BUILD MICHIGAN II AND GRANT ANTICIPATION REVENUE VEHICLES

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Under Governor Engler's Build Michigan II program introduced in 1997, the Michigan Department of Transportation (MDOT) committed to having 95% of the freeways and 85% of the nonfreeways, pavements, and bridges in "good" condition by the year 2007. The original financing plans for this infrastructure investment program called for a pay-as-you-go approach, relying on permanent revenue increases primarily from a hike in the State gasoline tax and additional Federal highway funding under the Transportation Equity Act of the 21st Century, commonly referred to as TEA-21. Based on four years of funding experience under TEA-21 and rising road and bridge construction costs, MDOT has decided to supplement existing resources with debt financing to deliver on its Build Michigan II promise by 2007.

In July 2001, the Michigan Department of Transportation issued $400 million in short-term notes to address the shortfall in Federal highway funds and to advance and accelerate the completion of the Build Michigan II program. Through the use of an innovative debt-financing strategy allowed under TEA-21, MDOT is able to pledge future Federal highway funds to cover current debt service costs. This type of borrowing effectively allows MDOT to front-load the Build Michigan II program by providing the State with a portion of its future Federal highway funds today. Accelerating the program will allow MDOT to avoid inflationary construction cost increases associated with some of its larger projects; however, MDOT will be faced with increased debt financing costs of about $68 million over the life of debt repayment. Borrowing for Build Michigan II also comes on the heals of MDOT's issuance of $308 million in long-term debt as the first phase of Governor Engler's plan to issue an estimated $900 million in long-term debt for Build Michigan III.

The Need for Short-Term Borrowing

Traditionally, MDOT has used a combination of long-term borrowing and pay-as-you-go financing to fund State transportation projects. While the State of Michigan has issued general obligation short-term debt to meet its cashflow needs in the past, MDOT has never issued short-term debt for transportation purposes. To date, the Build Michigan II plan has relied exclusively on the permanent revenue increases from a 4-cent State gas tax increase and additional Federal revenue from TEA-21 to finance State transportation projects. However, the Build Michigan II schedule, combined with estimated Federal revenue shortfalls and rising project cost increases, has resulted in estimated funding shortages during the next few years.

The Michigan Department of Transportation estimates a shortfall in Federal highway funds based on the first four years of funding under TEA-21. Although TEA-21's minimum guarantee provision ensures that each state will receive annual apportionments of not less than 90.5% of its share of contributions to the Highway Trust Fund, Congress annually determines obligation limitations which effectively cap reimbursement levels to each state. Table 1 lists MDOT's share of apportionments and obligation authority under TEA-21 for Federal fiscal years 1997-98 through 2002-03 (projected).[1] Through fiscal year (FY) 2000-01, MDOT has received nearly $300 million less in Federal obligation authority compared with apportionments under TEA-21. According to MDOT, this Federal revenue shortfall threatens its ability to meet the Build Michigan II commitments by 2007.

[1] "Apportionment" is the amount funding designated to a state pursuant to a formula in an authorization statute (e.g., TEA-21), whereas "obligation authority" is the overall amount of funding that Congress, through the appropriations process, authorizes states to obligate in an individual year.

Table 1: MDOT Apportionment and Obligation Authority under TEA-21 Federal Fiscal Years 1998 through 2003 (millions)

Fiscal Year	Apportionment	Obligation Authority	Difference
1998	$514.6	$472.3	$(42.3)
1999	656.5	567.1	(89.4)
2000	719.4	631.8	(87.6)
2001	757.3	671.1*	(86.2)
2002*	772.4	684.5	(87.9)
2003*	787.9	698.2	(89.7)

* Projected

Source: Michigan Department of Transportation

In addition to fewer Federal funds, road construction costs over the past five years have increased more than expected, thereby further reducing the resources available to MDOT. According to U.S. Bureau of Labor Statistics data, annual average highway and street construction costs have increased 11.8% from 1996 to 2000. This increase is compared with an increase of 5.1% in the producer price index over the same period.[2)] Despite these pressures on resources, MDOT has continued with its commitments under the Build Michigan II. Without additional resources, however, MDOT would be forced to modify either the schedule or the scope of the Build Michigan II program.

