

State Level Debt Issuance

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THE NATURE OF BONDS AND THE BOND MARKET

Rationale for Use of Bonds

State governments have financed their capital project requirements using three options: paying for projects with cash, borrowing for projects and repaying the resulting debt over time, and leasing facilities. Both long-term debt financing and lease purchase agreements require states or their independent authorities to enter the bond market.

Using cash requires the appropriation of either lump sum amounts, usually for smaller projects, or a series of amounts as larger facilities are built over several years. In recent years, some jurisdictions have earmarked continuing revenue flows such as lottery proceeds for current funding of capital construction. An advantage of using cash is that it may cost less, since there are no interest or debt issuance costs. A disadvantage is that adverse fiscal conditions or competing spending priorities can result in insufficient revenues to fund projects. If state revenues run low, new capital projects may be delayed or dropped. Alternatively, using cash could require a tax increase to fund government financing requirements; these increases are usually politically difficult.

If current revenues cannot support state capital improvement needs, states may choose bonding to finance the projects. Long-term borrowing for capital construction has several advantages: (1) costs can be spread over the useful life of projects, with future users of projects sharing those costs; (2) citizens can derive near-term benefits from capital expenditures; (3) higher taxes to provide necessary capital facilities may be avoided; and (4) costs may be reduced in periods of high inflation when the interest paid on debt is less than the increased construction costs from waiting to finance projects with cash.

However, there can be disadvantages to the use of long-term financing: (1) debt repayment commits the state to many years of fixed costs; (2) bonding can fund lower-priority projects that may not be approved using cash; and (3) excessive bonding can affect state credit ratings, which could increase interest costs on future bond issues. The widespread use of bonding by state governments suggests that the advantages outweigh the disadvantages.

Finally, states can lease facilities. The most common leasing arrangement, the lease-purchase agreement, has elements of traditional long-term debt financing. Under lease-purchase agreements, states usually contract with state building authorities to construct facilities. Those authorities sell bonds to finance the construction and then lease the facilities back to the states, which pay rent for the facility operations, maintenance, and debt service costs. Often states acquire title to the facilities once the authority bonds have been retired. Leasepurchase agreements permit states to finance capital construction projects without affecting their debt limits, since independent authorities have title to the property and all "debt service" payments are accounted for as routine operating expenditures, such as rental payments. Lease-purchase agreements, like long-term debt financing, spread the costs of the facilities over their useful life. A disadvantage of the approach is that lease-purchase financing generally carries higher interest rates than general obligation bonds issued by states.

Bonds represent the promise of borrowers to repay principal to lenders at specific times, and to pay, usually on a periodic basis, interest for the use of money. Unlike owners of stock, bondholders are entitled only to these interest and principal payments; bondholders do not have ownership of the issuing corporations or governmental units. Bonds may be secured by the credit and good name of the borrower, or by the stream of income from the facilities the bonds will fund. Generally "bonds" refer to long-term debt, as distinguished from short-term "notes."

Bonds are called fixed income securities, because the interest rates and principal payments are permanently set when the bonds are issued. Fixed income securities include corporate bonds, U.S. government bonds involving debt of the federal government and its agencies, and municipal bonds, including debt issued by states or their special purpose authorities, counties, cities, villages, towns, and school, water, sanitary, and other special purpose districts.

One important feature that distinguishes municipal bonds from other fixed income securities is that interest earned on municipal bonds is exempt from the federal income tax. The terms "municipal bonds" and "tax-exempt bonds" are often used interchangeably. Because of this tax-exempt feature, investors in higher tax brackets accept lower interest rates in exchange for the federal tax exemption.

Investors without need of tax-free income invest their money where it will earn the highest returns. Because of the reduced range of interested investors, the municipal bond market is more volatile than the other fixed income securities markets and is vulnerable to changes in the investment preferences or tax status of investors. In general, municipal bonds fall into two broad categories defined by the security offered for their repayment: general obligation bonds and revenue bonds. However, the state has issued a third type of bonds called appropriation obligation bonds, which include a state commitment to pay debt service on the bonds through annual appropriation of funding.

General Obligation Bonds

General obligation bonds are backed by the "full faith and credit" of the issuers for repayment. This repayment pledge is an unconditional promise by issuers to collect taxes or take whatever other steps are necessary to assure repayment. Consequently, general obligation bonds are considered relatively safe investments and usually carry lower interest rates than revenue bonds, which do not carry this pledge.

The repayment pledge for Wisconsin general obligation bond issues is contained in Article VIII, Section 7(2)(f) of the State Constitution. It is considered a strong pledge by the investment community.

"The full faith, credit and taxing power of the state are pledged to the payment of all public debt created on behalf of the state pursuant to this section and the legislature shall provide by appropriation for the payment of the interest upon and instalments of principal of all such public debt as the same falls due, but, in any event, suit may be brought against the state to compel such payment."

General obligation bonds often are limited to constitutionally or statutorily defined levels and uses. They often are used to support facilities such as state office buildings and correctional and educational institutions. General obligation bonds also may be used to fund the construction of selfamortizing facilities such as dormitories. The revenue generated by these facilities is used to meet debt service payments; if facility revenues are insufficient, issuers are obligated to use tax revenues to pay the bonds.

Revenue Bonds

Revenue bonds rely on rents or user fees collected from public enterprises or facilities, or on a designated stream of revenues. The income generated by these enterprises or facilities or a designated revenue stream is the sole guarantee or pledge for repayment from the borrowers. Typical examples of revenue bond supported undertakings are toll roads, bridges, water or sewer systems, and parking ramps. Revenue bonds generally are not subject to the same constitutional debt limitations as are general obligation bonds. Because revenue bonds are generally secured only by project revenues or a designated revenue stream, they are considered to be of greater risk than general obligation bonds and, as a rule, carry higher interest costs.

A subclass of revenue bonds is moral obligation revenue bonds. Like other revenue bonds, moral obligation revenue bonds are secured by revenues generated by the enterprise or facility financed. In addition, these bonds are also secured by a pledge to commit funds from tax sources, subject to the legislative appropriation process, if project revenues or the designated revenue stream are insufficient to meet principal and interest payments. Because of this pledge, moral obligation revenue bonds may have interest costs which are lower than other revenue bonds, but higher than general obligation bonds.

Appropriation Obligation Bonds

Appropriation obligation bonds are a form of borrowing where repayment is subject to annual appropriations of funding by the Legislature. Because repayments each year would be subject to appropriation, the bonds would not be considered public debt of the state. Unlike revenue bonds, there is not a stream of revenues earmarked to repay the bonds. In order to provide greater security to bond holders, these bonds would be backed by the state's moral obligation pledge to appropriate any funds that may be necessary to repay the obligations and maintain the required reserves.

Bond Characteristics: Repayment Features

General obligation bonds and revenue bonds generally share common payment, maturity, and redemption features.

Payment and Maturity

Bonds are characterized by their schedules for repayment of principal. For term bond issues, the entire amount borrowed falls due at the same time, as much as twenty or thirty years in the future. The individual bonds that comprise the issues have identical maturity dates and coupon rates. To ensure that repayment funds are available when due, term bonds often provide for sinking funds into which borrowers make scheduled periodic payments.

More common are serial bond issues in which principal is repaid in smaller sums over the life of the issues. The individual bonds may have different maturity dates and different coupon rates. The principal payments may be equal in each year or have different structures reflecting market conditions at the time of issue or the debt policies of the issuers. For example, the issuers may limit the life of the debt to the useful life of the facility or equipment the bond finances.

Capital appreciation bonds are term bonds sold at large discounts from face value. Investors receive all principal and interest at the maturity dates. These bonds are attractive to bond funds and institutional buyers who prefer long-term growth over current income.

Redemption

Bonds may have call provisions that allow early payment; issuers may redeem the debt before the regularly scheduled maturity date. Issuers may exercise this option if they can borrow new money at lower interest rates than the bonds carry or if funds become available to retire the debt early. When bonds are called, the borrowers often must pay predetermined premiums to the bondholders. Although callable bonds generally result in higher borrowing costs for the issuers to compensate investors for increased uncertainty, the option to call bonds at times when market conditions are favorable for refinancing is an important debt management tool.

Bond Market in Operation

Preparing the Issue

There are several steps to prepare bond issues for sale that influence how the market receives them. The issuers decide the size, structure, and timing of bond issues, prepare disclosure statements providing financial information for potential investors, apply for credit ratings, and properly advertise new issues.

As a protection to bond buyers, the validity and tax-exempt status of bond issues must be confirmed by bond counsel. While preparing this documentation, the counsel also may provide aid and advice on preparation of the bond issues. Most borrowers retain nationally recognized bond counsel.

Underwriters and Syndicates: Getting the Issue Into the Market

Getting new bond issues into the market depends upon underwriters who normally purchase entire bond issues on an all or none basis. Their purpose is not to hold the bonds, but rather to resell them to investors for profit. If bond issues are large, syndicates may form. Syndicates are groups of firms that join together to purchase specific bond issues and break up when the issues are disposed, which allows sharing the financial risk of large transactions. They often form with similar memberships each time particular issuers come to market.

Competitive Sales

Most general obligation bonds are sold through competitive sales in which underwriters, acting alone or in syndicate, analyze bond offerings and prepare bids. The bids include schedules of coupon rates and purchase prices offered for the bonds. Bonds at par have a purchase price equal to their face value. Bonds purchased at a premium have a price greater than their face value, and those purchased at a discount have a price less than their face value. Entire bond issues are awarded to underwriters or syndicates offering borrowers the lowest true net interest cost, which is the lowest cost on a present value basis when coupon rates and premiums or discounts are included. Increases or decreases in later sales prices of bonds are the gain or loss of underwriters or bondholders and do not change the interest cost that borrowers pay.

In preparing bids, underwriters must estimate the prices investors will be willing to pay for the bonds. The underwriters are compensated entirely by the difference between the prices they pay for bonds and the prices they receive when they resell those bonds to investors.

For investors, the most important calculation is of yield, or return on their investment. Since both the coupon rates and the principal payments are fixed, the only way to change the yield is to change the price paid for the bonds. When the price is at par, the yield and the coupon rate are identical. As price drops, yield rises and, conversely, as price increases, yield drops. If the underwriters overestimate the market value for bonds and offer net interest costs to borrowers that are too low (that is, pay prices that are too high), they may have to sell the bonds at a loss. It is generally regarded as a good sign if the bids received on bond issues are close to each other, suggesting a market consensus on the desirability and quality of the bonds.

Negotiated Sales

For bond issues that are complex or unusual, a negotiated sale may be arranged. Negotiated sales are cooperative efforts between the issuer and underwriting syndicate to structure a sale under reasonable terms. Frequently, a negotiated sale is used for revenue bonds with complex financing arrangements and for refunding issues. In these cases, borrowers may receive better interest rates if the underwriters are familiar with the proposed facility or program. Generally, syndicates agree on initial pricings for issues, but may revise the prices upward or downward on the day of sale. The Building Commission has approved a policy used to determine if bonds are to be sold via competitive sale or negotiated sale.

Buying and Selling Bonds: The Secondary Market

After the initial placement of new bond issues, the bonds may be bought and sold many times. This trading occurs in the secondary securities market.

