

Debt Affordability Analysis



**January 2016 State of Alaska
State Bond Committee
Debt Management Policies
And State Debt Capacity**

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Executive Summary

The national credit rating agencies have placed State of Alaska among the highest echelon of states in the United States. The State's strong fiscal position has resulted in the November 22, 2010 Moody's Investors Service upgrading of the State to Aaa, the January 5, 2012 Standard & Poor's Financial Services LLC upgrading of the State to AAA, and the January 7, 2013 Fitch Ratings upgrading of the State to AAA. The January 5, 2016 downgrade of the State by Standard & Poor's to AA+ punctuates the importance of maintaining the strengths that allowed the state to achieve the high credit ratings position including: financial management, moderate debt levels and strong and responsible leadership. A carefully considered debt management plan is a useful tool to policy leaders and government professionals to determine appropriate levels of debt while meeting the need of funding the State's capital program

The State of Alaska has been impacted by declining unrestricted revenue due to the sharp drop in the price of oil in the last quarter of calendar year 2014 continuing through early 2016. The State's unrestricted revenue production has declined from \$5,394 million in FY 2014 to \$2,257.3 million in FY 2015 and a projected \$1,593.0 billion in FY 2016. As a result of this fiscal pressure Moody's Investor's Service placed the state on negative outlook in December 2014 and Standard & Poor's followed suit in August 2015 followed by the aforementioned ratings action in January 2016. All three have released reports detailing concerns about the state's fiscal situation culminating in the recent ratings action by Standard and Poor's. If the price of oil and correlated unrestricted revenue remain at the currently depressed levels the State will be forced to either drastically reduce the services it provides or to use revenues which, while available for appropriation, have historically been saved or spent on non-government related function as well as considering implementing a broad based tax or additional targeted taxes. Governor Walker has proposed a revised fiscal plan for the State that will be considered by the Legislature this year. The proposed plan allows for sustainable annual state budget utilizing a mix of earnings from the permanent fund, additional taxes including an income tax, and additional budget reductions. For more detail on the Governor's plan you may review it at: <http://gov.alaska.gov/Walker/priorities/new-sustainable-alaska-plan.html>

The State has finite capacity to borrow money in a cost effective manner. Any borrowing which jeopardizes the State's credit rating or perceived credit by investors will increase the cost of borrowing money by the State as well as other issuers in Alaska. As such, these guidelines are established to ensure that any borrowings by the State are reflective of the best practices and represent conservative, well balanced approaches to debt management. These guidelines also envision that in certain circumstances, deviations from these guidelines may be in the best interest of the State, however any such deviations should be well studied by the State and its financial advisor(s).

The State has an estimated capacity to issue up to \$175 million of general obligation bonds without impacting its current credit rating. However, the potential issuance of the Knik Arm Crossing

bonds that were authorized in 2014, results in the State exceeding the targeted debt limit for this category of borrowing for the next ten years.

As of June 30, 2015 the State had outstanding general fund obligations of:

| | Par Outstanding | 2017 Debt Service | Final Maturity |
|---------------------------|-----------------|-------------------|----------------|
| GO Obligation | 753,800,000 | 87,200,000 | 2038 |
| Subject to Appropriation | | | |
| COPS | 30,800,000 | 2,900,000 | 2029 |
| Lease Revenue | 244,000,000 | 23,600,000 | 2033 |
| School Debt Reimbursement | 895,400,000 | 120,500,000 | 2035 |
| DOT Reimbursements | 35,800,000 | 4,600,000 | 2031 |
| TOTAL | 1,206,000,000 | 238,800,000 | |

As of June 30, 2015 the State had authorized, but unissued general fund obligations of:

| | Authority | Estimated Debt Service | Term |
|---------------------------|---------------|------------------------|----------|
| General Obligation | \$271,000,000 | \$22,000,000 | 20 years |
| Subject to Appropriation | | | |
| Knik Arm Crossing | \$300,000,000 | \$25,000,000 | 20 years |
| Pension Obligation Bonds | 2,500,000,000 | 189,000,000 | 23 years |
| School Debt Reimbursement | Limited | Limited | |
| TOTAL | 3,076,000,000 | 236,000,000 | |

Since June 30, 2015 the State has discussed the potential of issuing debt to fund a portion of the State's funding requirement for the AK LNG project, as well as utilizing general obligation bonds in the FY 2017 capital budget. The AK LNG project would require issuance of debt in the range of \$14.9 billion over a ten year period. If approved, this issuance would exceed existing debt by over 13 times. The general obligation bond proposal of the Governor would authorize an additional \$500 million of bonds in the November, 2016 election.

As of June 30, 2015, the State had approximately \$754 million of outstanding general obligation bonds, all of which are in fixed rate mode including \$155 million of one-year Bond Anticipation Notes. As of June 30, 2015, the State had approximately \$40 million in Certificates of Participation outstanding, all in fixed rate mode. As of June 30, 2015 the State had \$36 million of capital lease obligations securitized through political subdivisions that were authorized by Alaska Law, all in

the fixed rate mode. On June 30, 2015 the State had \$56.9 million in guaranteed debt obligations issued for the purpose of making home loans to qualified Alaskan military veterans, all in the fixed rate mode. On June 30, 2015 the State had authorized payment of the equivalent of 100% of debt service on \$895 million of municipal general obligation bonds on a subject to appropriation basis through the School Debt Reimbursement Program. In the 2015 Legislative Session a 5 year moratorium on additional bonds participating in the program was approved. On June 30, 2015 there was \$1,200 million of moral obligation debt of the State, \$693 million of State revenue and university debt, and \$493 million of State agency debt. The State currently has no outstanding interest rate derivatives. The State's funding of its two main retirement systems the Public Employee's Retirement System (PERS) and the Teachers Retirement System (TRS) for the year ended June 30, 2014 is for Pension 59.7% for PERS and 54.5% for TRS and for other pension liabilities including healthcare 87.0% for PERS and 77.0% for TRS. The State made one time contribution of \$1 billion to the Public Employees Retirement System and \$2 billion to the Teachers Retirement System in FY 2015 that in conjunction with other variables are anticipated to increase the funding levels for both pension and OPEB for both systems.

