



## Legislative Fiscal Bureau

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Joint Committee on Finance

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### **Transportation Bonding and Debt Service (DOT – Transportation Finance)**

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Several of the Committee's decisions on transportation programs involve the use of transportation fund-supported bonds. The use of bonding for transportation programs is a long-established practice in Wisconsin, as well as many other states, and may be justified to, in effect, spread the cost of transportation improvements over their useful life. The more bonds that are used, however, the higher are future debt service costs. Therefore, the state's transportation bonding policy must weigh current advantages of the use of bonds versus future debt service costs. This paper provides an overview of the state's use of transportation fund-supported bonding, including a discussion of current transportation fund debt service, to provide a framework for the Committee's decisions on transportation program expenditures and finance.

#### **Rationale for the Use of Bonds for Transportation**

The issuance of bonds for transportation projects allows the benefits of transportation construction projects to be realized in the short term, while spreading the costs, through the repayment of principal and interest, over the long term, typically 20 years. In this way, future users of a highway or other capital improvement project can be made to share in its cost.

A bond financing strategy can be particularly useful if the proposed improvements are expected to have immediate economic development benefits. If, for instance, a highway project improves transportation efficiency and reliability, existing businesses that use the highway may increase their profits, and new businesses may take advantage of the improvements to locate in the area. Consequently, although interest repayment on the bonds may add to the overall cost of financing the project (depending upon inflation and other factors), increased economic activity resulting from the project may reduce the cost as a percentage of total economic output. In other words, the auxiliary economic benefits of a transportation improvement project may, in the long term, make the project more "affordable" over the period in which the bonds are repaid.

The use of bonds may also be appropriate if expenditures for transportation improvements are expected to be uneven over a period of several years. If, for instance, the state expects to have a particularly high level of expenditures in one year, followed by a period of lower expenditures, the use of bonds allows the state to finance the high expenditure year, while repaying the bonds in the subsequent, lower-expenditure years. Without bonds, this situation would require the state to either generate additional tax or fee revenues in the high-expenditure year, or reduce expenditures on other projects in that year.

Finally, bonds may, for two reasons, be particularly advantageous during an economic recession. First, during a recession, revenues generated by transportation-related taxes and fees may be stagnant or falling. In this situation, the state can use bonds to maintain a steady level of transportation improvements, to avoid falling behind in its normal system rehabilitation schedule. Second, during a recession, private business investments and consumer spending are reduced. Bonds can be used to increase government expenditures over the "normal" level to offset some of the reduction in private business or consumer spending, provided the government borrowing does not "crowd out" the same level of private investment that would otherwise occur. Any resulting increased level of aggregate demand may, in turn, help alleviate the unemployment associated with economic recession.

### **Use of Bonds in Wisconsin for Transportation**

Bonds have been authorized in Wisconsin for transportation purposes since 1969. Originally, these bonds were general obligation bonds, meaning that the state pledges the "full faith, credit, and taxing power" of the state for the payment of debt service. Despite this general pledge, debt service on the original transportation bonds has been paid from the highway fund, or later, the transportation fund (created in 1977). In 1984, however, the state stopped using general obligation bonds for highways and bridges, and began using transportation revenue bonds for major highway development projects and departmental administrative facilities.

Revenue bonds, unlike general obligation bonds, are not backed by the full faith, credit, and taxing power of the state, but instead, the source of debt service payments is limited to a specific fund consisting of fees, penalties, or excise taxes set up for that purpose. In the case of transportation revenue bonds, this fund consists of vehicle registration fees and other vehicle-related revenues, such as title fees. After paying the debt service, the balance of the pledged revenues are deposited in the transportation fund and are available for appropriation. Since first issuing revenue bonds in the 1980s, this has been the dominant source of bonding for transportation programs. However, the state has continued to issue general obligation bonds for harbor and freight rail improvements, and has more recently issued general obligation bonds for a portion of the cost of the Marquette Interchange and I-94 North-South freeway reconstruction projects.

The following table shows the use of transportation fund-supported bonds over the past 10 fiscal years, plus the proposed levels for the 2009-11 biennium, by type of program. For the

purposes of this table, it is assumed that the amount of general obligation bonds used was equally split between the two years of the biennium in which the bonds were authorized, while the use of transportation revenue bonds equals the amounts reflected in the appropriation schedule for major highway development and administrative facilities. For the 2009-11 biennium, the amounts shown are the Governor's recommendations, except for the harbor improvement program, where the amount reflects a reduction from the Governor's recommendation adopted by the Committee in earlier action on the bill. The table does not show an additional \$100,000,000 proposed by the Governor for southeast Wisconsin transit projects, since it is not clear in which years this amount would be spent.