Because of the decentralized trading and the diversity of bonds being sold, participants in the secondary market rely heavily on bond ratings and yields when making investment decisions. Additionally, readily recognized issuer names and larger blocks of bonds trade more easily and at better prices. The performance of bonds in the secondary market is a factor underwriters must consider when making their bids on new issues. As a result, the secondary market influences the new issue market.

The accuracy, timeliness, and availability of the issuer's continuing disclosure annual report

plays an important role in determining the liquidity or ready marketability of bonds in the secondary market.

Interest Rates and Their Determinants

When states, municipalities, or other governmental units go to the municipal bond market to borrow funds, they hope to get the lowest interest rate possible for their bonds. Many factors interact to produce the actual rates of interest that borrowers must pay. Some market factors affect the general level of interest rates available to all borrowers issuing bonds at given times, while other factors vary by issuer.

External Factors: General Level of Interest Rates

General levels of interest rates are established by the supply of and demand for money. In its role as regulator of the nation's money supply, the Federal Reserve Board exercises a major influence over interest rates. When monetary policies are designed to decrease the supply of money, interest rates respond by climbing upward. With increases in the money supply, interest rates tend to fall. Similarly, increases in the demand for capital generally stimulate increased interest rates. During periods of slower economic activity, demand weakens and interest rates drop.

The rates of interest found in the municipal bond market are sensitive to the overall level of interest rates. However, the general level of interest rates defines a range of likely rates for municipal bond yields. The position of borrowers within this range depends on characteristics of individual borrowers and credit instruments, only some of which are within the control of the borrowers.

In addition, the sale price of a bond and the coupon (interest) rate on the bond are interrelated. If a

bond's sale price is higher than its par (face) value, the bond is selling at a premium. A bond that sells at a premium does so because the coupon rate on the bond is higher than the prevailing interest rates in the market, making the premium bond worth more to the buyer than a bond paying the lower, market rate. For example, a municipal issuer may choose to sell a bond at par with a 5% market rate coupon. Conversely, in that same market, the issuer could sell a bond paying a 7% coupon rate, which would be worth more to a bondholder than the par bond carrying the 5% rate. Therefore, the bond paying 7% would be priced higher than par, thus equalizing the attractiveness of the two bonds to both the bond issuer and bondholder. As a result, the bondholder pays a premium for a bond carrying an above market rate and the bond issuer receives the upfront, premium payment associated with the bond in exchange for paying the higher coupon rate (interest costs) over the life of the bond.

Factors Unique to Issuer and Issue: Quality and Quantity

While municipal bond interest rates are consistently lower than the rates on taxable bonds because of their tax-exempt feature, individual municipal bond issues often receive differing treatment in the market. The limited numbers of investors seeking

tax shelters require municipal issuers to compete for investment funds. The characteristics of individual bond issues and their issuers become important in establishing the costs of borrowed money to issuers.

"Quality" is a key concern for municipal bond investors. Quality is more than a measure of risk that borrowers will default on bond issues. The default rate, which has been very low on general obligation bonds since the Depression, would not distinguish between different bonds. Quality also includes the risk of future credit developments adverse to the interests of creditors. This definition broadens the concept to include evaluations of the salability and market prices of the bonds in the secondary market.

Bond Ratings

The diversity of debt-issuing units and the array of bond issues reaching the market has led to the development of shorthand measures of quality. Three major firms, Moody's Investors Service, Inc., Standard & Poor's Corporation, and Fitch, Inc. prepare credit evaluations of those borrowers who apply for ratings and pay fees for the services. In addition, in 2013, Kroll Bond Rating Agency began rating certain types of state bond issues. Bond issuers often choose to have a combination of one or more agencies prepare evaluations. It is typical for large issuers to obtain ratings from all three services.

The major rating agencies use alphabetical symbols, ranging from the highest quality--Aaa (Moody's) and AAA (Standard & Poor's and Fitch), to the lowest--C (Moody's) and D (Standard & Poor's and Fitch). As shown in Table 1, the lowest rating is used for bonds already in default. In practice, only the first five categories are routinely used for new issues.

Table 1: Moody's, Standard & Poor's, and Fitch Borrower's Ratings

Quality		Rating Symbols	
Characterization*	Moody's	Standard & Poor's	Fitch
Prime	Aaa	AAA	AAA
Excellent	Aa, Aa1	AA	AA
Upper Medium	A, A 1	А	А
Lower Medium	Baa, Baa 1	BBB	BBB
Marginally Speculative	e Ba, Ba 1	BB	BB
Very Speculative	B, B 1, Caa	B, CCC, CC, C	B,CCC,CC,C
Default	Ca, C	D	D

*Complete definitions of Moody's, Standard & Poor's, and Fitch ratings can be found in the trade publications of each agency. Moody's uses the ratings Aa 1, A 1, Baa 1, Ba 1 and B 1 to indicate the better credits within the Aa, A, Baa, Ba and B categories, respectively, and the ratings Aa3, A3, Baa3, Ba3, and B3 to indicate the lesser credits. Standard and Poor's and Fitch adds a plus (+) or minus (-) notation to ratings from AA to B to show relative standing within the rating category. The rating a borrower receives reflects the independent judgment of the rating agency on the ability of the borrower to make timely payments of interest and principal. Ratings serve the purpose of grading bonds according to their risk characteristics. These grades applied to particular bond issues are not evaluations of the attractiveness of those issues to lenders. Rather, the attractiveness of issues depends on their yields, maturity dates and other characteristics, in addition to their investment quality, the sole element to which the rating applies.

In establishing ratings, the rating agencies consider both the ability and willingness of borrowers to repay bonded debt. However, as neither of these factors is directly measurable, the agencies consider other information relating to borrowers. The agencies analyze four major categories of information: (1) economic base; (2) debt management; (3) financial performance; and (4) administration of services.

Economic Base. Agency analysis of economic base considers the ability of borrowers to generate taxes, perform their functions and meet their debt obligations. This leads to consideration of broader economic trends and conditions in the states. Accordingly, several characteristics of issuers, including the availability of natural resources, population trends, existence of skilled labor, educational facilities, diversity of economic activities, and stability of the local economy in the face of national cyclical fluctuations are usually examined. Standard and Poor's cites the economic base analysis as the most critical element in the rating process.

Debt Management. Agency debt management analysis considers the overall impact of all debt obligations on the ability of issuers to repay debt. This analysis generally involves five specific areas of scrutiny: (1) debt burden, which relates debt to the revenues and resources of issuers and enables quantitative comparison with other issuers; (2) debt policy questions relating to the uses, purposes, and planning of debt issuance; (3) debt structure and retirement schedules related to borrower resources and future debt needs; (4) debt history of any defaults, use of debt to fund operating deficits, or rapidity of debt growth relative to the purposes for which debt has been incurred; and (5) future borrowing plans, especially authorized but unissued bonds.

In analyzing general obligation debt, agencies use a debt burden index. Overall debt is usually related to population and assessed valuations of all taxable property, adjusted to reflect market values, regarded as the broadest and most generally available measure of jurisdictional wealth. Total debt includes not only the direct obligations of states, but also the debt obligations of local governmental jurisdictions, so that all debt supported by the same group of taxpayers is considered, regardless of whom issues the debt. Relatively high per capita debt may cause concern since overly burdensome public indebtedness may lead to inability or unwillingness of jurisdictions to repay their obligations.

Financial Performance. The financial performance analysis looks to the "health" and management of borrower finances. Analysts consider indicators such as current revenues and expenditures, policies concerning deficits, adequacy and diversity of the tax base, history of financial operations, and financial administration, including tax collections and reporting procedures. The financial analysis is particularly concerned with evaluating how well the economic resources of issuers are translated into usable revenues and how sensitive those revenues are to cyclical fluctuations in the economy. The existence of general fund surpluses is generally viewed positively.

Administration of Services. Analysis of the administration of services is less quantitative than the other categories of analysis. It considers the organization of government for efficient and effective action, the legal and political flexibility of the political structure, and the ability of government to provide necessary services. For example, it considers how clearly defined are the financial and budgetary powers and responsibilities; if the executive and legislative functions controlling state financial conditions are centralized or decentralized; what degree of intergovernmental cooperation exists; and what judgments can be made about overall quality of administration.

Although these four categories have been identified as important factors in the analysis of borrower credit, rating agencies generally do not specify the relative importance of each in calculating borrower credit ratings. There apparently is no single formula that can be applied to these factors to arrive at credit ratings and no uniform standards or threshold numbers which, when exceeded, automatically change credit ratings. Issuers seeking to improve their credit ratings, or avoid being downgraded, must adopt broader strategies to improve the factors that are taken into account by both investors and rating agencies in evaluating the quality of borrower credit.

It is generally agreed that the bond ratings that result from these analyses closely correlate with the cost of borrowing money for bond issuers. Under all economic conditions, higher-rated bonds, on average, sell at lower yields than do lower-rated bonds.

For example, a comparison can be made using The Bond Buyer 20-Bond and 11-Bond Indices. The 20-Bond Index is based on a set of general obligation bonds with an average rating equivalent to Moody's Investors Service Aa2. The 11-Bond Index is based on a set of general obligation bonds with an average rating equivalent to Moody's Investors Service Aa1. Thus, the 11-Bond Index represents a set of bonds approximately one rating step higher in quality than the 20-Bond Index set of bonds. By way of example, in December, 2018, the 20-Bond Index was approximately 51 basis points (hundredths of a percent) higher than the 11-Bond Index. There is considerable disagreement concerning whether bond ratings cause certain levels of interest rates or whether the ratings follow the judgments of investors as expressed in market prices. In some respects, ratings appear to have a direct impact on market demand. In the secondary market, ratings and yields are prime considerations for investment decisions. Thus, future market performance is highly dependent on ratings and is a major consideration in the prices bid for new issues. Small investors and individuals are especially dependent upon the judgments of rating agencies.

Additionally, certain investors are required to take ratings into account when making investment decisions. For example, published ratings are used to determine which investments are suitable for commercial banks. "Investment grade" is limited to the top four rating categories; investment in lower categories, while not absolutely prohibited, is discouraged by the additional justification required to support those investment decisions. This consideration serves to limit competition for and desirability of lower-rated bonds.

Ratings emerge as a major factor in determining the cost of borrowed funds in the municipal bond market. Small fractions of percentage point changes in interest rates can translate into hundreds of thousands of dollars in interest costs over the life of large bond issues. For example, a 0.25% (25 basis points) increase in the interest rate on a 20-year, \$100,000,000 issue structured with level repayments can cost the issuer from \$3.2 to \$3.4 million in additional interest costs over the life of the bond issue. Consequently, state and local issuers generally attempt to maintain financial and governmental traits that the rating agencies view positively.

Scarcity

A concept related to "quality" that also affects the cost of borrowing money is "scarcity." As with any commodity, an overabundance of bonds in the market can lessen their value. Therefore, states that frequently put bonds on the market or have large issues may find difficulty in obtaining low interest rates.

Scarcity is more understandable in light of investment decisions made daily by bond buyers. They are often interested in mixing the municipal bonds they hold by both geographic area and by credit rating. Because bond portfolios are designed to produce desired rates of return, they include not only high quality Aaa-rated bonds (which bring in lower yields) but also enough lower rated bonds to increase overall yield. State bonds may become "overabundant" relative to demand so that issuer costs of borrowing increase.

