

LEGISLATIVE SPOTLIGHT

Innovative Finance Provisions in Senate and House Proposals for ISTEA Reauthorization

Although last fall's extension to ISTEA bought the Federal highway and transit programs an extra six months of life, May 1, 1998, marked the final day that states could obligate their Federal funds until new authorizing legislation is enacted. The Senate and House passed independent reauthorization bills in March and April, respectively. Each body now has designated members participating in the conference committee. At the time this issue of *IFQ* went to press, the conferees were hoping to agree at least in principle on a consensus bill before the Memorial Day recess.

Areas of contrast between the Senate and House bills include proposed funding levels, program structure, and finance provisions. This quarter's *IFQ* compares each bill's approach to

innovative finance. If the conference proceeds in as timely a fashion as hoped, next quarter's *IFQ* will summarize the provisions appearing in the final consensus bill passed by the full Congress and, we hope, signed by the President.

The innovative finance provisions included in the Senate and/or House bills fall into five general categories: state infrastructure banks; direct Federal credit; tax incentives for privately-developed highway projects; tolls and other income; and matching share requirements. A brief description of relevant provisions within each category appears in the box on page 2.

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Late-Breaking Conference Highlights

As this issue of *IFQ* goes to press, the House and Senate are hammering out the final details on legislation to reauthorize the Federal highway and transit programs, so preliminary information presented on the conferenced version is subject to change. Following are some highlights of the conference agreement, as publicly reported to date. Readers are cautioned that the conference is still ongoing, and that even when complete, the bill will require approval by the full House and Senate, as well as the President's signature.

Funding Level	\$200 billion
Highways	\$167 billion
Transit	\$33 billion
Duration	6 years
Special Highway Projects (i.e., "demonstration projects")	\$9.35 billion for approximately 1,500 projects
Program Structure	Fundamental structure would remain similar to ISTEA's
Budgetary Treatment	While the Highway Trust Fund would not be moved "off-budget," a firewall may be created within the current discretionary spending caps to ensure that future receipts to the Highway Trust Fund would be available only for transportation expenditures.

The next issue of *IFQ* will provide details on the reauthorization bill, a discussion of the implications for state highway programs, and thoughts on how project sponsors and state officials can adapt to this changing landscape.

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Contributing Authors

Contributors to Vol. 4, No. 2 of *IFQ* include:

- Ian Carroll, FHWA,
Western Finance Center
- Paul Marx,
Federal Transit Administration
- Jennifer Mayer, FHWA
Western Finance Center
- Miriam Roskin,
Porter & Associates, Inc.

Key Innovative Finance Provisions: Senate and House

Category/Provision	Status	Purpose	Senate	House
• State Infrastructure Banks	Codification of existing pilot program.	Enables states to capitalize lending institutions with Federal transportation grant funds	■	□
• Direct Federal Credit				
✓ Surface Transportation Credit Program	New pilot program. (1)	Provides direct Federal loans, loan guarantees, and lines of credit for large surface transportation projects of national significance.	■	□
✓ Rail Credit Pilot	New pilot program.	Provides direct Federal loans and loan guarantees for up to five rail and intermodal projects.	□	■
• Tax-Exempt Status for Private Activity Highway Bonds	New pilot program. (2)	Permits up to 15 privately-owned and/or operated highway projects to gain eligibility for tax-exempt financing. Total bonds issued may not exceed \$15 billion.	■	□
• Tolls and Other Income				
✓ Interstate Highways: Conversions to Toll	New pilot program.	Up to three Interstate highway segments may be converted from free to toll as part of a reconstruction project.	□	■
✓ Right of Way Income	Expansion of existing law.	Allows income from right-of-way sales and leases to be used for Title 23 purposes, as currently allowed for airspace income.	■	□
• Matching Share Provisions				
✓ Tapered Match	Codification of experimental strategy.	Allows non-Federal share to vary over project life, so long as the ultimate matching share is preserved over time.	■	■
✓ Program Level Match for STP projects	Codification of experimental strategy.	For Surface Transportation Program (STP) projects, allows Federal funds to be matched across full program, not on a project-by-project basis.	■	■
✓ Flexible Match: Federal Land Management Agency Funds	Codification of experimental strategy.	Basically, funds from Federal land management agencies (e.g., BLM) may count towards the non-Federal matching share for enhancement projects. The Senate and House bills differ in specifics concerning this proposal.	■	■
✓ Flexible Match: Federal Lands Highway Program	Codification of experimental strategy.	Funds from DOT's Federal Lands Highway Program may count towards non-Federal match for projects within or providing access to Federal or Indian lands.	■	■
✓ Flexible Match: Publicly-Owned Land	Expansion of existing law.	Permits donations of publicly-owned property to count towards non-Federal match on all Federal-aid highway projects.	■	□
✓ Soft Match: Toll Credits	Codification of existing law.	Permits certain toll revenues to be used as a credit toward the non-Federal share of another highway project.	■	■

