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The Role of Bonds in Utah

A Guide to Utah Bonding and its Benefits and Limitations



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The mission of Utah Foundation is to promote a thriving economy, a well-prepared workforce, and a high quality of life for Utahns by performing thorough, well-supported research that helps policymakers, business and community leaders, and citizens better understand complex issues and providing practical, well-reasoned recommendations for policy change.

The Role of Bonds in Utah

A Guide to Utah Bonding and its Benefits and Limitations

The State of Utah borrows billions of dollars to finance large capital projects. Several such projects loom on the horizon, including the prison relocation, highway construction, and water projects. In consideration of these needs, Utah Foundation researched whether it is beneficial for Utah to maintain the practice of bonding with shorter terms, or if it might be useful to extend the term lengths.

The report first explains what municipal bonds are, how they work, and who issues them. The second half of the report details how bonds have benefited the state, and how they can be useful in funding Utah's future. In seeking to answer the research question regarding term lengths, Utah Foundation determined that legislators and other policymakers who are promoting funding for large-scale projects should convene to prioritize Utah's future needs and how bonding can assist in funding these projects.

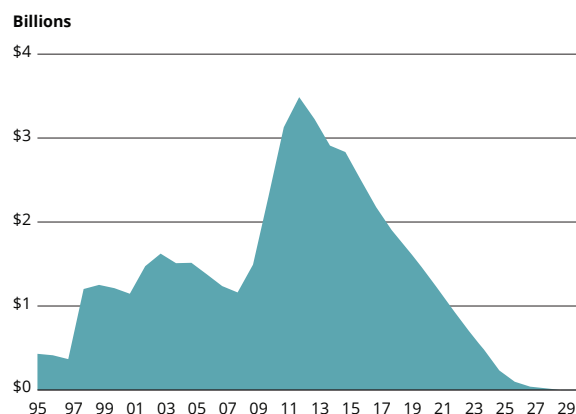
IN THIS REPORT

- Current state debt is 25% higher than the Utah State Treasurer's recommended level of \$850 per capita (currently at \$1,081, down from its 2012 peak of \$1,221). (*see page 10*)
- Utah's formal and informal financial practices help it maintain its AAA status. (*see page 12*)
- Utah faces some challenges including a "debt burden that has risen quickly to an above-average level" (Moody's Investor Service). (*see page 11*)
- If all of Utah's current outstanding general obligations were downgraded from a AAA bond rating to a AA+ it would cost an additional \$1.5 million annually. (*see page 14*)

FINDINGS

- Utah's practice of utilizing shorter-term bonds raises more capital at lower borrowing costs, essentially saving the state millions in interest payments.
- Other states with AAA bond ratings tend to issue shorter-term bonds, though Utah's average bond length is the shortest.
- Lengthening bond terms to match the useful life of projects ensures more equitable repayment; more users would pay for projects from which they benefit.
- Utah may have room to extend the average term of its bonds which would allow for the completion of larger projects with larger economic impacts.

State of Utah Outstanding General Obligations



Source: Utah State Treasurer's Office.

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Photo credit (cover, Utah State Prison): Jeffery Allred, Deseret News

INTRODUCTION

Utah legislators are currently discussing a number of expensive proposals. A billion dollar prison relocation is under serious consideration, as is a billion dollars for highway projects. Other legislators are pushing for another billion dollars to provide water pipelines in Washington and Weber counties. There are longer-term needs as well, particularly since Utah is expected to grow by 2.5 million residents over the next thirty-five years. Funding the transportation needs of this growth will require tens of billions of dollars by 2040, with a projected shortfall of \$11 billion. Water infrastructure is projected to need \$32.7 billion by 2060. Additionally, hundreds of thousands of new school children will need new classrooms in the coming decades.

In an effort to manage current expenditures and future growth, Utah must prioritize the most urgent projects as well as find additional sources of funds. Legislators and other stakeholders will need to carefully balance the needs of the state as they consider tax increases. While population growth itself will provide additional funds, municipal bonds – from both the state and localities – will be integral to funding Utah’s expansion.

“If we want these things done, we’re probably going to need to issue one more large bond because we’ve got a lot of large unfinished projects. I think it’s time to finish those.”

–Sen. Wayne Harper, R-Taylorsvilleⁱ

“Returning to lower debt levels is important for Utah to retain its AAA bond rating”

–Governor’s Office of Management and Budgetⁱⁱ

Bonding is a particularly useful tool for financing capital projects that will provide benefits over the long term. Bonds permit both present and future users of projects to pay for the projects at the same time as they benefit from the projects. Through bonds the state can prepare for population expansion without the current population carrying an unfair burden.

While bonding should not and cannot be used to fund all of Utah’s projected needs, it will undoubtedly be an essential tool in planning for Utah’s growth. Utah Foundation researched whether it is beneficial for Utah to maintain the practice of bonding with shorter terms, or if it might be useful to extend term lengths. Following a background on municipal bonds, this report analyzes the benefits and costs of Utah’s short term bonding practices.

A BACKGROUND ON MUNICIPAL BONDS

Municipal bonds are debt securities issued by states, counties, municipalities, or local districts. Often they are used to support the building of infrastructure, but occasionally the state or a local agency acts as a conduit to the municipal bond market on behalf of non-profit organizations (i.e. hospitals) or even for-profit entities (in order to promote economic development).¹ Similar to stocks purchased through stock exchanges, individuals and entities can purchase municipal or corporate bonds in the bond market for investment purposes. As an investment, municipal bonds generally offer lower interest rates than corporate bonds but the interest on most municipal debt is exempt from income taxes. This makes them popular among individuals and institutions in high income tax brackets.² To provide an idea of the scope of the U.S. municipal bond market, at the end of 2011 there were over one million different municipal bonds outstanding with a total principal amount of more than \$3.7 trillion.³ There are more than 55,000 different issuers of municipal securities.⁴ States and local issuers have continued to deleverage themselves; the total amount of debt held has decreased to \$3.1 trillion as of 2013.⁵

As of July 2014, there are over 2,600 different municipal bonds outstanding in Utah with a total principal amount of nearly \$57 billion. This debt is issued by 36 school districts, 21 counties, 76 cities or towns, the state of Utah, and 58 inter-local entities and other special districts. Included among these entities are a number of corporations using counties or cities to access the municipal bond market (such as Intermountain Healthcare using Murray and Riverton to achieve cheaper debt for constructing hospitals within these cities).