Other Market Considerations

Other details influence bond performance in the market. Many are technical items related more to convenience for underwriters and bond dealers than to policy considerations of issuers. For example, advertising of pending issues and convenience of bid deadlines can influence the number of underwriter bids that are received. More bids will likely mean lower interest costs. The timing of new issues to avoid competition with similar issues can also mean better prices.

Bond Premiums

Over the past several years, bond markets have shown a demand for bonds issued at a premium. Bonds issued at a premium means that the coupons on the bond maturities included in the issue are above the market interest rates that exist at the time of sale for those maturities. In return for paying an above market rate of interest for the maturities included in the bond issue, the state receives proceeds at the time of the bond sale in excess of the actual amount of principal borrowed.

In Wisconsin, all general obligation bond premiums, other than those associated with a refunding bond issue, must be deposited in the capital improvement fund. The amount of unissued bonding for each individual bond authorization purpose is reduced by the amount of bond premium proceeds deposited to the capital improvement fund for that purpose.

USE OF DEBT ISSUANCE IN WISCONSIN

Prior to 1969, Article VIII, Section 7 of the Wisconsin Constitution effectively prohibited the state from issuing public debt. The state could incur debt directly for two purposes only: (1) "to repel invasion, suppress insurrection, or defend the state in time of war"; and (2) for "defraying extraordinary expenditures." Further, bonding to defray any extraordinary expenditures was limited to \$100,000. Notwithstanding this constitutional limitation, the state did incur debt indirectly, as far back as 1923, through the use of non-state "dummy" building corporations.

In April, 1969, voters approved an amendment to the Wisconsin Constitution authorizing the state to issue debt directly. This chapter discusses the five major debt issuance mechanisms--general obligation bonds, state-issued revenue bonds, appropriation obligation bonds, authority-issued revenue bonds, and state-issued operating notes-which have been used by the state since the 1969 constitutional change.

General Obligation Bonds

The 1969 constitutional amendment enabled the state to "acquire, construct, develop, extend, enlarge or improve land, waters, property, highways, buildings, equipment or facilities for public purposes." The language was deliberately broad, requiring only that bonding be intended to affect physical property directly and be undertaken for public purposes. In April, 1975, another constitutional amendment was passed, specifically permitting the state to issue general obligation bonds for veterans' housing loans. In April, 1992, a further constitutional amendment authorized the use of general obligation bonds for railways.

The State Constitution also imposes a ceiling on the aggregate amount of general obligation debt the state may incur in any calendar year. Annual debt is limited to the lesser of:

a. 0.75% of the aggregate value of all taxable property in the state; or

b. 5% of the aggregate value of all taxable property in the state less the state's net indebtedness as of January 1 of the current year.

These limits for calendar year 2018 were computed as follows:

For purposes of calculating the 2018 debt limit, the aggregate full market value of all taxable property in the state was \$549,532,691,500. The net indebtedness of the state was \$8,155,029,919. Using these numbers, the limit on aggregate public debt in 2018 was the lesser of:

a. \$4,121,495,186 [0.75% of \$549,532,691,500]; or

b. \$19,321,604,656 [5% of \$549,532,691,500 or \$27,476,634,575 less \$8,155,029,919].

As a result, the debt limit for calendar year 2018 was \$4,121,495,186.

Table 2 compares the annual debt limitation to the amount of general obligation debt actually contracted from 2009 to 2018.

Subject to these overall annual limits, the specific purposes for which bonding is authorized and

Table 2: Comparison of General Obligation DebtContracted to Debt Limitation

Calendar Year	Debt Actuall Contracted	y Annual Debt Limit	Debt Contracted as Percent of Limitation
2009	\$542,765,000	\$3,839,339,873	14.1%
2010	809,293,000	3,719,281,442	21.8
2011	896,260,000	3,651,481,746	24.6
2012	735,585,000	3,533,193,969	20.8
2013	642,295,000	3,506,269,200	18.3
2014	598,170,000	3,596,099,766	16.6
2015	750,475,000	3,679,519,080	20.4
2016	713,305,000	3,788,432,462	18.8
2017	607,975,000	3,944,884,094	15.4
2018	547,290,000	4,121,495,186	13.3

the aggregate amount of bonds which can be issued for each purpose are enumerated under s. 20.866 of the Wisconsin Statutes. The bonding authorization for a particular agency purpose is cumulative; it refers to bonds issued rather than outstanding. Thus, if \$1 million of bonds has been issued for a purpose under a \$1 million bonding authorization, the Legislature must increase the bonding authorization before any additional bonding takes place, even if some or all of the bonds in the original authorization have been retired.

In some instances, agencies may have residual bonding authority. As a result of projects being completed at costs less than initially budgeted, projects not being undertaken, or vetoes of specific project enumerations in the biennial budget while the bonding authorizations are retained, statutory levels of bonding authorization may exceed agency needs. From time to time, usually during the biennial budget deliberations, the Legislature acts to repeal or reallocate some residual bonding authority.

Although several agencies are authorized to use bond revenues for activities other than for capital facilities construction, agencies cannot shift bonding authority between programs. For example, the Department of Natural Resources cannot shift bonding authority between its pollution abatement program and its recreational facilities program.

The specific purposes for which general

obligation debt may be contracted are authorized by the Legislature. These programs, their legislatively authorized debt, and the amount of debt issued for each program are listed in the Appendix. Specifically, as indicated in the Appendix: (1) the Legislature has authorized nearly \$33.2 billion of general obligation debt; (2) \$29.1 billion of this authorization has been issued or used; and (3) approximately \$4.1 billion of the authorization remains available for issuance through December, 2018.

Of the \$33.2 billion of general obligation debt authorized for issuance since 1970, approximately \$727.4 million in new bonding was authorized in the 2017-19 biennium. Most of the bonding provisions for the biennium were contained in 2017 Act 59. The purposes for which the Legislature authorized the issuance of new general obligation bonds in the 2017-19 biennium are summarized in Table 3. Negative amounts shown in Table 3 indicate a reduction in previously authorized bonding levels. In addition, as indicated in the note to the table, Act 59 also provided \$1.5 billion in refunding authority, which is included in the \$33.2 billion authorized.

Through December, 2018, Wisconsin had approximately \$7.75 billion of general obligation bonds and commercial paper obligations outstanding, which represents the principal amount of debt that remains to be paid from issuing nearly \$29.1 billion of general obligations to that date. Of the amount outstanding, \$4.21 billion is supported by debt service payments from the general fund and \$1.63 billion is supported by payments from other tax-supported funds, primarily the transportation fund and the conservation fund. The remaining \$1.91 billion of outstanding obligations are selfamortizing, which means that they have revenue streams resulting from the programs for which they were issued and from which debt service payments are made. These include University of Wisconsin System dormitories, food service, and intercollegiate athletic facilities, as well as certain facilities on the State Fair Park grounds. Table 4 presents a summary of the outstanding state general obligation indebtedness as of December, 2018.

Table 3: General Obligation Bonding Authorized in the 2017-19 Biennium

Agency	Purpose	Amount
Administration	Energy Conservation Projects	\$20,000,000
Agriculture, Trade and Consumer Protection	Soil and Water	7,000,000
Building Commission	Other Public Purposes (All Agency Projects) Housing State Agencies La Crosse Center St. Ann Center for Intergenerational Care, Inc.; Bucyrus Campus Brown County Innovation Center	$186,168,000 \\97,000,000 \\5,000,000 \\5,000,000 \\\underline{5,000,000} \\298,168,000$
Corrections	Correctional Facilities Secured Residential Care Centers for Children and Youth	69,333,000 40,000,000 109,333,000
Environmental Improvement Fund	Clean Water Fund Safe Drinking Water Loan Program	-40,460,000 <u>5,800,000</u> -34,660,000
Health Services	Mental Health Facilities	37,695,000
Military Affairs	Armories and Military Facilities	10,218,100
Natural Resources	Dam Safety Projects Nonpoint Source Urban Nonpoint Source Cost Sharing SEG Revenue Supported Facilities	$\begin{array}{r} 4,000,000\\ 6,150,000\\ 3,700,000\\ \underline{5,805,800}\\ 19,655,800\end{array}$
Transportation	Freight Rail Harbor Assistance Southeast Wisconsin Megaprojects	12,000,000 14,100,000 <u>252,400,000</u> 278,500,000
University of Wisconsin	Academic Facilities Self-Amortizing Facilities	210,912,000 31,502,300 242,414,300
Veterans Affairs	Veterans Facilities Self-Amortizing Facilities Self-Amortizing Mortgage Loans	4,332,600 8,046,400 -273,300,000 -260,921,000
TOTAL General Obligation	on Bonds*	\$727,403,200

*Excludes \$1,500,000,000 of economic refunding bonds authorized in 2017 Act 59.

Bonding Category	Amount Outstanding
Tax-Supported	
General Fund	\$4,209,945,478
Segregated Funds	1,634,958,209
Subtotal	\$5,844,903,687
Self-Amortizing University of Wisconsin	
and Other Minor Categories	\$1.906.959.201
and other minor categories	<u>\$1,700,727,201</u>
Total	\$7,751,862,888

Table 4: Outstanding General ObligationDebt -- As of December, 2018

The \$7.75 billion in outstanding debt includes \$405.6 million outstanding from the state's general obligation commercial paper program and variable rate borrowing programs. As of December, 2018, approximately \$181.9 million in general obligation commercial paper notes and \$223.7 million in general obligation extendible municipal commercial paper were outstanding.

Chapter 18 of the statutes establishes the procedures the state must follow in issuing debt and contains security provisions behind the state's obligations. It assigns responsibility for issuance of general obligation bonds to the Building Commission and sets forth procedures for authorizing and issuing debt. Further, it provides for the capital improvement fund, into which bond revenues are deposited, and the bond security and redemption fund, from which debt service payments are actually made.

A key provision of Chapter 18 (s. 18.12 of the statutes) relates to the security pledged for bond issues. This provision irrevocably pledges the "full faith, credit, and taxing power" of the state for the payment of public debt. It further provides for an irrevocable appropriation, "as a first charge upon all revenues of the state, of a sum sufficient for the payment of...principal, interest and premium[s]," on general obligation bonds as they fall due. These statutory provisions, combined with the constitutional provision that bondholders may file suit

against the state, make the Wisconsin general obligation pledge particularly strong.

Debt service payments on conventional general obligation bonds are made twice each year. Payments from 1970-71 through December, 2018, total approximately \$19.0 billion. Total remaining debt service payments after December, 2018, on all outstanding general obligation bonds are estimated to total approximately \$10.1 billion over their terms, with the last payment being made in fiscal year 2041-42. This amount excludes any principal and interest payments on the state's \$405.6 million in outstanding commercial paper and variable rate borrowing programs.

Table 5 presents a history of Wisconsin's annual debt service payments on general obligation bonds and notes since 2008-09. As mentioned earlier, approximately \$4.21 billion in outstanding general obligations are supported by debt service payments from the general fund. Table 6 shows general purpose revenue debt service as a percentage of general purpose revenue (GPR) expenditures for the same years.

Table 5: Debt Service on General ObligationBonds (\$ in Millions)

Fiscal Year	Principal	Interest	Total Debt Service
2008-09*	\$397.3	\$256.0	\$653.3
2009-10*	119.0	251.8	370.8
2010-11*	222.3	263.5	485.8
2011-12*	159.3	262.2	421.5
2012-13	626.0	300.1	926.1
2013-14	736.3	322.9	1,059.2
2014-15*	527.7	308.3	836.0
2015-16*	554.3	316.0	870.4
2016-17	620.6	326.4	947.0
2017-18	592.8	328.8	921.6

*Reflects structural refunding of certain state issued general obligations and commercial paper scheduled to mature during that fiscal year (see Table 7 for those amounts).