1 This proposal is based on the program outlined in the Transportation Infrastructure Finance and Innovation Act (TIFIA), fully described in *IFQ* Vol. 3, No. 1.

2 This proposal reflects the program proposed under the Highway Infrastructure Privatization Act (HIPA), fully described in *IFQ* Vol. 3, No. 2.

TRANSIT CASE STUDY

New Orleans RTA Lease-with-Maintenance Contract

Federal assistance to cover transit agencies' operations has steadily declined since the 1980s. Partially compensating for this decline, the Congress gradually expanded the definition of those "capital" expenditures eligible for grant reimbursement. Lease arrangements and loans for equipment or facility acquisition have long been eligible for capital grant funding. By 1996, the Federal Transit Administration (FTA) issued a final rule that paved the way for Federally-reimbursable lease-with-maintenance contracts. This contractual arrangement allowed maintenance, when incorporated in a capital lease, to be considered a capital expense eligible for Federal grant reimbursement.

Other transit properties have financed bus procurements under capital leasing rules, but the New Orleans Regional Transit Authority (RTA) was the first to avail itself of this dual capability to finance capital and maintenance costs.

The RTA Experience

The RTA had an old fleet of buses (over 13 years on average), comprising six or more distinct models. Some of these could no longer be serviced even with recycled parts. Replacement of some 90 of these buses would lower the average fleet age and reduce the number of bus types, thereby cutting maintenance costs. However, RTA had access to only \$10 million in Federal grant funds, and the bus purchase would require at least \$21 million.

Under these circumstances, RTA began exploring the potential for acquiring its buses by lease. As the discussions progressed, RTA staff began to consider combining the lease with contract maintenance operation. RTA issued a request for proposals and selected a lessor. Subsequent discussions indicated that the optimal transaction size would be

between 100 and 175 buses. RTA also concluded that available FTA grant funds and projected annual cash flows would be sufficient to support this level of vehicle replacement. With the terms now finalized, the transaction will result in a procurement of 175 new buses. The capital cost is \$49 million and will be amortized pursuant to an annually renewable lease.

RTA has agreed to commit FTA grant assistance as a source of repayment, and plans to meet 80 percent of annual lease payments with Federal grants and 20 percent of the payments with local matching



funds. In addition, RTA has secured the lease by giving the lessor a lien on the buses. The lease contract is set up as a municipal obligation, so the interest income is tax-exempt for the investors.

Demonstrated Cost Savings

To approve a lease-with-maintenance contract, FTA requires agencies like the RTA to document the potential cost savings in two ways. First, the grantee must demonstrate on a cost-benefit basis that the lease is more cost-effective than a cash purchase. The transit agency does this by calculating the present value of the costs and benefits of lease versus purchase, using an Office of Management and Budget (OMB)-mandated discount rate of 7 percent. Second, the mainte-

nance component must be more cost-effective than maintenance by the agency's own personnel.