TYPES OF BONDS

There are several types of municipal bonds in the market. The type of bond is determined by the needs of the issuer, the demand from investors, and government regulation. Most municipal bonds can fall into two categories based on the means of repayment: general obligation bonds and revenue bonds.

General Obligation Bonds

When issuing a general obligation bond the issuer pledges its “full faith, credit and resources” for the repayment of the principal and interest, which often includes the promise to levy a property tax if necessary.⁶ While still fallible, general obligation bonds are considered some of the safest municipal investments and allow issuers to achieve the lowest interest rate.

Revenue Bonds

Often the projects being funded by bonds produce a stream of revenue. In these cases, entities might prefer to issue revenue bonds in which the interest and principal are paid directly from the revenue stream of completed projects. This allows the users of a project to pay the cost of the project rather than taxpayers in general. Projects often funded with revenue bonds include toll roads, hospitals, bridges, water, sewer or electrical infrastructure projects, and airports. For example, over \$900 million of the nearly \$2.2 billion dollars available for the ten-year terminal redevelopment of the Salt Lake City International Airport was from revenue bonds. These bonds will be repaid from fees collected from passengers, rents from retailers, and fees charged to airlines for the use of the airport.

Utah often uses a type of revenue bond to finance its public buildings. In lease revenue bonds rent that would be paid to private owners is instead used as the revenue stream to pay off the debt. These bonds are often

“Pay for Success” with Social Impact Bonds

After a failed attempt during the 2013 General Session, the Utah Legislature passed House Bill 96 in 2014 in an effort to help fund pre-school education in Utah. The bill put in place a framework for the state’s first social impact bond.

Social impact bonds enable government agencies to pay for programs that provide specific results. If the results are not met, the government does not pay. Utah is one of three states that has issued social impact bonds, with a dozen more looking into the financing measure. Both Massachusetts and New York have social impact bonds in place to reduce prison recidivism.

Through a collaboration of the United Way of Salt Lake and private investors (J.B. Pritzker and Goldman Sachs), three- and four-year-olds will receive “high impact and targeted curriculum to increase school readiness and academic performance.” The first \$1 million investment (of a total of \$7 million) will allow the United Way to oversee the administration of high quality pre-school instruction in Granite and Park City school districts. The funding will reach 450 and 600 students at risk of landing in special education classes in grade school. For each year that these students do not use special education and remedial services, the investors are paid a return on their investments. The investment works because pre-school is much less expensive than special education and remedial services.

referred to as “appropriation risk bonds” because the Utah State Legislature must appropriate funds to pay the “lease” every year. Potentially, the Utah Legislature could fail to appropriate funds to pay off a lease revenue bond and default, leaving investors with only the building as collateral. Public officials have linked all state building lease revenue bonds together to reduce the risk. This cross-collateralization means that if the state defaults on one building, the creditors can take any other building held by the state as collateral. The reduced risk allows lower interest rates for the state (saving taxpayers money) and eliminates the need for bond reserve funds.⁷ An important distinction between traditional revenue bonds and lease revenue bonds is who pays. Traditional revenue bonds are paid for by revenue generated by users. Lease revenue bonds are funded by general taxpayers, similar to general obligation bonds.

In most instances, general obligation bonds achieve lower interest rates. Utah and other states with a AAA credit rating principally issue general obligation debt.⁸ However, revenue bonds are more common in the municipal bond market. Revenue bonds are an attractive option because local entities usually do not need to pass a referendum to authorize the projects and the revenue stream is often generated by the users of the projects. Local entities will also alternatively pledge their sales tax as revenue stream for the bonds. Revenue bonds in Utah are typically used for water, sewer, and electric projects.

BOND CHARACTERISTICS

While most bonds fall within the two types discussed above, there are other characteristics that affect the risk and costs of bonds. This section outlines these characteristics, which include a serialized structure, call features, refunding, fixed or variable interest, tax-exempt status, and type of sale. Based on the needs of particular projects, issuers choose characteristics which minimize the cost of borrowing. The series of four bonds issued by Utah in 2009 provides an excellent example of many of these characteristics (see Figure 1).

Serial Structure

While bonds in the corporate market are generally paid off in a lump sum at the end of the bond’s term, municipal bonds usually employ a serial structure. For example, Utah’s series 2009A bonds were sectioned into 24 segments ranging from under \$3 million to nearly \$30 million, with interest rates between 2%-5%, and maturities spanning 15 years (see Figure 2). Series 2009A is an extreme example of the segmentation of a bond. Most bonds usually are segmented to one maturity per year.

Bonds sold in segments are useful to both issuers and investors. Similar to a home mortgage set to an affordable amortization schedule, the serialized structure of a bond allows a repayment schedule based on the cash flows of the issuer. Without the serialized structure, issuers would pay interest on the entire principal for the entire term of the bond.

Figure 1: State of Utah Bond Issuances in 2009

Series	Debt	Maturity Begins	Maturity Ends	Purpose	Tax Exempt
2009A	\$394,360,000	2010	2024	Utah Department of Transportation (UDOT): Highway construction and renovation	Yes
2009B	\$111,100,000	2010	2015	Division of Facilities Construction and Management: Acquiring land, construction, and renovating state buildings and higher education projects	Yes
2009C	\$490,410,000	2011	2018	<ul style="list-style-type: none"> • UDOT: I-15 core project in Utah County • The Mountain View Corridor in Salt Lake County • Other transportation projects statewide • Various buildings and improvements for the state and the higher education system 	Yes
2009D	\$491,760,000	2019	2024	Same as 2009C	No

Source: Municipal Securities Rulemaking Board’s Electronic Municipal Market Access.