**TABLE 1**

**Use of Transportation Fund-Supported Bonds**

<u>Fiscal Year</u>	<u>Major Highway Development</u>	<u>Administrative Facilities</u>	<u>Freight Rail Improvements</u>	<u>Harbor Improvements</u>	<u>Southeast WI Freeways</u>	<u>Total</u>
1999-00	\$119,629,900	\$2,785,400	\$2,250,000	\$3,500,000	\$0	\$128,165,300
2000-01	119,907,200	2,785,400	2,250,000	3,500,000	0	128,442,600
2001-02	127,035,100	4,377,300	2,250,000	1,500,000	0	135,162,400
2002-03	130,139,100	6,000,000	2,250,000	1,500,000	0	139,889,100
2003-04	136,167,400	6,000,000	2,250,000	1,500,000	0	145,917,400
2004-05	136,804,400	6,000,000	2,250,000	1,500,000	0	146,554,400
2005-06	150,838,100	6,000,000	6,000,000	6,350,000	106,550,000	275,738,100
2006-07	146,727,200	6,000,000	6,000,000	6,350,000	106,550,000	271,627,200
2007-08	204,738,300	6,000,000	11,000,000	6,350,000	45,100,000	273,188,300
2008-09	195,395,600	6,000,000	11,000,000	6,350,000	45,100,000	263,845,600
2009-10*	135,721,600	5,940,000	30,000,000	6,350,000	125,125,000	303,136,600
2010-11*	165,721,600	5,940,000	30,000,000	6,350,000	125,125,000	333,136,600

\* Amounts proposed in AB 75 as amended by the Committee's actions to date.

As the table shows, the use of bonds has increased rapidly in recent biennia, mostly corresponding to the beginning of the reconstruction of the Marquette Interchange and the I-94 North-South freeway in southeast Wisconsin. However, even without the bonds for those projects, the use of bonds has increased, due to higher bonding for the freight rail and harbor programs, and increases in the 2007-09 biennium in the major highway development program to address a projected deficit in the transportation fund and to partially offset a highway program lapse to the general fund.

As outlined in the previous section, there are several advantages to using bonds to finance transportation projects. However, the recent increases in the use of bonds may pose longer-term problems if the amount of the resulting debt service consumes an increasing share of transportation revenues. The next section provides a discussion of the different measures of transportation fund debt service.

## Measures of Transportation Fund Debt Service

There are two principal measures of transportation fund debt service that have been used to evaluate the state's use of bonds. The first is the revenue bond coverage ratio, which is a measure of debt service payments on revenue bonds in relation to the vehicle-related revenues that are pledged for that debt service. The so-called coverage ratio is an expression of the pledged revenues collected in a certain period, divided by the revenue bond debt service payments in the same period. To illustrate, in a particular year if pledged revenues are \$400 million and debt service is \$100 million, the coverage ratio will be 4.0:1 (a four-to-one ratio).

Under the guidelines for the issuance of bonds under the transportation revenue bond program, new bonds may be issued only if the coverage ratio was at least 2.25:1 for at least 12 consecutive months of the preceding 18 months. The following table shows the amount of revenue bond debt service, pledged revenues, and the coverage ratios over a ten-year period, plus estimates for the two years of the 2009-11 biennium, based on provisions of AB 75.

**TABLE 2**

### Revenue Bond Coverage Ratios (\$ in Millions)

Fiscal Year	Revenue Bond Debt Service	Pledged Revenue	Coverage Ratio
1999-00	\$84.2	\$312.5	3.7:1
2000-01	89.1	315.5	3.5:1
2001-02	87.9	325.0	3.7:1
2002-03	101.1	325.9	3.2:1
2003-04	113.1	426.5	3.8:1
2004-05	122.0	436.7	3.6:1
2005-06	143.7	467.4	3.3:1
2006-07	152.7	458.1	3.0:1
2007-08	167.4	544.7	3.3:1
2008-09*	171.8	635.6	3.7:1
2009-10**	178.3	650.8	3.7:1
2010-11**	194.1	654.4	3.4:1

\* Estimated.

\*\* Estimated based on bond usage and revenues under AB 75.

By this measure of revenue bond debt service, the state is not currently in jeopardy of being precluded from issuing additional revenue bonds, since the coverage ratio is projected to exceed 2.25:1 through the biennium. Additional capacity to use revenue bonds for major highway development projects will depend in the future upon maintaining the ratio above 2.25:1, which may eventually require the state to increase pledged revenues by either increasing vehicle registration or other currently pledged fees, or pledging revenue sources that are not currently pledged.

While this measure may be used to gauge the level of bonding and debt service for revenue bonds, it does not provide a complete expression of the overall level of transportation debt service, since it does not take into account debt service on general obligation bonds. Since general obligation bonds have become an increasingly important part of the state's transportation bonding policy, a different measure is needed to fully assess total transportation debt service. The percentage of gross transportation fund revenues needed to pay total debt service (on both general obligation and revenue bonds) provides such a measure. The following table shows the debt service percentage for the past 10 years, plus an estimate of this percentage for the two years of the biennium, based on AB 75, as modified by the Committee in earlier action.