Commercial Paper/Variable Rate Borrowing

In March, 1997, the Building Commission authorized a general obligation commercial paper financing program. The program involves the state issuing short-term commercial paper notes with maturities of 270 days or less in order to delay the issuance of long-term bonds for a period of time. The program tries to take advantage of short term borrowing rates, when those rates are substantially lower than long term rates. The program includes a liquidity facility provided by a group of banks. This liquidity facility is needed in the event maturing commercial paper notes cannot be "rolledover" to pay for maturing commercial paper notes.

In August, 2000, the Building Commission authorized a general obligation extendible municipal commercial paper program. This program operates the same as a commercial paper program; however, it does not require the state to maintain a liquidity facility as the investor provides liquidity by agreeing to an extended maturity date in the event "rollover" extendible municipal commercial paper cannot be issued to pay for maturing paper. The state also has similar commercial paper programs for its revenue obligation programs.

Debt Restructuring

In six of the last 10 years shown in Table 6, annual debt service payments from the state's general fund supported general obligation bond and commercial paper debt programs have been lower than the debt service repayment schedule on those obligations would otherwise indicate. This primarily has occurred for the following reasons: (a) through debt restructuring actions (as footnoted in Tables 5 and 6); and (b) issuing bonds at a premium. These actions have both had the effect of lowering near-term debt service costs in exchange for higher debt service payments in the future.

Under its debt restructuring actions, the state issued refunding bonds and used the proceeds on those bonds to make payments on current year

Table 6: Annual GPR Debt Service (\$ inMillions)

Fiscal Year	GPR Expenditures	GPR Debt Service	Debt Service as a % of Expenditures
2008-09	\$12,744.3	\$438.0*	3.44%
2009-10	12,824.0	145.3*	1.13
2010-11	13,579.3	213.8*	1.57
2011-12	13,751.1	155.1*	1.13
2012-13	14,332.9	616.7	4.30
2013-14	14,673.9	717.1	4.89
2014-15	15,503.5	509.7*	3.29
2015-16	15,378.9	507.2*	3.30
2016-17	15,897.0	566.8	3.57
2017-18	16,504.6	543.6	3.29

*Excludes principal payments that were not paid in those years as a result of debt restructuring (see Table 7 for those amounts).

principal due on its general obligation debt. Similarly, the state has "rolled over" current principal amounts due on its outstanding general obligation commercial paper programs. Under both these actions, the state defers the current principal due on its outstanding general obligation debt in order to reduce current year debt service expenditures. However, deferring principal payments on existing debt means that the principal debt is outstanding for a longer period of time and thus the state incurs additional interest costs. Table 7 provides a history of the debt restructuring actions taken by the state on its general obligation commercial paper and bonding programs. The state has also restructured principal on its revenue obligation programs.

Bond Premiums

Under current law, all general obligation bond premiums, other than those associated with a refunding bond issue, must be deposited to the capital improvement fund to be used in lieu of issuing bonds for that purpose in the future. The statutes specify that the authorized bonding purposes for which the bonding was issued are reduced by the amount of any premiums deposited to the capital improvement fund in proportion to the share of

Act	Fiscal Year	Type of Obligation	Amount
2001 Act 16	2001-02	Commercial Paper	\$102.0
2001 Act 109	2002-03	Commercial Paper	25.0
2003 Act 129	2003-04	2004 Series 3	175.0
2007 Act 226	2007-08	Commercial Paper	63.6
	2008-09	Commercial Paper	61.6
2009 Act 28	2009-10	2009 Series 1	54.4
	2009-10	2010 Series 1	201.2
	2009-10	Commercial Paper	107.0
	2010-11	Commercial Paper	107.0
	2010-11	2011 Series 1	25.1
2011 Act 13	2010-11	2011 Series 1	165.0
2011 Act 32	2011-12	2011 Series 2	45.4
	2011-12	Commercial Paper	104.8
	2011-12	2012 Series 1	218.0
2015 Act 55	2014-15	Commercial Paper	108.0
	2015-16	Commercial Paper	101.0
	Grand Tota	1	\$1,664.1

Table 7: History of GPR Debt Restructuring (\$ inMillions)

each purpose to the par value amount of the bond issue. Any premiums not used for the purposes for which the bonds are issued may be used for other purposes, as determined by the Building Commission, and the bonding authorization for those purposes would be reduced by the amount of premiums used. As a result, bond premiums are being used to offset future borrowing. To date, \$546.4 million in bond premium proceeds have been deposited to the capital improvement fund and used to cash-fund future projects.

State-Issued Revenue Bonds

Chapter 29, Laws of 1977, added a major provision to Chapter 18 of the statutes by authorizing the state to issue revenue bonds through the State Building Commission. Previously, revenue bonds could only be issued by independent authorities of the state. Under s. 18.52(5) of the statutes, revenue bonds are defined as an enterprise obligation or a special fund obligation. An enterprise obligation means bonds issued: (1) for the purpose of purchasing, leasing, constructing or operating a revenue-producing enterprise or program; (2) payable solely from, or secured by, the property or income of the program or enterprise; and (3) not public debt. A special fund obligation means bonds payable from a special fund consisting of fees, penalties, or excise taxes and that are not public debt. In addition, s. 18.61(1) of the statutes declares that the "state shall not be generally liable on revenue obligations and revenue obligations shall not be a debt of the state for any purpose whatsoever."

Notwithstanding the provisions specifying that state-issued revenue bonds do not constitute debt of the state, s. 18.61(5) of the statutes does permit the issuance of revenue bonds backed by a state "moral obligation" pledge:

"The legislature may provide, with respect to any specific issue of revenue obligations, prior to their issuance, that if the special fund income or the enterprise or program income pledged to the payment of principal and interest of the issue is insufficient for that purpose, or is insufficient to replenish a reserve fund, if applicable, it will consider supplying the deficiency by appropriation of funds, from time to time, out of the treasury. If the legislature so provides, the commission may make the necessary provisions therefore in the authorizing resolution and other proceedings of the issue. Thereafter, if the contingency occurs, recognizing its moral obligation to do so, the legislature hereby expresses its expectation and aspiration that it shall make such appropriation." To date, the state has never had to exercise this moral obligation pledge.

The volume of revenue bonds which may be issued for a specific program is set in the enabling legislation that initially provides for the program. Subsequent legislation may provide additional bonding authority or reduce the bonding authority for a revenue bond program. The Building Commission has issued revenue bonds for six programs, but only four currently have debt outstanding. The following sections of the paper describe the four programs that still have outstanding debt.

Transportation Revenue Bond Program

Transportation revenue bond authorizations totaling \$4,055,372,900 have been enacted by the Legislature. Table 8 shows the amount of these bonds authorized in each biennium. The Building Commission has issued state revenue bonds and commercial paper to finance highway and transportation related administrative facilities, of which \$1.8 billion were outstanding as of December, 2018.

Table 8: Transportation Revenue BondAuthorization Amounts

Biennium	Amount
1983-85	\$166,200,000
1985-87	126,700,000
1987-89	90,400,000
1989-91	93,734,000
1991-93	188,900,000
1993-95	284,900,000
1995-97	172,804,100
1997-99	224,420,800
1999-01	99,026,600*
2001-03	305,982,000
2003-05	342,516,400
2005-07	228,794,000
2007-09	383,963,100
2009-11	301,443,200
2011-13	341,763,100
2013-15	416,512,000
2015-17	163,413,600
2017-19	123,900,000
Total	\$4,055,372,900

*In addition, \$92,559,000 that had previously been authorized but reserved for financing costs was made available for program use.

Clean Water Fund Revenue Bond Program

Under 1989 Act 366, which modified the financing and administrative aspects of the clean water fund, \$729,355,000 in revenue bonds were authorized to finance municipal projects. Subsequently, the Legislature has increased the revenue bond amount to a total authorization of \$2,486,240,000. Table 9 shows the amounts of clean water fund bonds authorized in previous biennia.

Biennium	Amount
1989-91	\$729,355,000
1991-93	568,400,000
2001-03	100,600,000
2003-05	217,600,000
2007-09	368,145,000
2009-11	379,200,000
2011-13	353,000,000
2013-15	-7,400,000
2015-17	-182,200,000
2017-19	-40,460,000
Total	\$2,486,240,000

Table 9: Clean Water Fund Revenue BondAuthorization Amounts

Act 366 also authorized the Building Commission to designate, by resolution, that a legislative moral obligation exists for certain revenue obligations under the clean water fund program. If, at any time, the payments received or expected to be received from a municipality on any loan designated under this provision are pledged to secure revenue obligations of the state and are insufficient to pay, when due, principal and interest on the loan, the Department of Administration (DOA) would certify the amount of the insufficiency to the Secretary of Administration, the Governor and the Joint Committee on Finance. The Joint Committee on Finance would be required to introduce a bill with an appropriation of the amount needed to pay the revenue obligation. With this act, the Legislature expressed its moral obligation to make this appropriation if called upon to do so.

In 2015, the Building Commission approved restructuring the clean water fund revenue bond program, which was then renamed the environmental improvement fund (EIF) revenue bond program. (For more information, see the Legislative Fiscal Bureau informational paper entitled, "Environmental Improvement Fund.") As of December, 2018, \$370.3 million in clean water fund revenue bonds (including EIF revenue bonds) remained outstanding. It is anticipated that debt service for revenue bonds will be financed through municipal loan repayments and interest received from a reserve fund also created by 1989 Act 366.

PECFA Revenue Bond Program

A petroleum environmental cleanup fund award (PECFA) revenue obligation borrowing program administered by the Department of Commerce was created under 1999 Act 9. Act 9 authorized \$270 million in PECFA revenue obligations to fund the cleanup of PECFA eligible sites contaminated by petroleum based products. Subsequently, 2001 Act 16 provided \$72 million of bonding and 2003 Act 33 provided an additional \$94 million of bonding for this purpose. Finally, 2007 Act 20 reduced the PECFA revenue bond authorization by \$49.1 million. As a result, the PECFA revenue bond authorization totals \$386.9 million.

The bonds are repaid by the 2.0 cents per gallon petroleum inspection fee assessed on the storage of petroleum based products that are eventually sold in the state. As of December, 2018, \$27.2 million remained outstanding on the bonds and commercial paper issued for this purpose. (For more information, see the Legislative Fiscal Bureau informational paper entitled, "Petroleum Environmental Cleanup Fund Award (PECFA) Program.")

Appropriation Obligation Bonds

The Legislature has twice authorized DOA to issue appropriation obligation bonds. First, the 2003-05 biennial budget (2003 Act 33) authorized DOA to issue taxable general fund annual appropriation bonds. DOA can only issue appropriation obligation bonds to pay the state's unfunded accrued prior service (pension) liability and unfunded accrued liability for sick leave conversion credits. After issuance of the bonds, the state is making annual debt service payments on the bonds in lieu of each state agency making annual payments associated with these liabilities as part of their fringe benefit costs.