After reviewing the State's debt and fiscal position and comparing the State's practices with the best practices of other states:

- The state recognizes that using "Debt Service as a % of general government spending (or revenues)" is a better measure of an entity's debt burden. The ratio illustrates the relative portion debt service represents of total state annual expenses or state resources. The State Bond Committee has adopted a formal policy set at percentage of revenue (or expenses) target level of 5% with an absolute not-to-exceed ceiling of 8%. The ratio should include debt service paid on general obligation bonds, securitized lease obligations, and other subject to appropriation obligations of the general fund that have been securitized.
- The State has historically used revenue classified as "unrestricted general fund revenue" in the State's semi-annual Revenue Sources Book (RSB) as the basis of determining revenue available for debt service. This revenue number doesn't include large amounts of current year revenue that is available for appropriation, but has historically been saved or used for non-primary government purpose and therefore classified as restricted. The Fall 2015 RSB includes a new table titled "Current-Year Revenue Subject to Appropriation" which highlights the magnitude of the omission of revenues. For example in FY 2016 unrestricted revenue projections are \$1.593 billion while revenue subject to appropriation is \$5.438 billion. Governor Walker's proposed fiscal plan as described earlier in this text, provides for the recognition and use of a portion of these additional revenues for state government.
- The State Bond Committee should continue to monitor other ongoing commitments of the general fund including the School Debt Reimbursement Program, the Veteran's Mortgage Program, PERS and TRS system funding requirements, and any other quantifiable multi-year obligation of the state to pay or reimburse on outstanding liabilities.

- While the school debt reimbursement program is currently unavailable to new bond authorizations participating it is recommended to require the Department of Education to submit their current outstanding reimbursement schedules to the State annually by October 15th for a refinancing analysis by the SBC. While state law doesn't require that municipalities pursue refinancing opportunities on bonds subject to reimbursement from the State, the State Bond Committee will continue to monitor opportunities and encourage municipalities to refinance and reduce the State's appropriation requirements. For communities that use the Alaska Municipal Bond Bank this already happens, but is less certain for independent issuers.
- The State's broad fiscal position shall be considered and noted when determining debt capacity. It will generally impact capacity negatively if the State has not acted to resolve the current pattern of deficit spending and provide a stable means of providing for the annual budgetary needs of the state.

Introduction

The following policies are established in an effort to standardize the practices of the issuance and management of debt by the State Bond Committee of Alaska. The primary objective of the policies are to establish conditions for the use of debt and to create procedures and policies that minimize the State's debt service and issuance costs, maintain credit ratings, reflect best practices for State government finance, and maintain full and complete financial disclosure and reporting. The policies apply to any debt issued by the State, including general obligation bonds, lease-revenue bonds, certificates of participation, subject to appropriation obligation, revenue bonds and any other forms of indebtedness, as well as any debt which is implicitly or explicitly guaranteed by the State.

Debt policies promote the best and most efficient use of the State's finite capacity to borrow to meet the State's commitments to provide services to its citizens without jeopardizing the future financial health of the State. These policies should be considered guidelines for general use, and seek to provide the State with adequate flexibility to be able to respond to constantly changing economic conditions and changes in financial markets. Nevertheless, nothing contained herein should be construed as prohibiting the State from undertaking actions not specifically contemplated in these policies should it determined to be necessary and appropriate. Regular updates to debt policies are encouraged as necessary to ensure that the State maintains sound financial management practices reflecting then-current market and economic conditions.

Beginning in 1983 the State has measured debt capacity by comparing debt service to unrestricted revenue. The State's policy was that debt service should not exceed 5% of unrestricted revenues. Beginning in 1985 the State included general obligation, lease revenue, university, certificates of participation, and the school debt reimbursement program in the ratio. University debt was

subsequently removed from the calculation. In 1999, recognizing past practice of the State, the policy was amended to target 5%, but allow for the ratio to reach up to 8% due to revenue volatility.

Discussion of Credit Ratings and Applicable Ratios

In June 2006, Standard and Poor's released an update to its 2005 Public Finance Criteria Book focusing specifically on how they assess the strength of a governmental entity's financial management practices. State general obligation bond ratings are driven by four primary credit factors:

- Economy
- Finances
- Management and Administration
- Debt and other long-term liabilities

In the update, S&P stated that "as part of its financial management assessment, it evaluates established and ongoing management practices and policies in the areas most likely to affect credit quality. One such area is debt management. S&P seeks to determine if the entity has established policies relative to, among other things, the issuance of debt, maturity and debt structure, and debt refunding guidelines. Issuers deemed "Strong" in this regard would be entities that have well-defined debt policies, with strong reporting and monitoring mechanisms in place.

In its August 15, 2011 publication "*U.S. State Government Tax-Supported Rating Criteria*" (see: Appendix C), Fitch stated that its analysis of a given state's debt burden focuses on all net tax-supported debt. The State's outstanding general obligation and state-supported debt would necessarily fall under this definition. As part of the credit review process to determine a state's debt burden, rating agencies review each entity's outstanding debt and future capital plans through the following:

- **Debt Ratios**
 - Debt to personal income
 - Debt service as a percentage of general government spending (or, conversely, unrestricted revenues)
- **Debt Structure**
 - A review of the composition of the debt (GO, appropriation-backed or special tax)
 - The rate at which the debt is repaid
 - The purposed for which the bond proceeds are used
 - The percentage of fixed vs. variable rate debt
- **Future Borrowing Plans**
- **Pension and OPEB Funding**

Debt Ratios

The rating agencies are consistent in the manner in which they review an issuer's debt profile, thereby facilitating comparative analysis within peer groups. Such comparative analysis has taken on greater importance over the last several years as investors in the capital markets have pushed for greater transparency within the ratings process.

Fitch believes the calculation of net tax-supported debt as a percentage of personal income to be the best indicator of a state's debt burden, and has opined that "...a low debt burden is a positive credit factor." Fitch considers a ratio less than 2% to be "LOW", and a ratio in the 3-4% range to be "Moderate".