Figure 2: Utah's Series 2009A Bond Repayment Schedule

Date	Nominal Annual Interest Rate	Principal	Actual Annual Interest Rate
2010	2.00%	\$9,490,000	0.85%
2010	4.00%	14,175,000	0.85%
2011	2.00%	5,425,000	1.30%
2011	5.00%	18,255,000	1.30%
2012	3.00%	23,680,000	1.60%
2013	2.00%	5,935,000	2.00%
2013	5.00%	17,745,000	2.00%
2014	5.00%	23,680,000	2.36%
2015	3.00%	12,450,000	2.53%
2015	5.00%	12,815,000	2.53%
2016	3.00%	5,050,000	2.75%
2016	5.00%	20,215,000	2.75%
2017	5.00%	25,265,000	2.93%
2018	3.00%	4,545,000	3.11%
2018	5.00%	20,720,000	3.11%
2019	4.00%	3,460,000	3.33%
2019	5.00%	21,805,000	3.33%
2020	5.00%	29,930,000	3.57%
2021	5.00%	29,930,000	3.76%
2022	5.00%	29,930,000	3.92%
2023	4.00%	7,540,000	4.02%
2023	5.00%	22,390,000	4.02%
2024	4.00%	3,775,000	4.17%
2024	5.00%	26,155,000	4.17%

Source: Utah Series 2009 Official Statement.

Refunding

Just as a homeowner might refinance a mortgage at a lower interest rate, issuers can refund bonds by issuing new debt to pay off older debt incurring interest at higher rates. If a bond has an early redemption option that has passed, the bond is easily refunded; otherwise, the proceeds of the refunding bonds are placed in an escrow account and used to pay the principal and interest as they come due or until the call date has passed. At this point the original bond is considered to be defeased. Federal regulations restrict the number of times bonds can be refunded in this manner and still receive a tax-exempt status.

An issuer can potentially save millions of dollars by refunding a bond at lower interest rates. However, the issuer must balance those savings against the cost of issuing bonds, which can sometimes reach millions of dollars (depending on the size and complexity of the bond). Negative arbitrage (where the issuer loses money over time because they pay a higher interest rate than they earn in an escrow account) could also decrease the amount of savings by refunding. As a rule of thumb, the Utah State Bonding Commission looks for at least a 3% net present value savings after all the costs are considered before the state will consider refunding a bond.⁹ Other issuers tend to consider 5% the appropriate threshold.¹⁰

Investors purchase one or more segments that best fit their investment profile. They receive regular interest payments (usually semi-annual with Utah state bonds) in addition to the full invested amount on the date of maturity. A serialized structure allows a greater variety of investment choices with various yields and maturities. This appeals to a wider number of investors with different tolerances of risk and different yield expectations.

Call Features

An optional early redemption feature, also known as a “call feature,” allows the issuer to “call back from investors” bonds prior to the final term. For example, because Series 2009A has a call date set for July 1 2019, all segments maturing after that date can be redeemed early at the discretion of the issuer. If the issuer has the funds available to pay down debt ahead of schedule it can save money on forgone interest payments. Issuers will often refund (see the next subsection) a portion or the entirety of a bond after call dates have passed in order to obtain lower interest rates. Call features are common among state bonds in states with a similar credit rating to Utah (see Figure 3).

Figure 3: Prevalence of Call Dates on General Obligation Bonds among Comparable States

All Bonds	63%
Bonds over 5 years	73%
Bonds over 10 years	87%
Bonds over 15 years	93%
Bonds over 20 years	100%

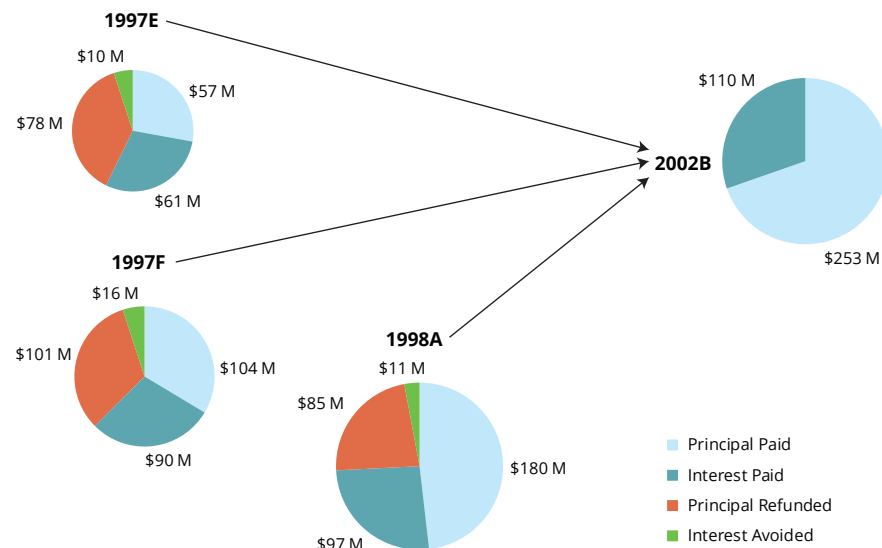
Source: Municipal Securities Rulemaking Board's Electronic Municipal Market Access.

Interest Rate: Variable or Fixed

Issuers can attach a fixed interest rate or a variable rate which fluctuates based on market rates or economic indices as determined by the remarketing agent (the company that manages the buying and selling of the bonds on the open market after the initial sale).