Second, 2007 Act 226 (the 2007-09 budget adjustment act) authorized DOA to issue appropriation obligation bonds to refund the outstanding tobacco securitization bonds issued by the Badger Tobacco Asset Securitization Corporation in 2002, and repurchase the rights to the state's tobacco settlement revenues. These bonds funded an upfront deposit of \$309 million in 2008-09 to the medical assistance trust fund.

Under the 2003 Act 33 and 2007 Act 226 legislative authorizations, the state has issued nearly \$3.4 billion in appropriation obligation bonds. Because the bond repayments each year are subject to appropriation, appropriation obligation bonds are not considered public debt of the state and are not supported by the full faith and credit of the state. However, in authorizing these bonds, the Legislature, recognizing its moral obligation to do so, expressed its expectation and aspiration that it would make timely general fund appropriations that are sufficient to pay the principal and interest due on appropriation obligations in any year.

The debt service payments on appropriation obligation bonds are payable from a GPR appropriation in the amounts appropriated by the Legislature each year. The required appropriation level equals the maximum possible payment that could be made in a given year under the debt structure associated with these obligations and all ancillary agreements related to the obligations. These budgeted GPR amounts may not be fully expended, since the actual debt service on the obligations and related agreements may be lower than the amounts required to be appropriated.

For the appropriation bonds issued to refinance liabilities associated with the state's pension program, the DOA Secretary also has the authority to assess each program revenue (PR), segregated revenue (SEG), and federal (FED) general operations appropriation account for the percentage of debt service costs that are associated with each fund's share of the unfunded accrued prior service pension liability and unfunded accrued liability for sick leave conversion credits that would have otherwise been paid by those funding sources. These PR and SEG amounts are transferred to the general fund each year, which further offsets the GPR cost of these bonds. The State has issued these bonds, which in aggregate were outstanding in the amount of \$1.499 billion as of December, 2018.

Under the 2007 Act 226 tobacco settlement repurchase transaction, the debt service on the appropriation obligation bonds would be repaid from a general fund appropriation through 2036-37. These costs to the general fund are largely offset by the annual deposit of most of the repurchased tobacco settlement revenues to the general fund during that same period. The state issued these bonds, which in aggregate were outstanding in the amount of \$1.529 billion as of December, 2018.

Total State Debt Obligations

As discussed in this chapter, the state issues three types of debt obligations: general obligation

Table 10: Outstanding Principal on State Bonding Programs

Type of Bonds	Outstanding Debt December, 2018
General Obligation Bonds	
General Purpose Revenue Supported	\$4,209,945,478
Program Revenue Supported	1,906,959,201
Segregated Revenue Supported	1,634,958,209
Transportation Revenue Obligations	1,768,310,000
Clean Water Revenue Obligations*	370,255,000
PECFA Revenue Obligations	27,195,000
Appropriation Obligations	
Pension	1,498,735,000
Tobacco Settlement	1,529,200,000
Total	\$12,945,557,888

*Includes Environmental Improvement Fund bonds.

debt and commercial paper, revenue obligation debt and commercial paper, and appropriation obligation debt.

Table 10 summarizes the level of outstanding principal as of December, 2018, for each type of debt issued by the state.

Agreements Related to State Debt Programs

In recent years, the Building Commission and DOA were authorized to enter into agreements and ancillary arrangements relating to issuance of state revenue obligation bonds and appropriation obligation bonds at the time of, or in anticipation of, or after issuing such debt. Subsequently, 2007 Act 20 allowed the Building Commission, DOA, and its staff, to enter into these agreements or arrangements, such as interest rate exchange or swap agreements, with a third party associated with any of the state's debt programs. Act 20 also instituted certain reporting requirements and guidelines for interest rate exchange agreements related to state's general obligation debt. Act 20 also specified that certain types of agreements related to state's general obligations and appropriation obligation borrowing programs would be subject to Joint Committee on Finance approval.

An interest rate exchange agreement or swap is a contractual agreement between two parties who agree to exchange certain cash flows for a period of time. Generally, the cash flows to be swapped relate to interest to be paid or received with respect to some asset or liability (debt obligation) of one of the parties to the agreement. For example, an agreement may be designed to effectively convert variable rate payments on existing debt obligations to fixed rate payments associated with those obligations, or vice versa. No principal amounts are exchanged and no new principal amounts are incurred. Rather, a hypothetical (or notional) principal amount is determined under the agreement, which becomes the basis on which the swapped interest payments are calculated. The principal amount is generally tied to the principal amount of an existing state debt obligation. Interest rate swap agreements do not typically generate new funding like bond sales; rather they effectively convert one interest rate basis to a different basis.

DOA has used its authority to enter into swap agreements relative to the state's appropriation obligation debt program. For example, the state issued short term, variable rate, auction rate certificates to refinance the state's unfunded pension and accumulated sick leave conversion liabilities. At the same time, the state entered into an interest rate swap agreement associated with these auction rate certificates. However, the state subsequently refinanced the auction rate certificates into longterm appropriation obligation debt and relinquished the swap agreement.

Authority-Issued Revenue Bonds

Chapters 231 and 234 of the Wisconsin statutes provide, respectively, for the creation and operation of the Wisconsin Health and Educational Facilities Authority and the Wisconsin Housing and Economic Development Authority, each of which has the ability to contract debt. These authorities are public corporations created by the state to administer certain programs. A third authority, the University Hospitals and Clinics Authority was created July 1, 1996.

Health and Educational Facilities Authority

The Wisconsin Health Facilities Authority was created by Chapter 304, Laws of 1973, as a public corporation to provide low-cost capital financing for nonprofit health care institutions. In 1987, the Authority was renamed the Wisconsin Health and Educational Facilities Authority (WHEFA) and was further authorized to issue revenue bonds both for private nonprofit educational facilities and for nonprofit continuing care facilities.

WHEFA's statutory authority to issue revenue bonds has been expanded in three recent biennia. Under 2009 Act 2, WHEFA was authorized to issue revenue bonds for nonprofit research facilities engaged in basic research. Under 2011 Act 32, WHEFA was authorized to issue revenue bonds for projects located in other states provided that the project has a substantial component located within this state as determined by the Executive Director of WHEFA. Most recently, WHEFA's authority to issue revenue bonds was expanded to include all nonprofit institutions under 2013 Act 20. WHEFA had also been authorized to issue revenue bonds for child care centers beginning in 1993; this authority was subsequently deleted in 2011.

Additional statutory changes in 2007 and 2013 exempted the interest paid on certain bonds and notes issued by WHEFA from state income tax. Under 2007 Act 20, interest paid on bonds issued by WHEFA to health facilities to fund the acquisition of information technology hardware or software was exempted from state income tax beginning in the 2008 tax year. Under 2013 Act 20, interest income received on bonds or notes issued by WHEFA was also exempted from taxation beginning in the 2013 tax year if the bonds or notes would have been exempt from taxation if issued by another entity.

Bonds issued by WHEFA are not considered state debt under the state's constitutional debt limit. Further, the state has no obligation to repay WHEFA debt if its revenues are insufficient to meet debt service costs. As of June 30, 2018, WHEFA had outstanding revenue bonds totaling \$9.6 billion.

Wisconsin Housing and Economic Development Authority

The Wisconsin Housing and Economic Development Authority (WHEDA), originally the Wisconsin Housing Finance Authority was created by Chapter 287, Laws of 1971, to provide housing for low and moderate income Wisconsin citizens. Like WHEFA, bonds issued by WHEDA are not considered state debt under the state's constitutional debt limit.

Since WHEDA's creation, its responsibilities have been expanded by the Legislature to include programs other than low and moderate income housing. Among the programs WHEDA administers are: (1) the home ownership mortgage loan program; (2) the multifamily mortgage loan program; (3) the home improvement loan program; (4) the Wisconsin development reserve fund; (5) federal section 8 (rental assistance) and low income housing tax credit programs; and (6) various economic development loan programs.

As of June 30, 2018, WHEDA had issued a total of \$10.6 billion in general obligation bonds under its authority, of which an estimated \$1.5 billion were outstanding. Additional amounts of at least \$480 million have been issued without WHEDA's general obligation since 1984, but WHEDA does not track amounts outstanding on these issues. Additional information on WHEDA is presented in the Legislative Fiscal Bureau informational paper, entitled "Wisconsin Housing and Economic Development Authority."

University of Wisconsin Hospitals and Clinics Authority

The University of Wisconsin Hospital and Clinics Authority was created in 1995 Act 27 to operate and manage the UW Hospital and Clinics beginning July 1, 1996. By statute, the Authority can issue bonds for any corporate purpose, however, new bonds may only be issued with the approval of the Joint Finance Committee and the Secretary of DOA. This approval may come either through a vote by the Joint Finance Committee and an affirmative letter from the DOA Secretary or through passive review. There are no restrictions on the refinancing of existing bonds or indebtedness by the Authority. As of June 30, 2018, the Authority had \$570.2 million in outstanding bonds, including \$155.0 million relating to component units Swedish American (\$123.6 million) and the UW Medical Foundation (\$31.4 million). This amount excludes other long-term debt of the Authority such as loans and capital leases.

Special Purpose Districts

Chapter 229 of the Wisconsin statutes creates several special purpose districts which have the authority to contract debt. The debt issued by the following Districts is not considered a debt of the state. However, any revenue obligation bonds issued by these Districts could be backed by the state's moral obligation pledge.

Wisconsin Center District

The Wisconsin Center District is a local exposition district created under authority granted

in 1993 Act 263 to build and operate an exposition center in the city of Milwaukee. The District has the authority to issue up to \$200 million of bonds for construction of the exposition center and to impose a tax on the sales of certain food and beverages, auto rentals and hotel charges in the district to fund the issuance of the bonds. To fund construction of the exposition center, the District has issued \$63.5 million of senior dedicated bonds, which have first draw on these tax revenues, and \$120.5 million of junior dedicated bonds. These bonds are not debt of the state, but the junior dedicated bonds are backed by a moral obligation of the state.

Provisions of 2015 Act 60 authorize the District to issue up to \$203 million of bonds for construction of a sports and entertainment arena in the City of Milwaukee (Milwaukee Bucks Arena). The District has issued \$108.1 million in appropriation revenue bonds, supported by: (a) a \$4 million annual GPR appropriation from the state to make grants to the District; and (b) a separate \$4 million annual GPR appropriation from the state to the District, which is offset by an annual \$4 million GPR reduction in the county and municipal aid payment to Milwaukee County. On June 23, 2016, the state and District entered into a memorandum of understanding that requires the state to pay all monies appropriated from these appropriations directly to the Trustee established in the appropriation obligation bond indenture by July 1 of each year. The District has also issued \$54.3 million in dedicated tax revenue bonds and \$37.9 million of dedicated tax revenue refunding bonds, both of which are financed by indefinitely extending some of the existing District taxes.

Southeast Wisconsin Professional Baseball Park District

The Southeast Wisconsin Professional Baseball Park District was created under 1995 Act 56 to finance a new stadium for the Milwaukee Brewers baseball team. The District has the authority to issue bonds and impose a sales tax in a five county area to repay the bonds. Up to \$160 million of the bonds could have been backed by the state's moral obligation. The District has issued approximately \$259.1 million in bonds and certificates of participation; however, the District chose to issue this debt without the state's moral obligation pledge.