In its June 2015 State Debt Medians, Moody's calculated the State's debt to personal income ratio to be 3.0%, 19th highest of the 50 states.

| Table 1 | |
|----------------|--------------------------------|
| State | Debt as a % of Personal Income |
| Alaska | 3.0% |
| Florida | 2.4% |
| Georgia | 2.8% |
| Maryland | 3.5% |
| Minnesota | 3.2% |
| North Carolina | 1.9% |
| Texas | 1.0% |
| Vermont | 2.1% |
| Virginia | 2.8% |
| Peer Median | 2.5% |

Source: Moody's 2015 State Debt Medians

Debt Service as a % of general government spending (or revenues) is a much more meaningful measure of an entity's debt burden. The ratio illustrates the relative portion debt service represents of total state annual expenses or state resources. Table 2 provides a representative list of similarly rated states that have adopted a debt policy linked to annual operating revenues:

| Table 2 | | |
|---------------------------------------------------------------|-------|--------------------|
| Debt Service as a % of Unrestricted Revenues | | Legal Authority |
| State | | |
| Florida | 8.0%* | Policy |
| Georgia | 8.0% | Policy |
| Maryland | 8.0% | Policy |
| Minnesota | 3.0% | Policy |
| North Carolina | 4.8% | Policy |
| Texas | 5%** | Constitutional |
| Vermont | 6.0% | Policy |
| Virginia | 5.0% | Policy |
| * 8% cap; 6% target | | |
| ** Calculated using the average revenues of the prior 3 years | | |

S&P, in past reports released in conjunction with the State’s general obligation bond issuance, has noted what the general obligation and appropriation-backed debt service represented as a percentage of general fund and non-major special fund expenditures. In formalizing and linking the State debt policy to revenues at a level comparable to its peers, the State has maintained sufficient borrowing capacity to meet its historical capital needs.

Further evidence of the importance the debt service ratio plays in the overall credit review process can be found in a special comment published by Moody’s titled “U.S. State Debt Service Ratios”. In the report, Moody’s noted that the debt service ratio, defined as net tax supported debt service as a percentage of operating revenues, is a key metric used when assessing a given state’s fiscal flexibility. Moody’s contends this ratio “...measures the extent to which a state’s operating budget is burdened by fixed costs.”

As you will note upon reviewing the attached report, the State of Alaska’s ratio at June 30, 2013 (2.3% comprised of 1.6% general obligation, .7% state supported but grows to 4.3% when the School Debt Reimbursement Program is included). The following table provides a peer group comparison of the debt service ratio of Alaska and other “AAA” rated states:

| Table 3 | |
|------------------------------------------------------|------|
| FY 2014 Debt Service as a % of Unrestricted Revenues | |
| State | |
| Alaska | 2.3% |
| Florida | 5.5% |
| Georgia | 6.7% |
| Maryland | 5.8% |
| Minnesota | 4.2% |
| North Carolina | 4.3% |
| Texas | 2.6% |
| Vermont | 2.8% |
| Virginia | 5.4% |
| Peer Median | 4.7% |

Moody's intends to include this comparative ratio analysis in all future State Debt Medians reports which are published annually.

The Alaska economy is highly resource dependent, and the rating agencies recognize the revenue volatility inherent in an oil-based economy. Given these circumstances, the State adopted a policy similar to that utilized by Texas, in which the controlling ratio relative to debt service is linked to an average of total projected unrestricted revenue collections from the most recent Revenue Sources Book of the Department of Revenue Tax Division over the next 3-year period. A formal policy set at percentage of revenue (or expenses) target level of 5% with an absolute not-to-exceed ceiling of 8%, is intended to maintain the State's strong investment grade ratings.

There is no statutory limit on the amount of State GO bonds that may be authorized. \$271 million in authorized GO bonds remained unissued as of June 30, 2015. This does not include amounts authorized for Alaska Housing's Qualified Veterans Program.

Current and anticipated reserve balances including the Constitutional Budget Reserve and the Permanent Fund Earnings Reserve should be, in combination, maintained at minimum fund levels to ensure the highest probability of rating security. The State's most significant long term reserve, the Alaska Permanent Fund Corpus is protected by the State's Constitution and shall remain intact to provide for the proposed transfer from oil and gas extraction for revenue generation to other revenue sources. On June 30, 2015 the State had short term reserves sufficient to fund 150% of total expenditures, 3 times the amount of unrestricted general fund spending, or over 20 times the

amount of outstanding general obligation bonds. The target minimum reserve level of unassigned revenues is a balance equivalent to 20% of the State’s outstanding debt.

Pension and OPEB Funding

Fitch has specifically stated that “...Pension and OPEB liabilities are not directly included in the calculation of an issuer’s debt ratios”, acknowledging that such benefits represent a more variable commitment to future payments than bonded debt.

In June 2015, Standard & Poor’s released a Special Comment in which they stated that “Pension Funding Status Plays a Significant Role in a State’s Creditworthiness”. In November 2014 Moody’s provided a report on State pension systems and funding practices including each state’s pension and OPEB liabilities. Moody’s contends this information allows investors to gain a better sense of each state’s long-term obligations as a portion of available revenue and taxing capacity. However, the inherent flaw in providing this information – which Moody’s recognizes – is the differing assumptions used by each state in determining its liability.

The following table provides a comparative analysis of State of Alaska’s debt burden versus other “AAA” rated states when each state’s pension liabilities are added to its net tax-supported debt totals. For this purpose, debt burden is measured using the following two ratios:

- Total Debt as a Percentage of Personal Income
- Total Debt as a Percentage of Unrestricted Revenues

| Table 4 | | |
|-------------------------------------------------|----------------------------------------|--------------------------------------|
| State | Debt as a % of 2013 Personal Income | Net Tax-Supported Debt Per Capita |
| Alaska | 3.0% | 1,489 |
| Florida | 2.4% | 973 |
| Georgia | 2.8% | 1,043 |
| Maryland | 3.5% | 1,889 |
| Minnesota | 3.2% | 1,538 |
| North Carolina | 1.9% | 739 |
| Texas | 1.0% | 406 |
| Vermont | 2.1% | 954 |
| Virginia | 2.8% | 1,356 |
| Peer Median | 2.5% | 1,112 |
| <i>*Source: Moody's State Debt Medians 2015</i> | | |

Current Debt Position

As of June 30, 2015 the State of Alaska (“State”) had approximately \$754 million in General Obligation debt outstanding including \$155 million of bond anticipation notes. The State has traditionally had a very conservative stance with general obligation bond funding, as the State has a preference for pay-go funding as a primary source of capital.