Variable rates are beneficial if interest rates are expected to remain stable or decrease over the term of the bond. However, if rates increase unexpectedly, issuers might end up paying more interest than initially expected. Utah and other states with a AAA credit rating tend to issue fixed rate bonds. While Utah might save money with a variable interest rate, a fixed rate is often preferable because of the politicized nature of budgeting at the state level.

Figure 4: The Complexities of Refunding Bonds



Source: Municipal Securities Rulemaking Board's Electronic Municipal Market Access.

Tax-Exempt Status

Municipal bonds appeal to corporations and individuals with a high marginal tax rate because of the tax-exempt status of most municipal bonds. Tax exemption also allows municipal issuers to borrow at lower interest rates than they would otherwise achieve in the private capital market. However, bonds must meet certain criteria to be considered tax-exempt. Both federal and state governments regulate what can be considered tax-exempt. Most of these regulations limit issuers' ability to abuse the use of lower, tax-exempt interest rates. For example, an issuer cannot use tax-exempt funds to finance a building and then sell it to a private company. Regulations also restrict the amount of arbitrage (money gained when borrowing at a low rate and investing at a higher rate) and stipulate the maximum percent of the bond that can benefit a private entity.¹¹

On occasion, issuers will issue taxable bonds to finance projects that do not meet IRS tax restrictions or because the federal government will provide subsidies. These types of programs are usually temporary and depend on congressional approval. For example, Utah took advantage of a 35% federal subsidy initiated just after the 2008 financial crisis with Series 2009D,¹² only to have the federal government reduce the interest subsidy by approximately 7% as part of the sequestration cuts in late 2013.¹³ Although Utah still ended up saving money, the State Treasurer, Richard Ellis, declared that Utah is not likely to participate in any future programs because "the federal government is not a dependable business partner."¹⁴

Type of Sale: Competitive or Negotiated

When an issuer decides to issue a bond, it needs to select an underwriter to take the bond to market. Issuers can choose two basic routes when selecting underwriters — a competitive bid or a negotiated sale. In a

competitive bid, the issuer solicits underwriters to submit an interest rate at which they will buy the bond. The issuer then selects the best offer (based on the interest rate and underwriting fees), and the underwriter awarded sells the bond to the investors. In a negotiated sale, the issuer selects an underwriter and negotiates an interest rate. The underwriter in this case attempts to get as many investors as possible to commit to buying the bond before the closing sale. The Government Finance Officers Association (GFOA) – a professional association of state, county and local government financial officers – advises that a competitive sale might be best for those with high credit ratings, when using a general obligation bond, when the bond has no special financing features, and the issuer is well known in the market. Negotiated sales are often optimal when an issuer is not well known in the market, has a credit rating lower than a single A, when bond insurance or credit enhancement is not available, or if the bond features a variable interest rate, deferred interest, or other characteristics that are better suited for negotiation.¹⁵

THE KEY PLAYERS

The Issuer

In Utah, the State Bonding Commission (consisting of the Governor, the State Treasurer, and a four-year appointee from the party opposite the Governor's) issues most of the debt authorized by the Utah Legislature. Other state entities such as the State Board of Regents, the Military Installation Development Authority, and the Utah Energy Infrastructure Authority also are able to issue bonds. At the county, municipal, or local level, the issuing agency could be the school board, county, city, local district, or any entity organized to borrow in their name.

Municipal Advisor

Municipal advisors are designated by the Dodd-Frank Act¹⁶ to be legally obligated to represent solely the interests of the issuers. Municipal advisors help issuers decide on the details of the bond such as the method of sale, the structure of the debt, the timing, marketing, and obtaining of credit ratings. GFOA advises the retention of a municipal advisor before selecting any other members of the team.¹⁷

Underwriter

Underwriters play an essential role by either buying the bonds or placing them with institutional, retail, and other investors. Because underwriters are constantly involved in the municipal bond market, they can offer valuable information on general market conditions and what types of bonds are in high demand. Underwriters do not have a fiduciary responsibility to issuers, but regulators have imposed a responsibility of “fair dealings” with their clients.

Bond Counsel

Just as municipal advisors are legally obligated to represent issuers, the bond counsel is legally obligated to represent the bondholders. They ensure that the bonding process meets all the legal and procedural requirements, verify whether the interest on the securities will be tax-free, and ensure the rights of future bondholders.¹⁸

Bond Trustee

Bond trustees are legally obligated to bondholders to enforce the terms of bonds. Some of their roles might include transferring the payments from issuers to bondholders, notifying bondholders of any issuer disclosures, distributing bond proceeds as outlined in bond agreements, and ensuring that proceeds are invested in a safe manner.¹⁹

Escrow Verification Agent

Escrow verification agents are hired when issuers refund a bond. They verify that the proceeds of the escrow accounts combined with the future interest on those accounts will match the funds needed to pay off previous bonds and their interest.²⁰

Other Individuals

Depending on the type of debt issued, other parties that might be included could be auditors, issuer counsel, disclosure counsel, and tax counsel.²¹

