

Financing Our Nation's Highway Projects



BY ROBERT KLEINBURD

Innovative approaches for funding highway construction and maintenance programs

With the escalating need for highway construction and maintenance, many state agencies are facing an increasing number of challenges when it comes to the funding.

Many state highway agencies have used the customary pay-as-you-go approach to financing their highway improvement programs. The process required combining the amount of state and federal funds expected in future years, analyzing their options and determining how to best allocate those funds toward future projects. If there was a particularly large and expensive project, the costs could be spread out over several years. The process sounds simplistic, however in projecting out a state's highway program, agency officials need to identify which projects can be fully funded by the state and which could be considered federal projects. For the federally-funded projects, the state is required to allocate a percentage of their funds.

The Harsh Realities

For many years, state highway construction and maintenance was funded through road user fees, primarily in the form of vehicle fuel taxes, along with some excise taxes on trucks and truck equipment. This taxing methodology worked well for a time, however the political and economic realities served to diminish the viability of this funding. The federal and state fuel taxes were supposed to fund the bulk of the state's highway construction and maintenance program, but the dollars have been falling short.

It was anticipated that, as more people traveled more miles and the associated gas taxes increased with inflation and other factors, ample funding would be available. In reality, the federal gas tax has remained unchanged since 1993 at 18.4 cents per gallon, and most state gas taxes have been



slow to adjust upward, if adjusted at all. Today, any politician who would vote to raise the gas tax would see their decision backfire in an election campaign. As a result, any attempt to raise the gas tax would face incredible opposition.

In an effort to reduce our dependency on foreign oil, coupled with the desire to minimize adverse carbon emission related environmental impacts, substantial effort has been exercised to promote fuel-efficient and alternative fuel vehicles. The demand and use of these types of vehicles is increasing for many reasons, including tax incentives, reduced operating costs and increased environmental awareness. The net result to the highway financing program, of course, is reduced revenue. In essence, the economic recession, along with the high cost of fuel, has had the impact of reducing the previously estimated increase in vehicle miles travelled. Although the long-term impact of this recession is difficult to assess, the immediate task requires the states to reduce their anticipated gas tax revenue.

Funding Opportunities

In an attempt to alleviate some of the funding issues, the Federal Highway Administration (FHWA) has provided states with opportunities that could help them better manage and make the most efficient use of all available funds. Most of these financing options afford earlier construction with potential cost savings from inflation of construction costs and the earlier realization of road user benefits.

Typically, the state is required to match 20 percent of the funding needed, with 80 percent allocated by federal funding. The FHWA makes certain procedures available that could assist states in managing the 20 percent match requirement to their greatest advantage.

There are several significant funding options that fall under the header of innovative financing. As one might imagine, each of these options comes with a variety of rules, guidelines and nuances.

Advance Construction

In cases where a state has used or plans to use all of its available federal funds but still wants to move additional projects to construction, future federal funds can be committed to the project. In this scenario, state funds can be utilized from an existing pot of money with the ability to replace those with federal funds when a new pool of federal funding is made available.

For example, a state can sell bonds and use the proceeds to advance a construction project. When the state receives the federal funds at a later date, those funds can be used to either repay the bonds or pay the interest on the bonds. The advantage of this approach is that it allows states to advance their programs with the assurance that future federal funding will become available to pay for previously authorized projects. The only potential downside is that if, for some reason, future federal funding is reduced below what had been anticipated, the state would need to reevaluate and adjust its federal-aid program. Prior approval from the FHWA is also required, and the subject project must be set out in the State Transportation Improvement Plan (STIP).

Tapered Match

In situations where a state does not have the required 20 percent matching funds available, they may request a payment schedule. In this case, a reduced match is contributed early in the project, and a proportionally larger match is allocated at the end of the project. For example, a state may have sufficient federal funds to begin a project in the current fiscal year, but not the required 20 percent allocation. The FHWA may allow the state to begin the project with a 10 percent match in the first year, and increase the local match to 30 percent during the following fiscal year. At the completion of the project, the federal share would total 80 percent and the state's local share would be 20 percent.

The advantage of using the tapered match approach is that a state can advance a project to construction even when short-term state funds are unavailable. The only potential disadvantage is that, if the projected state funds did not materialize, the state would need to adjust its program schedule accordingly.

Toll Credits as Match

For states that have an independent toll authority, the amount that the toll authority spends to build or improve public highway facilities that serve interstate travel may be used as the state match for federal-aid projects. This allows the state to maximize their 20 percent match

requirement. An example is when the state's independent toll road authority completes an intersection project using all toll road funds and does not use any federal funds. The state may apply the expenditure for that improvement as its local match on another project undertaken by the state Department of Transportation (DOT), which is federally-funded. This effectively leverages the expenditure of the toll road authority on behalf of the DOT.

Financing of Debt

When a state borrows money in the municipal bond market to finance its transportation program, the interest rate charged on those funds can have a significant financial impact. Imagine a project where hundreds of millions of dollars are being borrowed. Even a slight lowering of the state's interest rate can offer substantial savings to their taxpayers.

The FHWA has developed several options for states to consider utilizing that could have the ultimate effect of reducing interest rate charges on borrowed money.