For the New Orleans RTA, the lease component of the deal demonstrated only modest savings. The expected annual financing cost is close to 7 percent, and given that the OMB-mandated discount rate is also 7 percent, the vehicle lease will save RTA no more than \$100,000. However, because the lease is being privately placed with an institutional lessor, RTA is able to minimize transactional costs such as ratings charges, underwriting fees, and printing expenses normally associated with public debt issuance. In addition, RTA has been able to avoid pledging local revenue sources, such as a share of sales tax receipts, to secure the obligation.

Savings to the RTA are particularly noteworthy for the maintenance component of the deal. For the first three years at least, the maintenance contract is expected to produce large benefits, saving the RTA over \$2 million per year. In addition, the lessor is expected to retain RTA's maintenance crew, and renegotiate their labor agreement every three years, as RTA has done in the past. The cost savings will result from standardization of parts inventories, simplified maintenance techniques and training requirements, and management efficiencies to be instituted by the lessor.



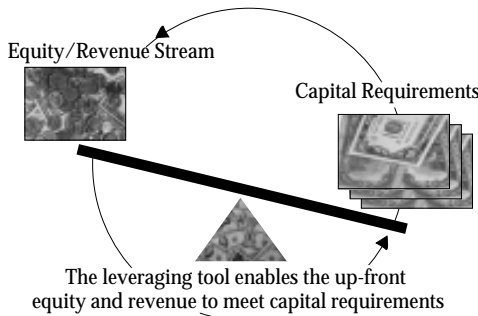
*Contacts:
 Paul Marx, Federal Transit
 Administration, 202/366-1675, or
 William J. Deville, Deputy General
 Manager, New Orleans Regional Transit
 Authority, 504/248-3733.*

TECHNICAL CORNER

Deconstructing Leverage

Who's Doing What to Whom? And By How Much?

This issue's technical corner considers the term "leverage," which is cited so often, and in connection with so many different types of financial arrangements, that it is easily misunderstood. In its broadest sense, financial leverage refers to the use of financial tools to increase the ability of your own resources to meet your project goals – just as you would use a mechanical lever to increase your ability to lift a heavy object.



Different communities use the term differently. For example, in the case of state revolving funds and state infrastructure banks, leverage is typically construed as a model for leveraging the entire fund by borrowing against the contributed capital (reserve fund model) or against interest payments made on individual project loans (direct loan model). In contrast, leverage can also be measured in relation to an individual project financing. This article focuses solely on leverage as applied to specific projects.

In terms of a project financing, leverage generally relates to monetizing a project's revenue stream through a debt financing. Thus, leveraging generally involves using a tool such as a bond or loan to borrow capital which is secured by a projected stream of revenues. In some cases, the borrowed capital supplements an up-front grant or equity investment. The greater the degree of borrowing against the defined revenue stream, the more highly leveraged is the transaction.

Quantifying the Leverage

Leverage is typically quantified as a ratio. This ratio compares the value of a total investment (i.e., project cost) to the initial equity contribution. Example 1 shows a typical borrowing for a revenue-generating project, where a state leveraged a \$100,000 initial equity contribution by borrowing \$400,000 from the private capital markets. The \$400,000 is eventually repaid to investors, with interest, from revenues associated with the project (e.g., receipts from dedicated taxes, impact fees, or tolls).

Example 1: \$500,000 State Route Simple

Facts of the Case, <i>Dollars in Thousands</i>	
Project Cost	500
Equity	100
Debt	400
Leveraging Ratio	
500/100=	5.0
Plain English	
From the perspective of the state sponsoring the project, the equity contribution <i>is leveraged</i> at a ratio of 5:1.	
Or:	
Use of debt <i>leverages</i> a \$100,000 contribution by borrowing an additional \$400,000, for a total investment of \$500,000.	

The Subject and The Object

From Whose Perspective is the Leverage Calculated?