As of June 30, 2015, the State had lesser commitments, but amounts included in net tax supported debt, of approximately \$30.8 million in Certificates of Participation and \$244 million of capital lease obligations securitized through political subdivisions that were authorized by Alaska Law.

Rating agencies have highlighted the State’s conservative financial management, citing a low debt burden and sizable reserve amounts to offset shifts in the price or production of oil. While the State has relied on North Slope oil production for revenues for the last 35 years there are long term alternatives in the potential development of natural gas resources and mineral production generated revenue, potential implementation of a Statewide broad based tax, and the potential use of earnings of the Permanent Fund to offset costs of government services. With the current low price of oil, the Governor has introduced proposals to utilize these options to stabilize revenue generation of the State. The State’s current debt position is very conservative and, as a result, the State has maintained a level of flexibility not experienced by many other States in funding for capital projects.

An evident factor in assessing the conservative nature of the State’s debt practices is witnessed by the relatively low level of debt service as a percentage of unrestricted general fund revenue. While the current State policy is designed to limit this ratio to 8%, for the ten years preceding FY 2015 the State remained below 5%. In FY 2015 the ratio increased to 10.1% due to diminished revenue generation. Based on the Fall 2015 Revenue Sources Book’s projections of diminished revenue, the state’s ratios are projected to remain greater than allowed percentages in FY 2016 and 2017. Another metric that demonstrates the conservative debt position of the State is the trajectory of general obligation debt retirement. Approximately 50% of the current general obligation debt outstanding will amortize and retire over the next 10 years, allowing for increased flexibility for the State to participate and support additional projects.

The State has traditionally utilized long-term fixed rate debt in relation to its general obligation bond issuance, and has no exposure to floating or variable rate debt or derivative products. While it is recognized that agencies of the State use variable rate debt and derivative products, no direct exposure exists for the State and the risks associated with such products are not found in the States general obligation bond indebtedness.

The State's ability to fund capital projects with current revenues has played a significant factor in the relatively low level of general obligation debt for the State allowing the State to maintain a flexible debt profile.

Affordable Level of Additional Debt or Obligations

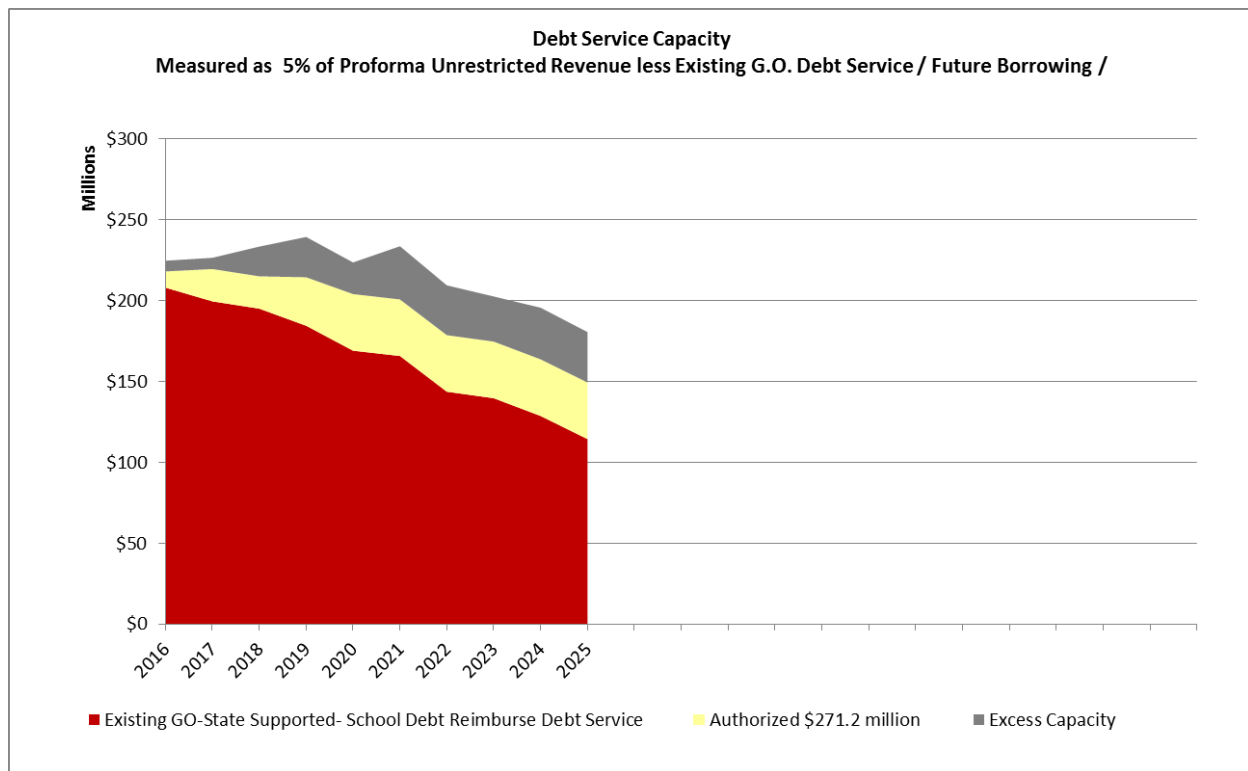
Debt Capacity in the short term is limited to existing authorizations and \$175 million of additional obligations. Over the 10 year projection the capacity is expected to reach \$225 million based on the current revenue forecast.