Green Bay-Brown County Professional Football Stadium District

The Green Bay-Brown County Professional Football Stadium District was created by 1999 Act 167 for the construction and maintenance of a renovated football stadium for the Green Bay Packers. The District has the authority to issue up to \$160 million of bonds exclusive of issuance costs and other reserves and to impose a sales tax in Brown County to repay the bonds. The District has issued three series of bonds totaling \$175 million, \$160 million of which was provided to the Stadium project. The remaining bond proceeds were placed in reserve or used to cover bond issuance costs. These bonds could have been backed by the state's moral obligation pledge; however, no such pledge was applied to these bonds by the District. In August, 2011, the District indicated that it had retired all outstanding principal on the bonds it has issued.

Redevelopment Authority of the City of Milwaukee

Under 1999 Act 9, the Redevelopment Authority of the City of Milwaukee was authorized to issue up to \$170 million in bonds to finance capital improvements at the request of Milwaukee Public Schools to implement a neighborhood school facilities plan, subject to approval of the plan by the Joint Committee on Finance (JFC). In September, 2000, JFC approved the issuance of up to \$100 million of this bonding. Act 9 specified that a state moral obligation pledge would apply to these bonds if certain conditions were met. Bonds totaling \$98.5 million, excluding reserves, have been issued that have a special debt service reserve fund backed by the State's moral obligation pledge. As of June 30, 2018, \$43.2 million of this bonding was outstanding.

State-Issued Operating Notes

During some fiscal years, the state issues operating notes, which are financial obligations used to support the cashflow of the general fund. The amount that may be issued during any fiscal year is limited to 10% of total general purpose revenue and program revenue appropriations for that year. If a cashflow deficiency is anticipated, the Secretary of Administration, with the Governor's approval, requests the issuance. It is then submitted to the Joint Committee on Finance for its approval. Following this, the Building Commission issues the notes. All notes must be repaid during the fiscal year in which they are issued. The amount of operating notes that have been issued each year since 2009-10 is summarized in Table 11.

Table 11: Operating Notes (\$ in Millions)

Fiscal Year	Amount Issued	
2009-10	\$800	
2010-11	800	
2011-12	800	
2012-13	0	
2013-14	0	
2014-15	0	
2015-16	0	
2016-17	0	
2017-18	0	
2018-19	0	

Master Lease Program

Another type of long-term obligation on the part of the state that does not involve the issuance of

bonds and is not considered a general obligation debt of the state is the state's master lease program. The state created its master lease program in September, 1992, for the purpose of acquiring departments equipment for state through installment payments. In 1994, the program was expanded to include, in limited circumstances, the acquisition of prepaid services. Examples of current leased items include the state's accounting system, expansion of the state's central mainframe computer, and various information technology items. The state's obligation to make lease payments is not a general obligation debt of the state, but rather the payments are subject to the annual appropriation of funds sufficient to cover the costs of the annual lease payments.

The program implements a two-phased financing structure: (a) the financing of all leased items initially financed with proceeds from a revolving line of credit for which the state pays interest based on a variable taxable interest rate; and (b) the state, at various times, issues certificates of participation to refinance the revolving credit with a fixed rate and most often tax exempt financing.

The master lease program is administered through DOA and is available for all state agencies, and any association, society, or other body of the State, which is entitled to expend appropriated funds, including the Legislature and courts. Through December, 2018, 16 Departments, the Legislature, the Supreme Court, and various other state bodies have used the program to acquire equipment or service items of which \$101.1 million in certificates of participation are outstanding.

Under the master lease program, state agencies submit requests to DOA for approval. DOA's review includes a determination as to whether lease financing is the best alternative for acquiring the equipment and the state agency has the resources to make the required lease payments. An agency's master lease payments are not included in the state budget as a separate line item, but rather are included with other expenditures in one or more of an agency's existing operating budget lines.

WISCONSIN'S BOND ISSUANCE PROCESS

A number of times each biennium the state, or one of the state authorities, issues bonds. The process leading to sale differs depending upon the type of debt incurred.

General Obligation Bonds

The procedure by which general obligation bonds are authorized and issued differs depending on whether programs are part of the state building program or not. Examples of bonding programs that are not part of the building program are the veterans' primary mortgage loan program, Department of Natural Resources land acquisition and water pollution abatement programs, and the state clean water fund program.

State Building Program

For bonding that is part of the state building program, the authorization process begins in the fall of even-numbered years, during the development of the state budget. At that time, agencies prepare their capital budget requests for the ensuing biennium for submission to the Building Commission. The Commission must submit its recommendations for the building program to the Joint Committee on Finance no later than the first Tuesday in April, of each odd-numbered year. The Committee and the Legislature review these recommendations, and authorize projects by listing each project's title and budget in the budget bill, which is called the project enumeration.

The Commission consists of the Governor, who serves as chair of the body, one citizen member, appointed by and serving at the pleasure of the Governor, and three legislators from each house of the Legislature, appointed as are members of standing committees. State agencies submit their capital budget requests to the Division of Facilities Development and Management (DFDM) of DOA. DFDM acts as staff to the Building Commission, analyzing agency requests and submitting its recommendation, initially to the DOA Secretary and the Governor for review and then to the Building Commission.

Generally, when projects requiring bonding are enumerated in the state building program, the Legislature also provides the necessary bonding authority for them. In some instances agency operating budget funds, federal funds, gifts and grants, or residual or unused bonding authority can be used to fund particular projects. In these cases, increased bonding authority for the full project amount may not be necessary.

When agencies are ready to proceed with projects that have been approved by the Legislature, they request release of advanced planning funds by the Building Commission. Concept and budget reports are the first phase of planning and design. For major projects, they are submitted to the Building Commission with a request for release of additional planning funds or construction funds. At that time, the Commission may grant approval to proceed with final design, bidding and construction. Authorization by the Commission to bid and construct building program projects generally constitutes its final project approval. As project funds are needed, the Commission authorizes the issuance of bonds or notes sufficient to support construction activities over the near term (approximately six months). The Commission may also substitute cash funding for bonding whenever funds are available.

Non-Building Program Activities

The bond issuance process for non-building program activities, including the veterans' primary mortgage program, water pollution abatement and environmental cleanup programs, the clean water fund program, and stewardship and other conservation programs differs from that outlined above. The Building Commission has substantially less involvement in the early stages of activities. Agencies with bonding requirements for these programs generally submit their borrowing needs as part of their operating budget requests, rather than as part of the state building program. The Governor recommends a level of borrowing authority for these programs, and the Legislature sets the bonding authorization as part of the budget process.

Structuring and Timing of the Bond Issue

The Capital Finance Office in DOA structures each bond issue. Capital Finance may consult with DFDM for state building program projects and with those agencies wishing to proceed with non-building program activities. Generally, the schedules for a number of capital projects and agency programs are coordinated so that the state can combine different undertakings in a single issue, although the veterans primary mortgage loan program is funded through separate stand-alone bond issues. The necessary dollar volume, maturities, call provisions, and other related items of issues must be determined. Capital Finance is occasionally assisted in this process by private firms serving as financial advisors to the state.

The timing of bond issues also must be determined. Timing is important because of the volatility of interest rates in the municipal bond market; a small change in interest rates potentially translates into large changes in interest expense or savings to the state over the term of issues. Timing also can impact the state's general fund condition through scheduling of debt service payments. Payments for conventional bond issues are made twice each year. The timing of issues can delay debt service payments into the following fiscal year. The necessary bonding revenues can be provided in the current fiscal year while initial debt service payments are postponed into the next fiscal year. Therefore, it is likely that the full fiscal effect of bonding authorizations included in legislation passed during one biennium, will not be incurred until the next biennium or later.

The Building Commission has considerable flexibility in the timing of issuance and scheduling of debt service payments. However, federal law forces states to carefully plan the size of new bond issues. States are required to expend all bond proceeds for their stated purposes within two years of issue, except for veterans' housing issues, or be subject to rebating all arbitrage profits (the difference between interest paid on bond issues and interest earned by investing proceeds) to the federal government. This provision forces the state to enter the bond market more frequently and with smaller issues.

Prior to any sale of bonds, the Building Commission passes debt authorizing resolutions, specifying the purposes and dollar amounts for which bonds will be issued. Debt resolutions must be passed before any construction or non-building program activity contracts can be signed or funds committed. The bond counsel prepares legal opinions on the validity of the sales, and preliminary official statements are printed for prospective underwriters and investors describing, in detail, the proposed issues and the state's fiscal condition. Notification of the pending sales are placed in The Bond Buyer and other financial publications, and the state applies to Moody's, Standard & Poor's, Fitch Investors Service, and Kroll Bond Rating Agency for bond ratings on the issues.

Wisconsin's Bond Ratings

Historically, there have been three rating agencies, Moody's, Standard and Poor's, and Fitch, that have rated the state's various debt obligations. However, recently the Kroll Bond Rating Agency has begun rating state debt issues. When Wisconsin first began issuing general obligation bonds in 1970, its issues received the second highest ratings by Moody's and Standard & Poor's. From September, 1974, until June, 1981, Wisconsin general obligation bonds received Moody's and Standard & Poor's highest ratings. In June, 1981, the state's bond rating was reduced from AAA to AA+ by Standard and Poor's and in 1982, the state's bond rating was changed from Aaa to Aa by Moody's Investors Service.

In 2002, a state general obligation bond issue received an AA- rating from Standard and Poor's Ratings Services, Aa3 from Moody's Investors Services, and AA by Fitch Ratings. Subsequently, in 2004, Fitch Ratings downgraded the State's general obligation debt to a AA- rating, matching the rating of the other agencies. In August, 2008, Standard and Poor's strengthened the state's rating on its general obligation debt from AA- to AA. More recently, Fitch Ratings and Moody's recalibrated their public financing ratings, which generally led to favorable changes in ratings on some of the state's borrowing programs, including an AA rating from Fitch Ratings and an AA2 from Moody's. Kroll began rating certain state debt obligation issues in 2013. In 2017, Fitch, Kroll, and Moody's upgraded their ratings on the state's general obligations, master lease certificates of participation, and general fund annual appropriation bonds. Table 12 provides a summary of the long-term ratings assigned to different types of securities that the state issues as of December, 2018.

Rating agencies also note an issuer outlook within the rating category given a bonding issue, which can indicate the potential direction of future rating changes. A rating associated with a bond issue can indicate a positive, stable, or negative outlook on the issuer's finances, which indicates the bond issuer's relative strength with a rating category. A positive outlook indicates that the issuer is in a strong position within its current rating category and could potentially be considered for a future upgrade. A stable rating means that the bond issuer has a solid position within its current rating. A negative outlook indicates that the bond issue has a weak position with its current rating category and could receive a potential future downgrade. On recent bond issues, Standard and Poor's and Fitch Ratings have indicated a stable outlook associated with their current rating category for the state's general obligation bonds, while Moody's recently indicated a positive outlook associated with its current rating on those bonds.

In the past, rating agencies have cited concerns about the state's finances in their ratings of the state's general obligation debt. Specifically, they identified the state's lack of general fund surpluses, the lack of a significant reserve or "rainy day" fund, and the use one-time revenues to fund ongoing expenditures as credit concerns. This was less of an issue in 2017-18, when the state's general fund ended with a positive balance of \$588.5 million and the budget stabilization fund ended with a balance of \$320.1 million.