It is important to understand from whose perspective the degree of leverage is being calculated. When multiple entities contribute to a truly leveraged project (that is, a project for which a share of the funding is borrowed), the leveraging ratio can be considered from a variety of perspectives. Consider Example 2, a \$4 billion transit project.

Example 2: \$4 Billion Transit Project

Facts of the Case, <i>Dollars in Millions</i>	
Project Cost	4,000
Federal Grants	700
Local Funds	2,300
Debt	1,000
Leveraging Ratio, Federal Perspective	
4,000/700=	5.7
Plain English, Federal Perspective	
The Federal contribution <i>is leveraged</i> at a ratio of 5.7:1.	
Or:	
Local commitments and debt <i>leverage</i> a \$700 million Federal contribution with an additional \$3.3 billion in local and borrowed funds, for a total investment of \$4 billion.	
Leveraging Ratio, Federal Perspective	
4,000/2,300=	1.7
Plain English, Federal Perspective	
The Federal contribution <i>is leveraged</i> at a ratio of 1.7:1.	
Or:	
Federal contributions and debt <i>leverage</i> a \$2.3 billion local commitment for a total investment of \$4 billion.	

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Can You Leverage Without Borrowing?

Example 2 raises an interesting question. Traditionally speaking, the term leverage has been applied only to cases in which funds are borrowed against a pledged future stream of revenues. Is it correct, then, to include grant funds contributed by another party when calculating a leveraging ratio? While it may not be technically correct to portray simple matching requirements as a case of leverage, as a practical matter, grants are considered part of the overall financial package – even in an instance where no borrowing has occurred. The essential premise of leveraging is to increase the effectiveness of an initial investment without adding more funds directly. Therefore, in a broader sense, one can talk about “leveraging” funds by attracting other sources of funding, so long as the additional funds do not come from the same sources as the original investment.

Thus, you will occasionally hear that the regular Federal-aid highway program has an implicit leveraging ratio of 1.25:1, assuming the standard 80-to-20 Federal-to-non-Federal matching ratio. Example 3 displays the calculation.

Example 3: \$100,000 Standard Federal-Aid Project

Facts of the Case, Dollars in Thousands	
Project Cost	100
Federal Grants	80
State Funds	20
Leveraging Ratio, Federal Perspective	
100/80=	1.25
Leveraging Ratio, State Perspective	
100/20=	5.0

Internal vs. External Leverage

The Case of Direct Federal Credit

A most interesting case arises when one considers the comparative leveraging effect of Federal credit (e.g., a direct loan, a loan guarantee, or standby line of credit) to that of a Federal grant. Recall that even under the broadest definition of leverage, the Federal investment is leveraged at only a 1.25 ratio under the traditional Federal-aid highway grant program. To illustrate the case of Federal credit as opposed to grants, consider the

Alameda Corridor. This \$2 billion project is receiving a \$400 million loan from the U.S. DOT. Example 4 presents ballpark figures outlining the project’s plan of finance, including a \$400 million equity contribution from the Ports of Los Angeles and Long Beach.

Example 4: Alameda Corridor (Simplified)

Facts of the Case, Dollars in Millions	
Project Cost	2,000
Federal Loan	400
State/Local Funds	400
Ports (Equity Contribution)	400
Capital Markets Debt	800
Leveraging Ratio, Ports’ Perspective	
2,000/400=	5.0
Leveraging Ratio, State and Local Perspective	
2,000/400=	5.0
Leveraging Ratio, Federal Perspective	
2,000/59 (see below)=	34.0

What if the \$400 million Federal contribution had been a grant, and not a loan? In this case, the leveraging ratio perceived by the Federal government would be coincidentally the same as that perceived by the Ports and the combined state and local governments: 2,000 divided by 400, or 5:1. However, because the \$400 million is disbursed as a loan that will be repaid with interest by the project sponsor, the budgetary cost (or “score”) of the \$400 million loan is actually much smaller than \$400 million. As readers familiar with the Alameda Corridor know, under Federal budgetary rules, the loan was assessed a present value budgetary cost of only \$59 million, with that fractional score primarily representing the estimated risk of non-payment of the obligation. In other words, the \$400 million loan actually required an appropriation of only \$59 million. Thus we see that the actual leveraging ratio realized by the Federal government on the Alameda Corridor is calculated as 2,000 divided by 59, or 34:1!