THE COSTS OF ISSUING MUNICIPAL BONDS

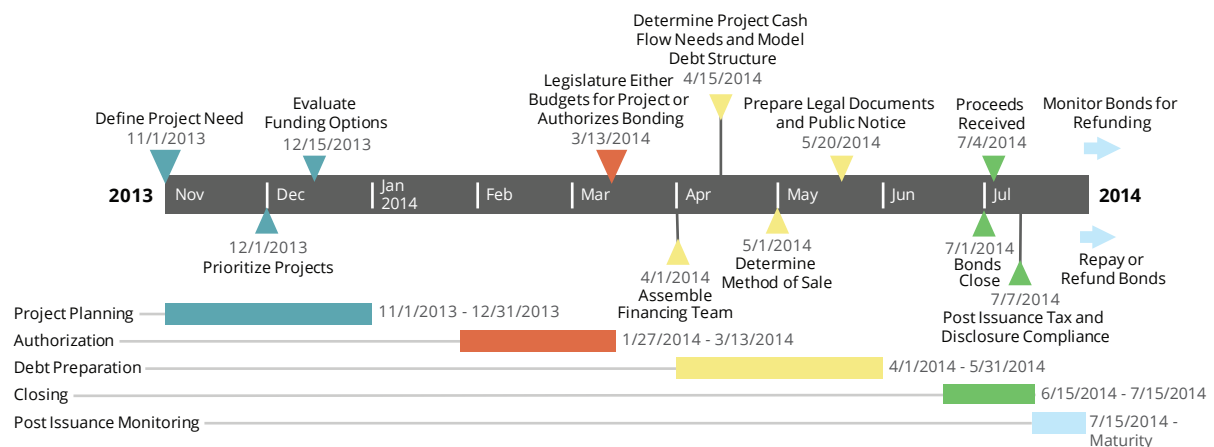
Bond proceeds are typically used to pay the costs of issuing bonds. The cost of issuance is usually based on the complexity, size, and length of the bond. Depending on the issuer and their needs, underwriters, advisors, and agents could be paid on an hourly basis, by fixed fee, or as a percentage of the funds raised. Bond issuers are also responsible for the cost of having their debt rated by a credit rating company. Usually the largest portion of the cost of issuing a bond is the payment to the underwriter. For example, the previously mentioned series 2009A bond cost over \$600,000, with an additional \$1.6 million in the underwriter discount. However, these costs represent a small fraction (0.7%) of the funds raised.

LIFE OF A MUNICIPAL BOND

The life of a bond begins when an organization begins planning capital projects. Once the project is planned and the required funds estimated, the organization prioritizes projects and decides on the best way to pay for them. Projects can be financed with reserves, current funds, or funds which can be raised through the sale of a bond. If the organization decides debt is the optimal form of financing, it must receive authorization from the appropriate authority before issuing the bond.

Authority to issue state debt in Utah comes from the Utah Legislature as set forth in the Master General Obligation Bond Act.²² The Utah Legislature authorizes the ability to issue public debt to state-level authorities. The Utah Legislature also outlines conditions in which counties, cities, school districts, and other local entities within the state can issue debt in the Local Government Bonding Act.²³ General obligation

Figure 5: Life Cycle of a State-Issued Municipal Bond



Source: Utah State Treasurer's Office

bonds in local areas need authorization to bond by referendum or revenue bonds by the local legislative authority (i.e. city council, board of education, board of trustees, etc.). There are also federal regulations with which issuers must comply to issue municipal bonds.

Either before or after (depending on the issuer) the bond's approval, the issuer assembles a team and plans out the bond structure, prepares the appropriate documents, and announces the bond to the market. Investors make commitments to purchase and transactions are finalized at the closing date. After the bonds are sold, the issuer then receives the proceeds of the sale and completes post-issuance legal requirements regarding disclosure and tax compliance. The bond is continually monitored in case refunding the bond appears to be profitable for the issuer. If it is not refunded the bond ends its life paid off on a strict amortization schedule. Figure 5 details the hypothetical life cycle of a simple, state-issued, municipal bond in Utah.

MUNICIPAL BONDS AND THE STATE OF UTAH

The State of Utah's practice of issuing municipal bonds differs from many other states. This section examines how Utah uses municipal bonds and details some of Utah's philosophy behind issuing bonds.

Utah's AAA status

Utah is one of 10 states with a AAA rating from all three credit rating companies (Moody's, Standard & Poor's, and Fitch). This rating marks Utah's municipal bonds as an extremely safe investment. Utah has one of the longest AAA histories.²⁴ The only states with comparable records include Iowa, Georgia, Delaware, Missouri, Maryland, and Virginia.²⁵ Because Utah holds such a great rating, it allows the state to borrow at lower interest rates than most other entities.

Utah's Debt Management Policy

The GFOA has performed extensive research on various state, county, and local financial practices across the United States and has published a number of research reports outlining best practices, one of which outlines the usefulness of debt management policies. The GFOA recommends a comprehensive, formal, debt management policy as a way to improve decision making; this provides guidelines and structures for issuing debt and signals rating agencies that the government is well managed and committed to meet its financial obligations in a timely manner.²⁶

Utah does not have a comprehensive, formal, written debt management policy outlining the allowances and restrictions of issuing debt. The State Treasurer's office and the Utah Legislature have calculated that a comprehensive policy would be too rigid and could take away much of the flexibility that can be useful when issuing bonds and managing debt, especially in times of extreme circumstances.²⁷ While Utah does not employ a comprehensive debt management policy, it does follow several formal and informal rules about issuing and managing debt.

By not implementing a formal debt management policy, the state leaves the details of debt to the agency issuing the debt, which for the state is the State Bonding Commission. If the commission and other agencies such as the Treasurer's Office are staffed by qualified individuals, the flexibility permitted by the lack of a formal debt policy can be beneficial. However, the State Treasurer is an elected office, leaving open the possibility that an inexperienced individual could take office, in which case the latitude stemming from not having a formal debt management policy could lead to fiscal mistakes. Yet even a formal debt management policy would not be a guarantee against corruption comparable to what allegedly occurred in the Attorney General's office.