**TABLE 3**

**Debt Service as a Percentage of Gross Transportation Fund Revenues  
(\$ in Millions)**

<u>Fiscal Year</u>	<u>Total Debt Service</u>	<u>Gross Revenues</u>	<u>Debt Service as % of Revenues</u>
1999-00	\$90.3	\$1,271.1	7.1%
2000-01	94.5	1,283.4	7.4
2001-02	93.2	1,337.7	7.0
2002-03	105.9	1,386.6	7.6
2003-04	119.7	1,440.4	8.3
2004-05	166.2	1,482.9	11.2
2005-06	148.2	1,523.3	9.7
2006-07	165.3	1,612.9	10.2
2007-08	187.5	1,681.3	11.2
2008-09*	194.2	1,743.5	11.1
2009-10**	208.1	1,838.2	11.3
2010-11**	229.7	1,903.2	12.1

\* Estimated.

\*\* Estimated based on bond usage and revenues under AB 75 as amended by the Committee's actions to date.

As this table illustrates, the percentage of total transportation fund revenues devoted to debt service has generally increased over the past 10 years, and is projected to continue growing through the 2009-11 biennium. From 1999-00 through 2010-11, total debt service is projected to increase by over 150%, while revenues during that period are projected to grow by just 50%.

The full, annualized debt service payments associated with newly authorized bonds may not accrue until a few years after the bonds are authorized. Consequently, the debt service on the proposed level of bonds in the bill is not yet reflected in the debt service percentages shown in the table. Although the amounts will vary depending on the Legislature's decisions in this and the next biennium, and actual growth in transportation fund revenues, these percentages can be

expected to exceed 14% by the end of the 2011-13 biennium if bond use continues at present levels and revenues were to grow by 3% per year.

There is no universally agreed-upon debt service percentage that is considered to be an appropriate level or a maximum limit. However, in the absence of an industry standard, some may argue that whatever the appropriate absolute level may be, a situation where the percentage is growing as it has over the past decade and is projected to continue to grow has certain negative consequences. In recent years, the state's transportation financing system has been faced with not only increasing debt service, but relatively stagnant or falling fuel tax revenues, and increased demand for expenditures stemming from southeast Wisconsin freeway reconstruction projects and other bond-financed programs. Together, these factors have created increased pressure for additional transportation tax and fee revenues, but since it is difficult to fully satisfy the various transportation program demands solely through tax and fee increases, the Governor and Legislature have resorted to further increasing the use of bonds.

Despite the defensible rationales given for the use of bonds for transportation projects, it is possible to utilize bonding to an such an extent that the cumulative debt service costs compel the state to use an ever-increasing amount of bonds to just maintain existing expenditures. This situation is sometimes referred to as a "debt trap" and is the principal risk associated with a bonding policy.

Highway-related indebtedness varies widely among states. Eleven states had less than \$100 per capita in outstanding highway debt in 2006 (the latest year for which complete data are compiled by the Federal Highway Administration) and three states had over \$1,000 in debt per capita. Wisconsin, with \$274 in highway debt per capita ranks close to the middle of states on this measure, at 23<sup>rd</sup> highest. Wisconsin's per capita debt was below the nationwide, state-level highway debt per capita of \$323. However, the relative ranking of states is not necessarily indicative of sound fiscal management or sustainability. In other words, the fact that Wisconsin has less debt on a per capita basis than many states does not mean the state's growing debt service costs should not be considered a cause for concern.

## **Summary Discussion**

The use of bonds for major highway development projects, southeast Wisconsin freeway reconstruction projects, and rail and harbor projects is defensible on a variety of levels, as discussed in the first section of this paper. Capital improvement projects have a long life and have benefits that will accrue to future generations. The issuance of bonds may allow such improvements to be done earlier than they otherwise would be done, because the costs are spread over many years.

Nevertheless, it is possible to utilize bonds to an extent where future costs exceed the amount that those future users are willing or able to pay. In Wisconsin, the ongoing use of bonds in some programs, like the major highway development program, has created a situation where

annual debt service payments on previously-issued bonds are estimated to exceed the use of bonds during the biennium. Clearly, the use of bonds has allowed some projects to be completed faster than would otherwise have been possible without the bonds. However, some may argue that the state would now be better off if the state had originally committed to finance major highway development projects on a "pay-as-you-go" basis. That is, from this perspective, for any program expenditure that is expected to be maintained for 10 to 20, or more, years, like the major highway development program, it may be appropriate to establish a cash-based financing basis, reserving the use of bonds to short-term higher expenditures or during periods when revenues fall due to economic conditions.

The Committee's decisions on bonding policy will not greatly impact the state's debt service in the short term. If the Committee decides that the state's transportation bonding and debt service levels should be addressed, it may be best to consider longer-term strategies. For instance, LFB Issue Paper #777, on the major highway development program, provides an alternative that would limit the future enumeration of new projects to those that can be financed without the use of bonds, consistent with a policy position that ongoing program expenditures should not rely on the use of bonds. LFB Issue Paper #778, on the reconstruction of the I-94 North-South freeway provides an alternative for increasing the use of ongoing SEG or FED funds for the project in place of bonds in 2010-11, which may help limit future bonding requirements for the completion of the project.