Grant Anticipation Revenue Vehicles (GARVEE)

Lower debt financing for projects is a highly advantageous option. To help reduce the risk factor associated with borrowing funds and reduce the associated interest rate charged, a guaranteed source of repayment money is useful. A GARVEE financing vehicle allows the state to pledge future federal funds as collateral for the bond-financing instrument. The future federal funding can be pledged to help pay both principal and interest debt. The FHWA must give

prior approval for any project or group of projects which applies for GARVEE status. For example, a state may use the GARVEE financing vehicle as collateral for a bond issue and improve the risk rating of the bond. This enhanced rating typically results in a reduced interest rate payable to the bond investors, which saves the DOT a significant number of dollars.

State Infrastructure Banks (SIB)

In enabling surface transportation projects to be funded with money borrowed at a relatively low interest rate, states may establish an internal bank of funds that is made available for loan on qualified projects. Federal-aid funding is available to help establish and maintain the bank. As borrowed money is returned, the bank is replenished. This option creates a "bank" whose assets rise and fall as funds are used for projects. It enables projects to be accelerated with borrowed funds that have low interest rates. While these kinds of banks are complicated to establish and require significant oversight, the process can yield a lower interest rate than is available in the public market.

Transportation Finance and Innovation Act (TIFIA)

The U.S. Department of Transportation (USDOT) has created its own banking organization, which has a separate pool of public funds available to assist eligible surface transportation projects, including highway and transit projects. The TIFIA banking organization has the ability to offer direct loans, loan guarantees and lines of credit that are available to both public and private entities. The basic concept of the TIFIA program is to provide reasonable funding options for large projects, which typically cost in excess of \$100 million, utilizing guidelines as established by the USDOT. The use of TIFIA funding does not have any impact on a state's normal federal-aid apportionment. The advantage of this approach is that the TIFIA bank is already established and in operation. Loans and loan guarantees are made available for qualifying projects at a lower rate than is available in the public market. The downside is that the state must apply and compete for funding categories, and if approved, a substantial processing fee is charged to defray the costs of negotiating the loan agreement.

Tolling Options

As the costs of managing a highway program rise faster than an increase in the state's revenues, the option of placing tolls on roadways becomes more prevalent. This option allows the state to collect toll revenues directly from roadway users.

Tolling Federal-aid Highways

The FHWA now allows tolling of most roadways other than the Interstate Highway System. If a state elects to place tolls on a new or reconstructed roadway, it is allowable as long as the state



executes a toll agreement with the FHWA establishing the manner in which the tolls will be used. Normal federal-aid financing of construction is available. For example, a state may issue bonds to finance reconstruction of a major highway. In order to repay the bonds, the roadway is now subject to a toll charge, and that toll revenue will be used to repay the project financing. With this approach, there are incremental costs for the motorists, as well as the expenses associated with toll collection.

Interstate Tolling Pilot Project

The FHWA has a pilot project to allow new tolling of a portion of the Interstate System in order to finance the improvement or expansion of the interstate facility. Normal federal-aid funding of construction is available, however the various states interested must compete for eligibility. While this option is currently very limited, when available, it provides a source of road user funding for project purposes. Tolling would place additional costs on the motorist, along with a toll collection expense for the states to absorb.

Public/Private Partnership

Public/Private Partnerships (P3) represent a vast array of projects where a private concern invests in public roadway construction or upgrades with a promise of receiving a future revenue stream. Recently, the State of Texas completed its SH 130 project around Austin using such a partnership. Essentially, the private concern enters into a business arrangement and hopes to recoup their investment in the future, along with a profit. These partnerships can be configured in many ways depending on the needs of both the public entity and the private investor. This situation almost always involves some method of toll collection. Instead of borrowing money, this option enables a public entity to enter into a financial arrangement with a private organization that treats it as a financial investment opportunity. Since the private entity treats their return on investment as a major component of the venture, the public entity can expect to lose a certain degree of control over the project.

The perception is that most P3 projects are privately funded. However, in reality, these types of projects actually use a combination of both private and public funding. In several recent projects, private activity bonds (PABs) were used as another funding option. It allows a public-purpose facility to be financed by issuing tax-exempt bonds even though there is a private, for-profit interest in the facility. USDOT is allowed to approve up to \$15 billion in PABs for P3 projects.

Combination Funding

Highway projects may involve a combination of the above funding methods. According to the May 2011 issue of Public Works Financing, the following projects used multiple types of funding approaches:

The North Tarrant Expressway:

- \$573 million in state funding grants
- \$650 million in TIFIA funds
- \$398 million in PABs
- \$426 million of private equity

The SH 130 Segments 4 & 5:

- \$430 million of TIFIA funding
- \$686 million in senior bank debt
- \$210 million in private equity

I-495 Hot Lanes:

- \$409 state grant funding
- \$589 million in TIFIA funds
- \$589 million in PABs
- \$350 million private equity

While these projects demonstrate that Public/Private Partnerships are a way of leveraging funds, even the P3 projects cannot move forward without considerable public financing.

Summary

Each of the different financing approaches has its advantages, and other options are likely to become available in the future. The most likely time to revise any of the existing financing options would be when the next highway legislation bill is authorized. The last transportation reauthorization bill, SAFETEA-LU, expired September 30, 2009 and has continued under nine short-term extensions. As of this writing, the current extension is set to expire on June 30, 2012. All indications are that any new legislation, once enacted, would enhance the alternative funding opportunities. The TIFIA program, in particular, seems to have the backing for substantial expansion.

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