Formal Rules

Utah's constitutional debt limit does not allow the state to issue debt exceeding 1.5% of the value of all taxable property of the state.²⁸ The Utah Legislature also established a limit of 45% of the maximum allowable appropriations limit (a formula based on population and inflation).²⁹ Yet when the state approached this statutory limit, the Utah Legislature exempted further highway bonds from that limit, effectively neutering the statutory limit on debt.³⁰ The Utah Constitution also limits the term of a bond to 20 years.³¹ This is further limited by statute to 15 years unless approved by the Utah Legislature.³²

Informal Rules

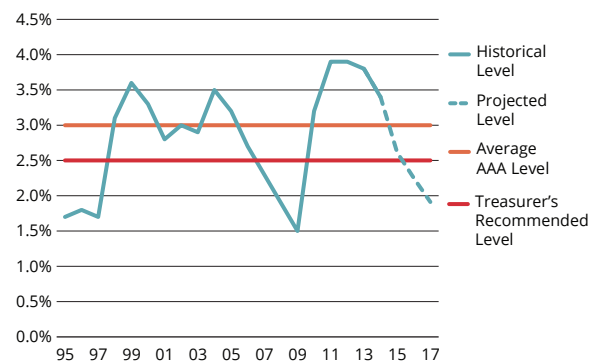
Utah also follows a number of informal rules regarding the issuance of debt. While the constitutional limit restricts debt to 1.5% of the taxable property, the Utah Legislature established an informal rule of not exceeding 85% of that limit (1.275% of state taxable property).³³ In addition to the formal and informal limits on debt, the State Treasurer's office also recommended some guidelines to help Utah manage its debt. Because general obligation bonds are paid through taxes, rating agencies and the market at large will often analyze the debt loads on taxpayers. The State Treasurer recommended two target indicators to help Utah preserve its AAA credit rating. As illustrated by Figures 6 and 7, the State Treasurer's office recommended a target debt per capita level of \$850 (currently at \$1,081, down from the 2012 peak of \$1,221) and a debt to personal income level of 2.5% (currently at 3.4%, down from the 2011 peak of 3.9%). Without the issuance of further debt, the state should reach these targets around 2016. The State Treasurer selected these objectives as tools that will help Utah better manage its debt. Investors and rating agencies evaluate these indicators and targets were selected by evaluating Utah with comparable states.

Financial Practices

Aside from the formal and informal rules imposed by legislators and the State Treasurer's office, Utah also engages in several financial practices that contribute to the state's credit worthiness. Moody's Investor Service outlined the following:

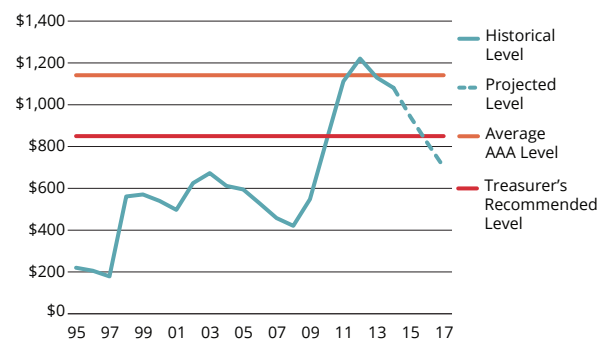
- Rapidly paying off its debts.
- Conservative fiscal actions in closing budgetary gaps.
- Building reserves such as the rainy day fund.
- Adequately funding the state pension system.
- Historically limited manner in which debt is issued.³⁴

Figure 6: Tax Supported Debt by Personal Income



Source: Utah State Treasurer's Office.

Figure 7: Per Capita General Obligation Debt



Source: Utah State Treasurer's Office.

Dangers to Utah's Credit Rating

While historically the state has issued bonds in a limited manner, last year Moody's indicated that since 2009, Utah's "debt burden . . . has risen quickly to an above-average level" (see Figure 8).³⁵ Essentially, Utah is more leveraged than ever before. Should the state fail to maintain its prudent use of bonds, Utah could lose its AAA credit rating. This would make obtaining funds through the municipal market more expensive, not only for the state but for school districts, which can issue debt using Utah's credit rating (explained in the following subsection). This could result in higher property taxes for these localities.

Utah's School Bond Guaranty

In 1997, the Utah Legislature started a program in which the State of Utah would provide a guaranty for school district bonds. This allows Utah school districts to issue bonds 'borrowing' Utah's premium credit rating. School districts may issue bonds outside of this program based on their own credit rating, but school districts that elect

Moody's indicated that Utah has a "debt burden that has risen quickly to an above-average level."

to issue bonds under this program must comply with a statutory default avoidance program ensuring that bondholders will be paid. If a school district were unable to make a payment, the school board would notify the State Treasurer's office, which would then make the bond payment. The State Treasurer would withhold school funds in order to reimburse the state with interest (no more than 1% plus the average prime rate) and penalty fees (no more than 5%). If the school board remained unable to pay for its bonds, the state would enforce a higher property tax (authorized by the residents when they voted in a referendum on the bond) until the bond is paid off or the school district regains its ability to pay. Measures are also included to insure that the state is able to cover any funds lacking by the school district including the ability to issue general obligation bonds.³⁶ Since the inception

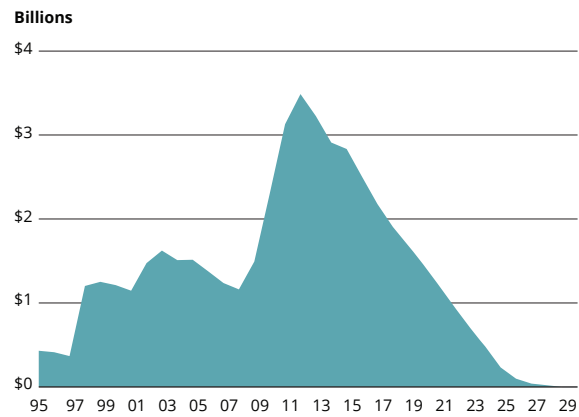
of this program, no school has failed to meet its obligations. This is an important program that permits schools to achieve an interest rate approximately three-fourths to one percent lower than they otherwise could.³⁷

This program is especially useful for smaller and more rural districts. While many of the larger, well-supported districts are able to achieve higher credit ratings, small rural districts such as Tintic issue debt less frequently and possess a less reliable means of repayment. As a result, they typically receive a lower credit rating and face higher interest rates. It is also important to note that schools play a much more critical role in the community in these areas, and the ability to finance more cheaply is very beneficial for these communities.