The Department of Revenue has developed a multi-pronged debt capacity model which will enable the State to calculate its available borrowing capacity to meet its future capital needs. The model results are based on the following constraints:

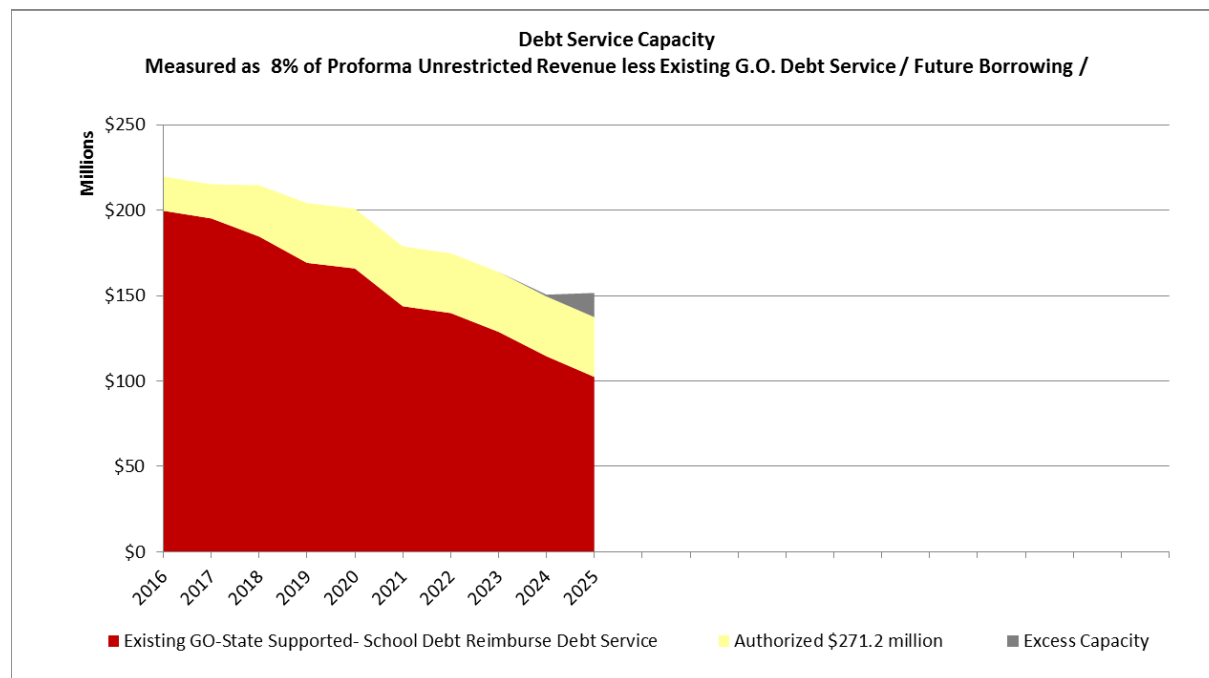
- Debt service on general obligation bonds and state supported debt (obligations that are based solely on the state's commitment to annually seek appropriation for repayment – could be supported by a lease or contract) in any year shall be targeted not to exceed the targeted level of 5% of the projected year's unrestricted revenues;
- Debt service on general obligation bonds, state supported debt, the DOT reimbursement program, and the school debt reimbursement program shall be targeted not to exceed the targeted level of 8% of the projected year's unrestricted revenues;
- All future debt issuances are amortized over 20 years, with level debt service payments;
- All bonds are issued at an assumed interest rate of 5%; and
- Annual unrestricted revenues available to pay debt service through 2024 are set at amounts stipulated in the Fall 2015 Revenue Sources Book of the Tax Division.

Using the less inclusive ratio and 5% limit the State has the capacity to issue \$175 million of additional debt over the next 10 years. This capacity is primarily based on projections of recovered revenue generation in FY 2017 and beyond, and caution should be used in deciding to commit to that level of debt prior to revenue recovery. Given the state's current fiscal structure and projected annual unrestricted revenue deficiencies the amount that the state could issue without negative credit action is limited to essential and minimalistic projects. As previously noted, the term "debt" includes all the State's outstanding general obligation and state-supported debt.

The graph below depicts the State's debt service capacity using the 5.0% debt service ratio when comparing current and authorized general obligation debt service to unrestricted revenue. The red area on the graph shows the State's existing annual general obligation debt service, the yellow is projection of debt service on authorized but unissued go bonds, and the grey shaded area displays the excess capacity available to the State to accommodate the issuance of up to \$175 million in additional debt while still maintaining the 5.0% debt service ratio.



The graph below depicts the State’s debt service capacity using the 8.0% debt service ratio when comparing current and authorized general obligation, state supported and state reimbursement of debt service to unrestricted revenue. The red area on the graph shows the State’s existing annual general obligation, state supported, and school debt reimbursement debt service, the yellow is projection of debt service on authorized go bonds, and the grey shaded area displays the excess capacity available to the State to accommodate the issuance of up to \$225 million in additional debt while still maintaining the 8.0% debt service ratio. It is worth noting that all of this capacity is projected from the 2024 to 2026 range, and does not include the potential \$300 million of state supported bonds for the Knik Arm Crossing. If the Knik Arm Crossing bonds are issued the capacity using this ratio is zero.



School Debt Reimbursement Program

Municipal school districts may apply for school debt reimbursement for construction or major maintenance projects anytime during the year while the program has statutory authority to accept new participants. The program's authority may be restricted or terminated at the Legislature's discretion, and in 2015 the Legislature placed a moratorium on the program for any bonds approved by voters after January 1, 2015 for a period of five years. Applications are reviewed by Department of Education & Early Development ("DEED") staff to determine the level of reimbursement for the project. Prior to the moratorium there were tiered levels of reimbursement available. Projects qualify for up to 70 percent debt service reimbursement when the project met the Department's eligibility guidelines. Projects that exceed the Department's eligibility guidelines were reimbursed at 60 percent of debt service or lower percentages based on a projects educational value as determined by the DEED.

The existing statutory and regulatory structure of the program mandate municipalities issue general obligation bonds to participate in the program requiring securing voter approval of the project. After the municipality has both Department and voter approval, it may issue bonds for the project and the State reimburses the approved percentage of the bond payments. School districts must notify the DEED of their anticipated debt reimbursement for the upcoming fiscal year by October 15th for state budgeting purposes.