Grant Anticipation Revenue Vehicles

The expected funding shortage has forced MDOT to explore alternative financing strategies for Build Michigan II. Given Michigan's favorable bond ratings and the relatively attractive interest rate climate, MDOT decided that short-term borrowing will provide the needed resources today to address its short-term funding deficits. Bonding also will allow MDOT to accelerate some costly, high-profile projects, thereby avoiding future increases in construction costs.

Specifically, MDOT will use an innovative borrowing strategy allowed under TEA-21 called Grant Anticipation Revenue Vehicles (GARVEEs). Unlike previous transportation borrowing which provided additional resources for state infrastructure investment, GARVEEs do not represent additional revenue but provide a mechanism to receive tomorrow's Federal revenue today. This financing instrument also requires future Federal highway funds to be set aside for debt repayment, rather than highway and/or bridge construction. Therefore, short-term borrowing does not solve the long-term funding shortage MDOT has been experiencing under TEA-21, but it does enable MDOT to leverage its future Federal highway funds in order to address its current cash deficit.

Grant Anticipation Revenue Vehicles are debt-financing mechanisms that allow states to fund transportation projects based on expected receipt of future Federal funds. Specifically, GARVEEs are either long-term (i.e., bonds) or short-term (i.e., notes) debt instruments backed by a jurisdiction's pledge of future Federal highway funds to repay the principal, interest, and other costs associated with debt issuance. As well as allowing states to leverage their Federal highway funds, GARVEES provide another alternative to pay-as-you-go transportation financing.

[2)] The producer price index measures the price of finished goods at the wholesale level, before they are offered for sale at the retail level.

Changes in Federal law during the mid- and late 1990s gave states more flexibility in the use of their Federal highway funds for debt financing and resulted in increased use of GARVEEs. Prior to 1995, states could use Federal highway funds only to cover the principal portion of debt service costs. This restriction limited a state's ability to leverage Federal funds for debt financing, as the predominant component of debt service costs during the early years of debt retirement is the interest payments. The National Highway System Designation Act of 1995 authorized states to use anticipated future Federal funds to cover the various cost components of debt financing. This significant change was incorporated into TEA-21 in 1997.

Federal law authorizes two types of GARVEEs: direct and indirect. In order to qualify for direct GARVEE financing, a project must be approved by the Federal Highway Administration (FHWA) as an "advance construction" project.[3] The debt service costs on direct GARVEE instruments are repaid by anticipated future Federal funds for one or more *specific* projects and are paid directly by the FHWA. Indirect GARVEEs are more flexible than direct ones. Projects financed with indirect GARVEEs do not have to be designated as advance construction. Also, the debt service costs on these instruments are repaid from a state's share of Federal funds that a state anticipates receiving as reimbursement for highway projects other than those being funded with the GARVEE proceeds. Similar to other Federal transportation programs, GARVEE-financed projects are subject to the general 80-20 Federal-state match requirements for repayment of the bond-related costs.

State of Michigan Grant Anticipation Notes

Section 18l of Public Act 51 of 1951 (P.A. 51) authorizes the State Transportation Commission to issue notes in anticipation of the receipt of grants from the Federal government and to pledge the proceeds of such grants for the payment of the principal, interest and redemption premiums on such notes. In July 2001, MDOT issued $400 million in indirect GARVEEs in the form of short-term grant anticipation notes, or GANs. These notes are separate from State Trunkline Fund debt instruments and do not count against the debt-service limitation contained in P.A. 51. These notes are payable solely from the State's share of Federal highway reimbursements under TEA-21 or its successor.

The GANs will provide financing to advance and accelerate the completion of the Build Michigan II program. Proceeds from the notes will support expenditures for a variety of State road and bridge projects throughout various Michigan counties. All of the candidate projects have been designated by the FHWA as advance construction projects.