LONGER-TERM BONDING ALTERNATIVE

Issuing bonds is a complex process and there are a number of factors that affect both an issuer's decision on how much debt to issue and the structure of its repayment. These factors include the issuer's ability to pay off the bond, other outstanding debt of the issuer, the scope and need of the project, and a host of other factors. While Utah Foundation acknowledges that these factors often limit the flexibility of issuers, this section of the report focuses on Utah's practice of issuing bonds with relatively short terms and the possible costs and benefits of alternative longer-term bonding.

Figure 8: State of Utah Outstanding General Obligations



Source: Utah State Treasurer's Office.

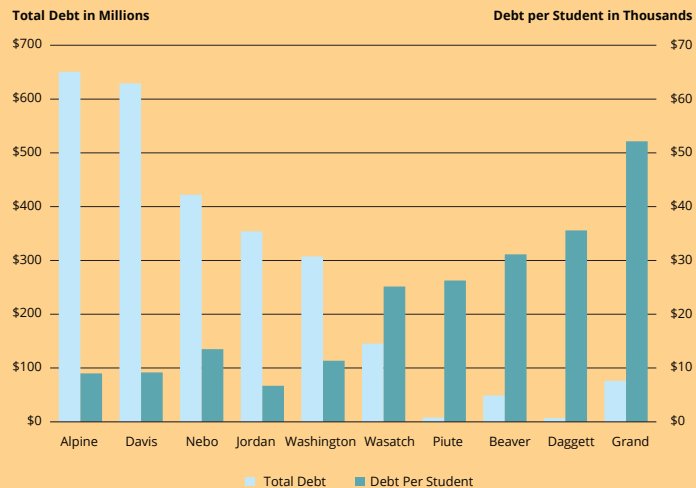
Paying for Schools through Bonds

Since school impact fees on new development have been prohibited since 1995, schools are reliant on bonds to build and remodel schools. Only 4 of Utah's 41 districts have not passed a bond in the past 20 years.

High-growth counties pass the most bonds, and raise the most revenue. Counties with more than 10,000 new students between 1992 and 2013 (Alpine, Davis, Nebo, and Washington school districts) approved five or more bonds for more than \$400,000. Jordan School District also had issued more than \$400,000 in three bonds during this time-period.

In 2013, voters rejected a bond in Jordan School District which would have been nearly twice the largest school district bond in the state to date. The bond would have been used to replace two schools, build 11 schools, and renovate or remodel about 30 more schools, helping to accommodate an increase in of "29,000 new students in the next 10 years." The \$495 million bond would have cost (at its maximum amount) about \$300 annually to an average homeowners in the district. The bond initiative failed by a vote of roughly 67 percent to 32 percent.

Figure 9: Top Five Most Indebted School Districts by Total Debt and Top Five by Debt per Student



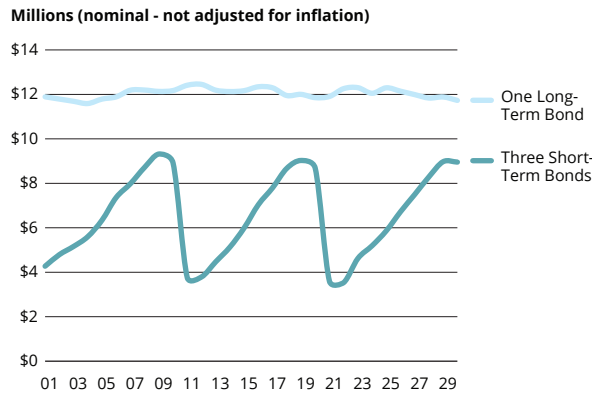
Source: Municipal Securities Rulemaking Board's Electronic Municipal Market Access.

The Utah Legislature has limited the length of state bonds to 15 years, although with its express authority from the length can be extended to 20 years. Among comparable states from 2000 to the present, Utah's average term is the shortest at 10.9 years. Other comparable states range from 12.4 years (Maryland) to 19.7 years (Virginia). This shorter-term bonding leaves Utah able to pay off 80% of its debt load in ten years, another favorable point in the eyes of the credit-rating agencies.³⁸

The principal theory behind issuing debt is that it generates immediate funds to pay for a project that will provide benefits in the future. Recipients of those benefits (future tax payers) will pay over the life of the bond. In other words, a bond is designed to tax future users of a project. Consequently, it would be equitable to extend the term of the bond over the course of the useful life of the project. For example, if the state issued bonds to redevelop a segment of I-15, it could structure that debt so its term extended over the useful life of the improvement (perhaps 30 years). As a result, taxpayers who use that stretch of I-15 for the next 30 years are the ones funding the project rather than only users for the next 10 years. Structuring a bond with the useful life of the project in mind is not uncommon among bonds issued by utility providers. The useful life of these types of projects often spans 30-50 years. Structuring the debt to be repaid using the revenues of these projects over the course of their useful lives ensures much more equitable payment. Essentially, it ensures that all users (including future users) pay a share. If the goal of a state is to make its bonding as equitable as possible, then the state should attempt to align bond terms to the useful life of the projects.

Utah's practice of issuing shorter-term bonds allows the state to construct projects at a lower cost. By paying off the bond quickly the state does not pay interest for extended periods of time. This permits the state to use its money more effectively. The state could potentially build more projects by utilizing shorter-

Figure 10: Annual Principal and Interest Service on \$150 Million Bond, by Length of Term



Source: Utah Foundation.

term bonds. Although annual payments might be lower over a long-term bond, the interest paid makes the total payment over the life of the bond higher. Essentially, the state's practice of short-term bonding saves taxpayers millions of dollars over time.