The State Bond Committee is not part of the School Debt Reimbursement Program. No records are kept by the Department of Revenue on the amount of debt outstanding that is subject to reimbursement other than the annual reporting found in the Alaska Public Debt Book. It has been recommended the Department of Education submit their current outstanding reimbursement schedules to the State annually by October 15th for a refinancing analysis by the State. While State law doesn't require that municipalities pursue refinancing opportunities on bonds subject to reimbursement from the State, the State Bond Committee will continue to monitor opportunities and encourage municipalities to refinance and reduce the State's appropriation requirements.

Level and Impact of Moral Obligations

Certain debt issued by several State agencies, such as Alaska Aerospace Development Corporation, Alaska Housing Finance Corporation, Alaska Industrial Development and Export Authority, Alaska Student Loan Corporation, Alaska Municipal Bond Bank, Alaska Energy Authority and the Alaska Pension Obligation Bond Corporation have been provided a statutory framework that allows some level of Moral Obligations of the State of Alaska to be issued. There is no direct obligation of the State to pay any debt service associated with these bonds, however there is a perception that the State would appropriate funds (at the Legislature's discretion) to cover any shortfall by these issuers due to the statutory framework that the State provided the agencies that requires a debt service reserve, reporting the sufficiency of that reserve to the State, and requires requesting replenishment in the case of a draw upon the reserve. As there is no obligation of the State to appropriate such funds, and there has not been an instance previously in which the State has had to honor the moral obligation pledge, rating agencies do not include these Moral Obligation bonds when calculating the State's financial ratios. However, in the event that the State did appropriate funds to one of these agencies to cover a shortfall, the rating agencies would likely consider all of that agency's debt as part of the State's general obligation debt in its future ratio calculations. To account for this, it is recommended that the State consider a percentage of each agency's debt as State general obligation debt when determining capacity for debt issuances. Since each agency may have a different credit profile, it is recommended that the State adopt a tiered approach to incorporating these agencies' debt into its ratios, where the strongest agencies count the least towards the State's debt. To implement this tiered approach, the State looks to the underlying rating of each issuer (which provides, among other things, an indication of the relative strength of the pledged sources of repayment) without taking into consideration the Moral Obligation backstop and then apply a ratio to that agency's debt.

Consideration of Debt Structuring Elements

Structuring

As a matter of practice, in the late 1970's and 1980's the State issued bonds with 10 year amortizations to match the "Prudhoe Curve", in the 1990's and early 2000's the State began issuing

more 15 and 20 year amortizations, and in issues since 2009 the State has issued bonds to amortize levelly in 20 years with principal paid annually and interest paid semiannually. This practice is consistent with other highly-rated states and local governments. Both serial and term bonds can be considered in the structuring depending on market conditions to generate the most cost effective structure of the bonds. Debt will be structured to obtain the lowest possible net cost to the State or State Issuer with consideration of market conditions, the nature of the project, and the nature and type of security provided.

Working within these guidelines, the State will take into account a number of factors in structuring any individual debt issue, including project feasibility, the source of funds to be used for debt service, the impact on the State's overall debt amortization profile and the fair allocation of costs to current and future beneficiaries or users.

In general, and consistent with the useful life of the asset to be financed, the State will utilize a 15-25 year final maturity structure with annual principal payments. Except in the case of a refunding transaction, the maximum principal payment shall be no greater than 4 times the minimum principal payment for the financing, it's a preference for equal annual principal payments. Principal repayments should not be delayed unless debt repayment is dependent upon revenues derived from the project being financed, the transaction is a refund deferring the refunding principal schedule is consistent with the refunded bonds, or there are other benefits to be achieved. Similarly, structures utilizing term bonds (without sinking fund requirements/redemptions) or other structures that result in significant "back loading" of debt are discouraged. Issues with a debt service reserve fund should use the fund to make the final payment.

Fixed and Variable Rate Debt

The optimal combination of fixed-rate and variable-rate is considered in order to manage the risk of the State's debt portfolio. The State will consider variable-rate debt to provide for asset-liability matching and lower cost of funding while maintaining a conservative portfolio of fixed-rate and variable-rate debt. As such, the State will not have outstanding variable rate debt in excess of its unrestricted cash balances. Additionally, the State's variable rate debt shall comprise no more than 25 percent of the State's overall direct debt obligations. This will allow the State to benefit from historically the least expensive cost of financing to offset cash investment returns while providing protection against market disruptions.

Call Provisions

A call provision gives the issuer the right to redeem or "call" all or a portion of an outstanding issue of bonds prior to their stated dates of maturity and provides an opportunity to potentially reduce debt service costs in the future. The cost of any such feature is dependent on market conditions, overall transaction structure, and such cost shall be taken into consideration when evaluating the flexibility this feature affords. Various call options may be evaluated in terms of their provisions and market acceptance.

Unless market conditions prove prohibitively expensive, the State's bonds shall be callable no later than 10 years from the date of sale and non-callable bonds shall only be considered for refundings or other transactions with a final maturity less than or equal to 15 years from the date of sale.

Bond Anticipation Notes (BAN's) & Revenue Anticipation Notes (RAN's)

Short-term State borrowing in anticipation of revenues is permitted under AS 43.08.010. RAN's may be issued and renewed from time to time, but must be structured to mature and paid off before fiscal year end. The full faith, credit, resources, and taxing power of the State are pledged to the payment of RAN's. There are no State RAN's currently issued or outstanding. The use of RANs should be undertaken only if the transaction costs plus interest on the debt are less than the cost of internal financing, or available cash is insufficient to meet working capital requirements.

Capital Appreciation Bonds

Capital Appreciation Bonds are structured as term bonds that do not pay interest until maturity. Interest is not paid to the investor until maturity, at an amount equal to the principal amount plus interest earned, compounded semiannually, at the stated yield. Their use is discouraged except for special circumstances.