Therein lies the power of leveraging. And within the context of a constrained Federal budget, therein also lies the distinct advantage that credit arrangements, such as loans, can enjoy over conventional grant funding.

SHADOW TOLLING, continued from page 6

- The project sponsor agrees to accept traffic risk associated with a variable usage-based payment, and
- Projects identified have already proven traffic demand, such as an extension to an existing road and not a start-up facility.

FHWA expects to have a copy of the report available through its website by early summer.



For more information about shadow tolls, contact Max Inman, FHWA, 202/366-0673 or Ray Tillman, URS/Greiner, 212/736-4444.

RESOURCE REFERRAL

Shadow Tolling in the U.S. *A Viable Financing Approach?*

A recent report commissioned by the Federal Highway Administration, and prepared by URS/Greiner in association with Public Financial Management, Inc., describes the United Kingdom's experience with shadow tolls, analyzes shadow toll-related financial and capital market issues, and explores the potential applicability of this technique in the U.S. The report, entitled *The Selective Use of Shadow Toll in the United States*, draws no firm conclusions, but its analysis can help communities determine whether this financing approach can enhance their transportation programs.

Not a Revenue Source, But a Payment Structure

Shadow tolls are payments, based on traffic levels, that are made by a government to a contractor or operator for the construction, operation, or both, of a highway facility. The payments are termed "shadow" tolls because although they are directly based on traffic levels, they are not paid directly by users, and users see no toll booths or other visible evidence of the payments.

Because the payments are termed "tolls," many assume that shadow tolls are an alternative revenue source. But from the perspective of a public sponsor, it is more accurate to consider shadow tolls as a type of payment structure where governments may use any kind of tax or fee revenue as revenue sources for the shadow toll payments. As with conventional tolling, shadow tolls can amortize capital costs over the useful life of the investment and can create early completion and other incentives by sharing traffic and other risks with the private partners.

Shadow Toll Agreement Structure

A typical shadow toll agreement would be made between a government and a private contractor/operator for a specific construction or reconstruction project. Under a Design-Build-Finance-Operate

(DBFO) arrangement, the contractor/operator might agree to provide some or all of the financing for the project by raising independent capital. The private partner would have a set period, possibly 30 years, to recover costs and earn a reasonable return on investment from shadow tolls. The road would then revert to public ownership, and the shadow toll payments would cease.

Incentive Effects of Shadow Toll

An important advantage of a shadow toll structure is its creation of incentives for the contractor to construct a road quickly and with high quality. Payments to the contractor are based on traffic volume, so the contractor benefits by completing the project early, avoiding construction delays, and ensuring a long-lived road.

Effect of Shadow Toll Structure on Financing Costs

The report notes that it is difficult to evaluate the effect of a shadow toll payment structure on net public sector financing costs, particularly if tax-exempt debt is available through a government agency or non-profit conduit. In general, the security of shadow toll debt is directly related to the perceived security of the underlying revenue source that a government pledges for repayment. However, contractor incentives and limits on financial risk provided by the shadow toll structure may lower the financing costs for shadow toll debt, in comparison to an issue that does not involve a shadow toll structure.

Conclusions

Analysis contained in the report concludes that shadow tolls will work best under the following conditions:

- The project has access to non-taxable debt,
- Underlying repayment source(s) are stable and creditworthy,

MIRIAM A. ROSKIN, EDITOR
PORTER & ASSOCIATES, INC.
206/441-9808
FAX: 206/441-9852
MROSKIN@PORTER-INC.COM

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

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

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