For example, Figure 10 illustrates how if the state issued ten-year, \$50 million bonds in 2000, 2010 and 2020, the state would pay far less (\$196 million) than paying three concurrent 30-year \$50 million bonds (\$362 million) or even one 30-year \$150 million bond (\$359 million).³⁹ Whether interest rates are low or high, short-term bonding will always save the state money. If the goal of a state is to issue the lowest cost bonds possible, then the state should extend the term of a bond only if the state is unable to afford the annual payments of a shorter-term bond.

Longer-term payments could potentially reduce the annual repayment of the state allowing those funds to be used elsewhere. There are likely a number of underfunded projects in Utah that could add a greater economic or social impact if funded adequately. Longer-term bonds would consequently increase the funds available for ongoing projects and reduce the Utah's capacity of producing capital projects. This might be beneficial depending on the costs and benefits of each. However the same objective can be reached at a lower cost by issuing smaller or fewer shorter-term bonds.

While shorter-term bonds cost less, it would be possible for the state to raise a larger amount of money initially through issuing a longer-term bond. In a simplified example, if an issuer had cash flows to support an annual repayment of \$50 million, and the interest rate increased similarly to treasury rates, they would be able to afford a \$430 million 10-year bond, a \$584 million 15-year bond, or an \$844 million 30-year bond. There might be cases where the state prefer to undertake a larger project either because the economic returns of the project are greater than the increased interest paid or because the higher quality of life is worth the higher costs. Moreover, when weighing the costs and benefits the issuer should also consider the forgone benefits of the smaller projects that could have been built had the state issued shorter-term bonds.

An alternative method for funding large projects is to use smaller short-term bonds over the course of two or three years. Utah has utilized this strategy when funding large projects including the redevelopment of I-15 in Utah County, using bonds from 2009, 2010, and 2011. This strategy will generally raise more capital at a lower cost of borrowing than issuing larger longer-term bonds.

Deciding how much capital to raise and the term of the bond will ultimately depend on a number of factors such as state cash flows, outstanding obligations, economic impacts, private capital markets, interest rate environments, project needs, construction capacities and numerous other factors. While it is not difficult to imagine a scenario where it might be a good decision for the state to issue a longer-term bond, in general an issuer using shorter-term bonds will be capable of raising more capital at a lower cost of borrowing than they would be able to using longer-term bonds.

Changing from shorter-term bonding to longer-term bonding could also have ramifications beyond paying a higher amount of interest. Structuring Utah's debt in such a manner could negatively impact its credit

ratings. As mentioned earlier, Moody's expressed concerns about Utah's quickly expanding debt. Those concerns are somewhat alleviated by Utah's ability and willingness to pay down the existing debt quickly. If the structure of Utah's debt changed so that Utah could no longer pay off 80% of its debt within ten years, it would impact Utah's low-risk credit rating.

Utah prides itself on its fiscal conservatism and holds its AAA credit rating as a trophy. If Utah's debt were downgraded a level to AA+/Aa1 it would increase interest rates by approximately 0.05%.⁴⁰ Since 2000, Utah has issued an average of \$450 million annually (although some of this has been to refund previous debt issued). Over the life of the average Utah bond (approximately 11 years) a 0.05% increase would translate into an additional \$1.5 million (\$130,000 annually). This is a small effect, but it would grow as Utah continued to issue debt. For example, if Utah's current outstanding debt of nearly \$3 billion were rated AA+/Aa1 it would result in approximately \$1.5 million of additional interest annually. With Utah's annual budget of nearly \$5 billion, this would represent a small fraction of the state's income.⁴¹ It is conceivable that a situation might arise in which it is in Utah's best interest to issue a bond that would result in a credit downgrade. However, due to Utah's fiscal conservativeness and the politicized nature of debt issuance, such an event would be politically costly.

While a credit downgrade would pose little threat at the state level, it would lead to further ramifications elsewhere. It would be more expensive for the Utah's school districts which borrow on the state's credit rating. Because school bonds are tied to property taxes (part of the program that allows school districts to borrow using the state's credit rating) more expensive bonds could result in higher property taxes for individuals in many districts.

Although it might be more equitable for those who receive the benefits provided by the government to be the source for funding those benefits, Utah's shorter-term debt policies ensure the state is able to raise additional funds at a lower cost of borrowing.

FINDINGS

Utah is considering a number of billion dollar projects in the near future including the relocation of the Draper prison, pipelines for Washington and Weber counties, and highway reconstruction. Moreover, unfunded needs when planning for the rapid projected growth leaves the state scrambling for an additional \$11 billion for transportation infrastructure by 2040 and \$33 billion for water infrastructure by 2060. Bonding is often a useful way to finance capital projects that will benefit future users. It will not solve every funding problem, but it will definitely be an essential tool in helping Utah prepare for an additional two million residents by 2050. Utah has issued bonds wisely and prudently in the past, as demonstrated by its top-tier credit rating, though Utah's current level of debt is a concern. However, if Utah continues its prudent measures of fiscal discipline, the state's debt limit should reach more manageable levels in the next few years.

The basis of Utah Foundation's bonding research was to determine whether it is beneficial for Utah to maintain the practice of bonding with short terms, or if it might be useful to extend the term lengths. The result of Utah Foundation's analysis are the following findings:

- Utah's practice of utilizing shorter-term bonds raises more capital at lower borrowing costs, essentially saving the state millions in interest payments.
- Other states with AAA bond ratings tend to issue shorter-term bonds, though Utah's average bond length is the shortest.

- Lengthening bond terms to match the useful life of projects ensures more equitable repayment; more users would pay for projects from which they benefit.
- Utah may have room to extend the average term of its bonds which would allow for the completion of larger projects with larger economic impacts.

Utah Foundation has determined that legislators and other policymakers who are promoting funding for large-scale projects should convene to prioritize Utah's future needs and ascertain the best way that bonding can assist funding these projects. With finite resources, the state cannot afford everything that policymakers wish to accomplish. Projects must be prioritized and compromises must be made to ensure that Utah's infrastructure will support its growing needs and Utah will maintain its fiscal discipline.

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