Although principal payments on the notes are not required until 2005, interest payments on the notes will begin immediately. Interest on the notes will be calculated on a weekly basis and fluctuate accordingly, although all debt service payments will be made on a monthly basis. All of the outstanding notes are required to be retired by September 2008. The total estimated costs associated with issuing $400 million in short-term notes will be $468 million ($400 million in principal and $68 million in interest). Annual principal and interest payments will be covered exclusively from the State's share of Federal highway funds. In nominal terms, the estimated $68 million in interest expenses will effectively reduce the amount of Federal resources available for actual highway construction over the life of debt repayment. However, the benefits to the motoring public from accelerating the program and the savings associated with avoiding construction cost increases could outweigh the $68 million in debt financing costs. At the present time, it is unknown how debt financing will affect the level of Federal funds available for actual construction.

As required for State Trunkline Fund bonds, authorization for MDOT to make debt service payments for the GANs will have to be contained in an appropriations act. The FY 2001-02 MDOT budget provides $10 million in Federal highway funds to repay the debt service on the GANs in that year.

[3] The "advance construction" designation preserves a project's future eligibility for Federal assistance without obligating the full Federal share of costs at the beginning of the project. This allows states to begin a project with non-Federal resources and still remain eligible for reimbursement for the Federal share of the project.

Several states have taken advantage of GARVEEs and other innovative financing mechanisms authorized under TEA-21 to address transportation demands in their states, each tailoring the chosen instrument to meet specific needs. A number of states, including Arizona, Arkansas, Colorado, Massachusetts, Mississippi, New Jersey, New Mexico, and Ohio, have used GARVEEs to finance major construction projects, while many others are considering the use of this unique instrument. Based on other states' experience to date, the bond market has viewed GARVEEs favorably, despite the fact that they are riskier than general obligation borrowing. The use of these instruments helps states accelerate construction, adds to their financing options, and may lower financing costs by improving bond ratings. Michigan's use of GANs to manage its cash flow and to accelerate its transportation investment program represents another example in a growing trend of states' use of innovative transportation financing.

Conclusion

Short-term borrowing will allow MDOT to address its expected Federal cash flow deficit, accelerate the Build Michigan II program, and still complete the program by the promised 2007 date. However, Michigan will use an estimated $68 million in Federal highway funds to repay interest expenses over the next seven years; this funding (in an amount depending on inflation) therefore will not be available for highway and bridge construction. The Department will have to weigh these direct costs against the benefits of avoiding inflationary pressures and the indirect benefits to the motoring public from completing jobs early, reducing congestion, and improving convenience.

Michigan's plans to leverage its Federal highway funds in a new way entails certain risks. First, debt service payments are required until September 2008; however, the current Federal highway aid program, TEA-21, is authorized only through 2003. Although there is a history of 80-plus years of Federal aid for highways, the level of funding Congress will authorize in the next Federal aid program is unknown. Second, Michigan's share of the Federal aid program is subject, to some extent, to annual appropriations by Congress, which could affect Michigan's ability to cover debt service costs. Finally, front-loading the Build Michigan II program could jeopardize future projects should State transportation revenues decline while certain Federal funds are already earmarked for annual debt service costs on the GANs.

Furthermore, the use of GANs to finance Build Michigan II projects is another example of Michigan's use of debt financing to fund highway and bridge construction. At the end of FY 1999-2000, the State had $633 million in outstanding long-term STF bonds. In FY 2000-01, the State added to this figure when it issued $308 million in STF bonds as part of the planned $900 million long-term borrowing for the Build Michigan III program. Some might argue that borrowing, and specifically the GANs, makes good financial sense given Michigan's favorable credit ratings and the current interest rate climate. Others may object to further debt-financing and contend that transportation investment should be based on current revenues rather than borrowing, which draws too many resources away from annual construction programs to satisfy debt retirement costs. Ultimately, State policy-makers must decide whether current revenues are sufficient to meet the highway and bridge investment needs of today, or whether further borrowing should be used to provide the resources for highway and bridge infrastructure investment.