Certificates of Participation

Certificates of Participation (COPs) constitute a fractionalization of a lease that the State has entered into with a trustee for the acquisition and/or improvement of real property. COPs are the only way that a lease transaction that is securitized to provide for a needed project can have the State of Alaska listed as the issuer. This is a considerable strength in the current market with the improvement in the State's credit position during an era of general negative movement in state ratings. While the State can allow political subdivisions to securitize its lease payments and credit through lease revenue bonds, the loss of control of the State's credit, the reliance on a political subdivisions governing body to implement the terms and conditions of the financing, and the markets general reluctance to accept a disclosure document of potentially a small village as the State of Alaska all lead the State to focus on COPs for lease financing.

Credit Enhancements

Credit enhancement (letters of credit, bond insurance, sureties) should be used only when the net debt service on the bonds would be reduced by more than the costs of the enhancements or when dictated by the financial markets for the type of project financed. Special consideration should be given to any additional covenants or restrictions the credit enhancement provider may require.

Liquidity

To address remarketing risk inherent in a variable rate debt issuance, the State will evaluate alternative forms of liquidity such as direct pay letters of credit, standby letters of credit, and lines of credit. Such evaluation will necessarily weigh the value of mitigating remarketing risk vs. the economic costs associated with each alternative.

Use of Derivatives

The State will consider the use of derivative products when such products meet the specific needs of a financing program or provide a demonstrated economic benefit to the State that outweighs the costs and risks of such transactions. The State will consider and monitor such derivative products strictly in accordance with its existing adopted State Swap Policy. Appropriate public finance professionals, including financial advisors and legal counsel, should be retained to ensure that any contemplated structure is appropriate for the State and its objectives and deliver opinions as to the fair pricing of any such transactions. Derivative products will not be used for speculation.

Competitive Sales

State Statute dictates that general obligation bonds are to be sold using a competitive method of sale. An exception to that requirement was provided for the 2010 authorization to better use structures authorized in the American Recovery and Reinvestment Act of 2009. Given the State's strong credit profile and traditional financing structures competitive sales will be utilized in issuing debt to provide the lowest cost of debt. Bids should be awarded on the lowest true interest cost basis (TIC) offered by bidders, provided other bidding requirements are satisfactory. The State reserves the right to negotiate certain terms and conditions with the lowest bidder.

Negotiated Sales

For State general obligation bonds negotiated sale can only be used if there is an exception to the statutory requirement for competitive sale or for refunding. When there is flexibility negotiated sales of debt will be considered in the following circumstances: (1) when the complexity of the issue requires specialized sales expertise; (2) when the negotiated sale would result in substantial savings in time or money; (3) when market conditions are unusually volatile or uncertain; or (4) if the State feels that a negotiated financing would promote extensive idea generation to the State's benefit by underwriting firms.

The negotiation of terms and conditions will include, but not be limited to, prices, interest rate, remarketing fees and commissions. Such terms will be based on prevailing terms and conditions for comparable issuers, including yields from secondary market trading of previously issued State debt. To ensure fair pricing on any bonds sold through a negotiated basis, it is preferable to engage a financial advisory firm which maintains an active trading or underwriting practice.

Post Issuance Policy

The State Bond Committee has approved a Post Issuance Policy that is intended to guide the State in meeting its obligations with federal tax law requirements, transcripts, ongoing disclosure, and other notice requirements. A detailed copy of this policy can be found in Appendix B.

Evaluation of Refunding Opportunities

Refunding Guidelines

The State will monitor the markets and its debt portfolio for opportunities to refund its existing debt for savings. For the State to consider a refunding transaction, a net present value (NPV) savings calculation will be done on a transaction or maturity-by-maturity basis.

The potential refunding of existing bonds for debt service savings must meet the following criteria for the State to approve the transactions:

- Total net present value savings of greater than 3% of the refunded debt service and each maturity being refunded has positive NPV savings.
- The refunding shall not extend the original bond structure's final maturity unless there are business or legal issues with maintaining the current final maturity date
- Outstanding debt may be current or advance refunded as long as tax law permits
- The State may refund outstanding debt if the proposed transaction is calculating a NPV savings of less than 3% as long as there is positive debt service in each fiscal year or if the NPV savings is less than 3-5% (depending on the original date of issuance of the bonds being refunded) due to a complete refunding of the contemplated series. If a maturity is likely to mature without any refinancing absent participating in a transaction that is underway.
- The State will consider refundings of individual maturities of targeted series without refunding the entire series of bonds to maximize debt service savings, however the preference is to refund not less than 30 million or 25% (whichever is less) of the callable refundable bonds of the evaluated series
- The State should take into consideration the efficiency of the refunding bond's escrow and where the negative arbitrage is equal to or greater than present value savings consider delaying the refinancing.

The refunding of municipal debt obligations can take a number of forms, or combination of forms:

- Current Refunding
- Advance Refunding
- Forward Refunding
- Synthetic Refunding

The criteria used to evaluate the desirability of entering into a refunding transaction should be influenced by the form of the proposed transaction and should recognize the additional costs, risks, or uncertainties associated with the transaction. Refunding transactions should, if possible, be at least \$50 million in size unless issued in combination with a "new money" issue.

In general:

- Current refundings which produce a positive net present value savings should be considered. However the savings to be realized should meet certain size criteria to be considered worthwhile. In general, current refundings should achieve at least \$1 million in net present value savings or \$200,000 in average annual saving. If a refinancing opportunity will otherwise be unused savings thresholds may be diminished.

- Bonds issued after 1986 can only be advanced refunded one time. It is, therefore, of particular importance that the one opportunity be reserved for situations where the refunding is prudent and warranted. The following parameters are suggested for advanced refunding transactions:
 - 5% present value savings for bonds refunded within two years of their issuance date and generate net present value savings of at least \$2 million or average annual savings of \$350,000.
 - 4% present value savings for bonds refunded that have been outstanding at least two years but less than five, and generate net present value savings of at least \$1.5 million or average annual savings of \$300,000
 - 3% present value savings for bonds refunded more than five years from their issuance date and generate at least \$1.5 million of present value savings or average annual savings of \$250,000
- Forward refunding refer to a refunding in which bonds are sold with a delayed closing that is likely to coincide with a date 90 days prior to the call date of the bonds to be refunded. This technique allows the transaction to be characterized as a current, as opposed to an advanced, refunding. Forward refundings should achieve the same savings levels as advanced refundings. As part of the analysis, the cost of the forward premium and its impact on the savings to be achieved should be evaluated.
- Synthetic refundings create present value savings by synthetically refunding, but not retiring, outstanding bonds by utilizing derivative structures. Synthetic refundings are often used to produce refundings-type savings for bonds that may not be otherwise refunded (bonds that have already been advance refunded once, for example). Synthetic refundings are used in connection with current, advance and forward refundings and should generate an additional 2% NPV savings above the advance refunding threshold unless a traditional financing is not possible because of tax or legal limitations. In that case, the advance refunding thresholds will apply.