Type of State Security	Fitch Ratings	Moody's Investors Service, Inc.	Standard & Poor's Ratings Services	Kroll Bond Rating Agency
General Obligations	AA+	Aa1	AA	AA+
Master Lease Certificates of Participation	AA	Aa2	AA-	AA
Transportation Revenue Bonds	AA+	Aa2	AA+	AAA
Clean Water Revenue Bonds	AA+	Aa1	AA+	No Rating
Environmental Improvement Revenue Bonds	AAA	No Rating	AAA	No Rating
Petroleum Inspection Fee Revenue Bonds	AA	No Rating	AA	No Rating
General Fund Annual Appropriation Bonds	AA	Aa2	AA-	No Rating

Table 12: Ratings on the State's Securities

Another concern of rating agencies has been the state's ongoing accounting deficit under generally accepted accounting principles (GAAP). The GAAP deficit generally reflects the state's year end general fund balance under its statutory basis of accounting, adjusted for revenue and expenditure items attributable to the current fiscal year. This deficit can be exacerbated when annual general fund surpluses are low, or do not exist. However, in 2017-18, despite a positive general fund ending balance using the statutory basis of accounting, when presented using GAAP, the state had a GAAP deficit of \$1.25 billion.

Following the rating of bonds, at the specified time of sale, representatives of various underwriting syndicates submit sealed bids for the bonds. Bids resulting in the lowest net interest costs to the state are accepted. The winning underwriting syndicates are generally given about three weeks to deliver the promised funds. During that time, the underwriters resell the bonds to investors.

When the bond proceeds are delivered, they are deposited in the capital improvement fund and invested by the State of Wisconsin Investment Board until needed. Earnings on invested funds are credited to the capital improvement fund and are used to offset future borrowing for projects under the same program purpose.

State-Issued Revenue Bonds

The purposes and aggregate amounts of revenue bonds which may be issued by the Building Commission are authorized by the Legislature. Although state revenue bonds may be sold competitively, sales are often negotiated.

For negotiated sales, the Building Commission selects underwriters to work with it and Capital Finance to structure bond issues. The Building Commission may select underwriters through a request for proposal process in which interested firms submit written proposals outlining their qualifications, the services they provide and their fees.

The process for structuring and authorizing revenue bond issues is similar to the process for general obligation bonds. The underwriters purchase the bonds at prices that are negotiated with the Building Commission. Just as with competitively sold bonds, underwriter profit is equal to the difference between the purchase price and resale price to investors.

Authority-Issued Revenue Bonds

Authorities select their own underwriters and issue their own revenue bonds. The Legislature sets authority debt limits, if any. Direct state involvement in authority bond issuance is limited, as the responsibility for authority bonding decisions rests with the authorities themselves, not with the State Building Commission. However, the Commission usually asks the authorities to coordinate their bond issuances with those of the Commission so that an excessive amount of Wisconsin bonds does not reach the market at the same time.

APPENDIX

Wisconsin State Programs for Which General Obligation Debt Has Been Authorized (Status through December, 2018)

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Administration	Black Point Estate	Adapt the Black Point Estate as a public use facility.	\$1,600,000	\$1,599,100	\$900
Administration	Energy Conservation Projects	Provide funds to agencies for energy conservation construction projects at state facilities.	\$220,000,000	\$171,516,987	\$48,483,013
Administration	School district technology infrastructure financial assistance	Provide technology infrastructure financial assistance to school districts in the state.	\$71,911,300	\$71,911,282	\$18
Administration	Public library technology infrastructure financial assistance	Provide technology infrastructure financial assistance to public library boards in the state.	\$269,000	\$268,959	\$41
Agriculture	Conservation reserve enhancement	Fund conservation reserve enhancement program projects to improve water quality, erosion control, and wildlife habitat.	\$28,000,000	\$20,966,378	\$7,033,622
Agriculture	Soil and water	Fund water resource management activities.	\$68,075,000	\$65,760,699	\$2,314,301
Building Commission	Capital equipment acquisition	Finance acquisition of capital equipment.	\$125,660,000	\$124,128,289	\$1,531,711
Building Commission	Discount sale of debt	Fund difference between amount of public debt contracted and the amounts received, not including accrued interest.	\$90,000,000	\$72,908,307	\$17,091,693
Building Commission	Discount sale of debt (higher education bonds)	Fund difference between amount of public debt contracted as a higher education bond and the amounts received, not including accrued interest.	\$100,000,000	\$99,988,833	\$11,167
Building Commission	Housing state departments and agencies	Acquire, construct, improve, or develop general state office buildings.	\$917,767,100	\$783,365,295	\$134,401,805
Building Commission	Other public purposes	Land acquisition, relocation assistance, and other public projects specified by the Legislature; primarily used for all agency projects such as maintenance and energy conservation. Also, includes University System's Wistar and Healthstar capital improvement projects.	\$2,677,933,400	\$2,395,335,355	\$282,598,045
Building Commission	Previous lease rental authority	Finance building projects that were in planning stages when the state transferred from building corporation to general obligation bonding.	\$143,071,600	\$143,068,654	\$2,946

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Building Commission	Wilson Street parking ramp	Finance construction of a parking ramp in Madison.	\$15,100,000	\$15,100,000	\$0
Building Commission	Project contingencies	Fund building program projects for state departments and agencies.	\$47,961,200	\$47,054,376	\$906,824
Building Commission	Bond Health Center	Finance a grant to the Bond Health Center for construction costs related to the expansion of a hospital facility.	\$1,000,000	\$999,990	\$10
Building Commission	H.R. Academy	Provide grant to aid in the construction of a youth and family center at H. R. Academy in Milwaukee.	\$1,500,000	\$1,500,000	\$0
Building Commission	Civil War Exhibit at Kenosha Public Museum	Finance a grant to Kenosha Public Museums for the construction of a Civil War Exhibit	\$500,000	\$500,000	\$0
Building Commission	Hmong Cultural Centers	Finance a grant for the purchase or construction of Hmong Cultural Center in Dane and LaCrosse Counties.	\$250,000	\$250,000	\$0
Building Commission	Wisconsin Agricultural Education Center	Grant to aid in the construction of a Swiss Cultural Center in New Glarus.	\$5,000,000	\$3,780,901	\$1,219,099
Building Commission	Milwaukee Police Athletic League	Provide a grant to the Milwaukee Police Athletic League to aid in the construction of a youth activities center.	\$1,000,000	\$1,000,000	\$0
Building Commission	Aids Resource Center of Wisconsin, Inc.	A grant for the construction and renovation of facilities and purchase of equipment.	\$800,000	\$800,000	\$0
Building Commission	Bradley Center Sports and Entertainment Corp.	A grant for capital maintenance and repair of the Bradley Center facility.	\$5,000,000	\$4,999,999	\$1
Building Commission	Aids Network, Inc.	A grant for the construction and renovation of facilities and purchase of equipment.	\$300,000	\$300,000	\$0
Building Commission	Myrick Hixon EcoPark, Inc.	A grant for the construction of an educational center and facility in the City of La Crosse.	\$500,000	\$500,000	\$0
Building Commission	Dane County Livestock Facilities	A grant for the construction of livestock facilities at the Alliant Energy Center in the City of Madison.	\$9,000,000	\$8,999,972	\$28
Building Commission	Madison Children's Museum	A grant for the construction of a children's museum facility in the City of Madison.	\$250,000	\$250,000	\$0
Building Commission	Grand Opera House in Oshkosh	A grant to the City of Oshkosh to aid in the restoration of the Grand Opera House facility.	\$500,000	\$500,000	\$0
Building Commission	Aldo Leopold Climate Change Classroom and Interactive Laboratory	A grant to the Aldo Leopold Nature Center Inc., to aid in the construction of the classroom and laboratory facility.	\$500,000	\$499,992	\$8

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Building Commission	Carroll University	A grant for the construction of a science laboratory facility at Carroll University.	\$3,000,000	\$2,796,862	\$203,138
Building Commission	Eau Claire Confluence Arts Center	A grant for the construction of the Confluence Arts Center in the City of Eau Claire.	\$15,000,000	\$12,401,009	\$2,598,991
Building Commission	Lac du Flambeau Indian Tribal Center	A grant to the Lac du Flambeau Board of the lake Superior Chippewa for the continuation of a tribal cultural center.	\$250,000	\$249,999	\$1
Building Commission	KI Convention Center	A grant to the City of Green Bay to aid in the expansion of the K I Convention Center.	\$2,000,000	\$1,999,916	\$84
Building Commission	Norskadalen Nature and Heritage Center	A grant to aid in the construction of a Norskadalen Nature and Heritage Center in Vernon County.	\$1,048,300	\$0	\$1,048,300
Building Commission	Domestic Abuse Intervention Center	A grant to aid in the construction of a shelter facility and offices in the City of Madison.	\$560,000	\$559,955	\$45
Building Commission	Wisconsin Maritime Center of Excellence	A grant to aid in the construction of the Center in Marinette County.	\$5,000,000	\$4,999,339	\$661
Building Commission	La Crosse Center	A grant to aid in the remodeling and expansion of the convention center in the City of La Crosse.	\$5,000,000	\$0	\$5,000,000
Building Commission	St. Ann Center for Intergenerational Care, Inc., Bucyrus Campus	A grant to aid in the construction of an intergenerational care center in the City of Milwaukee.	\$5,000,000	\$0	\$5,000,000
Building Commission	Brown County innovation center	A grant to aid in the construction of a STEM innovation center in Brown County.	\$5,000,000	\$0	\$5,000,000
Children's Hospital and Health System	Children's Research Institute	A grant to aid in the construction of a Children's Research Institute in Wauwatosa.	\$10,000,000	\$10,000,000	\$0
Children's Hospital and Health System	Family Justice Center	A grant to aid in the construction a facility in the City of Milwaukee to coordinate and centralize victim advocacy services for families affected by domestic violence.	\$10,625,000	\$10,624,951	\$49
Corrections	Correctional facilities	Acquire, construct, develop, or enlarge correctional facilities.	\$926,679,900	\$864,414,049	\$62,265,851
Corrections	Self-amortizing equipment	Acquire, develop, enlarge, or improve equipment used in existing prison industries.	\$2,116,300	\$2,115,537	\$763
Corrections	Juvenile correctional facilities	Acquire, construct, develop, or enlarge juvenile correctional facilities.	\$28,652,200	\$28,648,301	\$3,899
Corrections	Juvenile correctional grant program	County grant program for construction of juvenile correctional facilities.	\$40,000,000	\$0	\$40,000,000
Educational Communications Board	Educational communications facilities	Acquire, construct, develop or enlarge educational communications facilities.	\$24,169,000	\$24,163,123	\$5,877

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Environmental Improvement Program	Clean water fund	Provide loans to municipalities for wastewater treatment.	\$646,283,200	\$640,264,641	\$6,018,559
Environmental Improvement Program	Safe drinking water	Provide loans for safe drinking water.	\$71,400,000	\$70,918,949	\$481,051
Health Services	Mental health facilities	Acquire, construct, develop, or enlarge mental health facilities.	\$208,646,200	\$176,656,532	\$31,989,668
Historical Society	Historic sites	Acquire, construct, develop, or enlarge or improve historic sites and facilities.	\$9,591,800	\$9,356,811	\$234,989
Historical Society	Museum facility	Acquire and remodel a museum facility.	\$4,384,400	\$4,362,469	\$21,931
Historical Society	Self-amortizing equipment	Enlarge and improve facilities at Circus World Museum.	\$1,029,300	\$1,029,300	\$0
Historical Society	Historic records	Acquire and install systems and equipment necessary to prepare historic records for transfer to new storage facilities.	\$26,650,000	\$25,142,253	\$1,507,747
Historical Society	Wisconsin History Center	Self-amortizing bonding authority to provide grants for the construction of a Wisconsin History Center.	\$16,000,000	\$9,943,388	\$6,056,612
Marquette University	Dental clinic and education facility	A grant to Marquette University to aid in the construction of a dental clinic and education facility.	\$25,000,000	\$24,819,009	\$180,991
Medical College of Wisconsin	Basic science education facility	Construct a basic science education facility.	\$10,000,000	\$10,000,000	\$0
Medical College of Wisconsin	Biomedical research and technology incubator	Grant to aid in the construction of biomedical research and incubator facilities.	\$35,000,000	\$34,731,461	\$268,539
Medical College of Wisconsin	Community medical education facilities	Grant to aid in the remodel, development, and renovation of two community medical education facilities in northeast and central Wisconsin	\$7,384,300	\$5,215,204	\$2,169,096
Military Affairs	Armories and military facilities	Acquire, construct, develop, enlarge, or improve armories and other military facilities.	\$56,490,800	\$45,452,163	\$11,038,637
Natural Resources	General fund supported administrative facilities	Acquire and develop administrative facilities with debt service payments made from general tax revenues.	\$16,514,100	\$11,348,541	\$5,165,559
Natural Resources	Segregated revenue dam safety projects	Assist counties and municipalities with dam safety projects.	\$6,600,000	\$6,599,994	\$6
Natural Resources	Dam safety projects	Assist counties and municipalities with dam safety projects.	\$25,500,000	\$19,091,965	\$6,408,035
Natural Resources	Environmental repair fund	Undertake remedial actions at sites and facilities containing hazardous wastes.	\$57,000,000	\$49,575,901	\$7,424,099

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Natural Resources	Environmental segregated revenue supported administrative facilities	Acquire, construct, develop, enlarge, or improve administrative and laboratory equipment storage and maintenance facilities.	\$19,969,200	\$10,799,966	\$9,169,234
Natural Resources	Ice Age Trail	Acquire land for development of the Ice Age Trail.	\$750,000	\$750,000	\$0
Natural Resources	Land acquisition	Acquire outdoor recreation land.	\$45,608,600	\$45,608,600	\$0
Natural Resources	Segregated revenue supported facilities	Acquire, construct, develop, enlarge, or improve recreation and administrative facilities.	\$108,171,100	\$95,395,665	\$12,775,435
Natural Resources	Segregated revenue land acquisition	Acquire outdoor recreation land, with debt service payments made from segregated revenues.	\$2,500,000	\$2,500,000	\$0
Natural Resources	Local parks land acquisition and development	Acquire and develop local park lands and facilities.	\$2,490,000	\$2,490,000	\$0
Natural Resources	Municipal clean drinking water	Provide grants to municipalities for construction of clean drinking water facilities.	\$9,800,000	\$9,660,562	\$139,438
Natural Resources	Recreation development	Develop recreation facilities.	\$23,061,500	\$23,061,136	\$364
Natural Resources	Recreation projects	Acquire, construct, development, or enlarge recreation facilities.	\$56,055,000	\$56,055,000	\$0
Natural Resources	Nonpoint source grants	Provide funds for nonpoint source water pollution abatement projects.	\$94,310,400	\$94,310,394	\$6
Natural Resources	Urban nonpoint source cost sharing	Provide cost sharing for urban nonpoint source water pollution abatement and stormwater management projects.	\$53,600,000	\$44,498,208	\$9,101,792
Natural Resources	Nonpoint source	Fund nonpoint source water pollution abatement projects.	\$44,050,000	\$31,610,706	\$12,439,294
Natural Resources	Contaminated sediment removal	Fund removal of Contaminated sediment from Lake Michigan and Lake Superior or their tributaries.	\$32,000,000	\$25,760,282	\$6,239,718
Natural Resources	Warren Knowles- Gaylord Nelson Stewardship 2000	Acquire and develop lands, parks, trails, natural habitats, waterways, and fisheries.	\$1,046,250,000	\$883,596,961	\$162,653,039
Natural Resources	Stewardship program	Acquire and develop lands, park trails, natural habitats, waterways, and fisheries.	\$231,000,000	\$230,682,940	\$317,060
Natural Resources	Water pollution abatement and sewerage collection; combined sewer overflow	Construction of combined sewerage overflow projects.	\$200,600,000	\$200,600,000	\$0
Natural Resources	Water pollution abatement and sewage collection facilities	Provide grants to municipalities for construction of water pollution abatement and sewage collection facilities under the point source program.	\$893,493,400	\$893,440,316	\$53,084

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Natural Resources	Water pollution abatement and sewage collection facilities; ORAP funding	Provide grants to municipalities for construction of water pollution abatement and sewage collection facilities under ORAP 2000.	\$145,060,325	\$145,060,325	\$0
Natural Resources	Wisconsin natural areas heritage program	Land acquisition activities under Wisconsin natural areas heritage program	\$2,500,000	\$2,462,968	\$37,032
Public Instruction	State school, state center, and library facilities	Acquire, construct, develop, enlarge, or improve facilities for the deaf and visually handicapped at the state schools and reference and loan libraries.	\$12,350,600	\$12,345,803	\$4,797
State Fair Park	Self-amortizing facilities	Acquire, construct, or improve facilities at the State Fair Park.	\$53,687,100	\$52,735,332	\$951,768
State Fair Park	Housing facilities	Acquire, construct, develop, enlarge, or improve housing facilities at the State Fair Park.	\$11,000,000	\$11,000,000	\$0
State Fair Park	Board facilities	Acquire contract, develop, enlarge, or improve facilities at State Fair Park.	\$14,787,100	\$14,769,364	\$17,736
Transportation	Local roads for job preservation	To award grants to be used to fund local road projects for job preservation.	\$2,000,000	\$2,000,000	\$0
Transportation	Accelerated bridge improvements	Construct bridges.	\$46,849,800	\$46,849,800	\$0
Transportation	Accelerated highway improvements	Construct highways.	\$185,000,000	\$185,000,000	\$0
Transportation	Administrative facilities	Acquire and develop administrative facilities.	\$8,890,400	\$8,793,422	\$96,978
Transportation	Connecting highway improvements	Construct the 27th Street viaduct in Milwaukee.	\$15,000,000	\$15,000,000	\$0
Transportation	Federally aided highway facilities	Construct federally aided highways.	\$10,000,000	\$10,000,000	\$0
Transportation	Rail passenger route development	Develop rail passenger routes.	\$79,000,000	\$67,430,246	\$11,569,754
Transportation	Harbor improvements	Provide grants to municipalities for harbor improvement projects.	\$120,000,000	\$98,967,337	\$21,032,663
Transportation	Rail acquisitions and improvements	Acquire railroad property and provide grants and loans for rail property acquisitions and improvements.	\$250,300,000	\$190,925,226	\$59,374,774
Transportation	Highway projects	Construct highways.	\$41,000,000	\$41,000,000	\$0
Transportation	Major highway and rehabilitation projects	To construct and rehabilitate major highways. Available only in the event federal funds for such projects are not available to the extent anticipated.	\$565,480,400	\$565,480,400	\$0

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Transportation	Major highway and rehabilitation projects subject to joint committee on finance approval	To construct and rehabilitate major highways. Contingent bonding allocated among projects with approval by the joint committee on finance.	\$350,000,000	\$273,292,507	\$76,707,493
Transportation	Southeast rehabilitation projects, southeast mega projects, and high cost bridge projects.	To fund the Marquette Interchange, Zoo interchange, southeast mega projects, and I-94 north-south corridor reconstruction, and high costs bridge projects.	\$1,328,550,000	\$1,315,117,916	\$13,432,084
Transportation	State highway rehabilitation projects; southeast megaprojects	To fund state highway rehabilitation projects and southeast megaprojects.	\$820,063,700	\$820,063,099	\$601
Transportation	State highway rehabilitation certain projects	To fund certain state highway rehabilitation projects.	\$141,000,000	\$140,999,955	\$45
Transportation	Major highway projects	To fund major highway projects.	\$100,000,000	\$99,999,993	\$7
Transportation	Major interstate bridge construction	To fund major interstate bridge projects.	\$245,000,000	\$244,999,936	\$64
Transportation	Southeast Wisconsin freeway megaprojects subject to contingency	To fund interstate 94 improvements in Milwaukee, Racine, and Kenosha counties.	\$252,400,000	\$99,822,592	\$152,577,408
University of Wisconsin	Academic facilities	Acquire and develop education facilities.	\$2,552,521,100	\$2,188,863,009	\$363,658,091
University of Wisconsin	Self-amortizing facilities	Finance facilities such as dormitories with debt service paid from fees generated by the facility.	\$2,740,855,400	\$2,370,075,603	\$370,779,797
Veterans Affairs	Self-amortizing mortgage loans	Veterans' primary mortgage loan program.	\$2,127,540,000	\$2,122,542,395	\$4,997,605
Veterans Affairs	Veterans facilities	Acquire, construct, develop, enlarge, or improve Veteran's facilities.	\$15,018,700	\$9,456,079	\$5,562,621
Veterans Affairs	Self-amortizing facilities	Acquire, construct, develop, enlarge, or improve facilities at state veterans homes.	\$77,995,100	\$28,718,622	\$49,276,478
Subtotal			\$22,018,582,325	\$19,979,927,655	\$2,038,654,670

Wisconsin Refunding Debt Obligations (Status through December, 2018)

Agency	Program	Purpose	Legislative Authorization (1)	Amount Issued to 12/18 (2)	Remaining Authorization
Building Commission	Refunding GPR- supported debt	Refunding of tax-supported general obligation debt.	\$2,102,086,430	\$2,102,086,430	\$0
Building Commission	Refunding self- amortizing debt	Refunding of self-amortizing general obligation debt.	\$272,863,033	\$272,863,033	\$0
Building Commission	Refunding general obligation debt	Refunding tax supported and self- amortizing debt incurred prior to June 30, 2005.	\$250,000,000	\$250,000,000	\$0
Building Commission	Refunding GPR and self-amortizing debt	Refunding tax supported and self- amortizing debt incurred before July 1, 2011	\$474,000,000	\$473,651,084	\$348,916
Building Commission	Refunding GPR and self-amortizing debt	Refunding tax supported and self- amortizing debt incurred prior to July 1, 2013.	\$264,200,000	\$263,420,000	\$780,000
Building Commission	Refunding GPR and self-amortizing debt	Refunding of tax supported and self- amortizing general obligation debt.	\$6,785,000,000	\$4,976,873,916	\$1,808,126,084
Veterans Affairs	Bond refunding	Refunding of veterans' primary mortgage loans.	\$1,015,000,000	\$761,594,245	\$253,405,755
Subtotal			\$11,163,149,463	\$9,100,488,708	\$2,062,660,755

Grand Total

\$33,181,731,788 \$29,080,416,363 \$4,101,315,425

(1) Net legislative authorization from January 1, 1970, through December, 2018.

(2) Under s. 20.867(4)(q) of the statutes, interest earnings and bond premiums deposited to the capital improvement fund are used to offset the state's bonding requirements. As of December, 2018, a total of \$73,888,124 of interest earnings and \$546,406,713 in bond premiums have been applied and are included under the amount issued column.