Refunding Escrows

An advance refunding transaction requires the creation of an escrow that provides for the payment of debt service on the refunded bonds until the bonds are retired through the execution of the call feature (if any). Eligible securities for the escrow generally are limited to U.S. Treasury securities purchased in the open market (“open-markets”) and U.S. Treasury securities that take the form of “SLGS” or State and Local Government Securities purchased directly from the U.S. Treasury. Although SLGs offer flexibility and the ability to create custom securities, they may not offer any yield advantage. In addition, there have been instances in the past where the U.S. Treasury was unable to offer SLGS because of the U.S. Debt Ceiling being reached. When refunding transactions are being structured, both open-markets and SLGS should be evaluated to determine the most advantageous escrow candidates.

In the event that it is determined that open-markets are the best choice for the escrow, the financial advisor to the transaction should conduct a competitive bidding process for the procurement of the securities and should ensure that the process will meet IRS requirements for safe harbor under then-current regulations. A minimum of three bids is required. The details of the process for bidding escrow securities should include the number and names of bids solicited and received and should be retained for the life of the bonds. If the refunding is to be accomplished through a negotiated underwriting, the underwriter should be prohibited from furnishing the escrow securities without participation in a third-party, competitive bidding process.

APPENDIX A
Alaska Public Debt Report Tables

<http://treasury.dor.alaska.gov/Portals/0/docs/Debt%20book%202014%20FINAL.pdf>

APPENDIX B
State's Post Issuance Policy

Governmental Bonds

STATE OF ALASKA
POST ISSUANCE COMPLIANCE POLICY

This policy is intended to guide the State of Alaska (the “State”) in meeting its obligations under applicable statutes, regulations and documentation associated with publicly offered and privately placed securities of the State. This policy addresses obligations of the State that arise and will continue following the issuance of securities. The State maintains a separate Debt Policy with respect to matters related to the issuance of security obligations, including compliance with the State’s disclosure obligations related to securities issuance. These obligations may arise as a result of federal tax law (with respect to tax-exempt securities) and securities laws (with respect to ongoing disclosure) or as a result of contractual commitments made by the State. This policy outlines obligations that may be applicable to each issue of securities and identifies the party to be responsible for monitoring compliance. In the State, the Debt Manager will be responsible for ensuring that the policy is followed and checklists and records maintained. The Debt Manager may delegate responsibility to employees and outside agents for developing records, maintaining records and checklists. The State will provide educational opportunities (opportunities to attend educational programs/seminars on the topic) for the parties identified in this policy with responsibilities for post-issuance compliance in order to facilitate their performance of these obligations.

A. Transcripts.

1. The State’s bond counsel shall provide the State with three copies of a full transcript related to the issuance of securities (for each issue). The transcript shall be delivered in the following forms: one 3-ring binder, one soft cover and one CD-ROM and transcripts shall be delivered to the State within six months following the date of issuance of securities. It is expected that the transcript will include a full record of the proceedings related to the issuance of securities, including proof of filing an 8038-G or 8038-GC, if applicable.

2. Bond transcripts will be retained by the following parties and in the following locations within the State: Debt Manager’s office at State of Alaska Department of Revenue and State of Alaska Attorney General’s office.

B. Federal Tax Law Requirements (Applicable only if the securities are issued as “tax-exempt” securities).

1. *Use of Proceeds.*

a. If the project(s) to be financed with the proceeds of the securities will be funded with multiple sources of funds, the State will adopt an accounting methodology that:

___ maintains each source of funding separately and monitors the actual expenditure of proceeds of the securities;

___ commingles the proceeds and monitors the expenditures on a first in, first out basis; or

___ provides for the expenditure of funds received from multiple sources on a proportionate basis.

b. Records of expenditures (timing of expenditure and object code) of the proceeds of securities will be maintained by the Debt Manager.

c. Records of investments and interest earnings on the proceeds of securities will be maintained by the Debt Manager. Such records should include the amount of each investment, the date each investment is made, the date each investment matures and if sold prior to maturity, its sale date, and its interest rate and/or yield. Interest earnings on proceeds will be deposited in the fund in which the proceeds of the securities were deposited (if not, then the plan for use of interest earnings will be discussed with the State's bond counsel).

d. Records of interest earnings on reserve funds maintained for the securities.

2. *Arbitrage Rebate.* The Debt Manager of the State ("Rebate Monitor") will monitor compliance with the arbitrage rebate obligations of the State for each issue ("issue") of securities which are described in further detail in the tax certificate if any, executed by the State for each issue and included in the transcript for the issue. If the State did not execute a tax certificate in connection with an issue, the Rebate Monitor should consult with the State's bond counsel regarding arbitrage rebate requirements. The State will provide educational opportunities (opportunities to attend educational programs/seminars on the topic) for the Debt Manager in order to facilitate his/her performance of these obligations.

a. If the Rebate Monitor determines that the total principal amount of tax-exempt governmental obligations (including all tax-exempt leases, etc.) of the State issued by or on behalf of the State and subordinate entities during the calendar year, including the issue, will not be greater than \$5,000,000, plus such additional amount not in excess of \$10,000,000 as is to be spent for the construction of public school facilities, the Rebate Monitor will not be required to monitor arbitrage rebate compliance for the issue, except to monitor expenditures and the use of proceeds after completion of the project (see #3 below). For purposes of this paragraph, tax-exempt governmental obligations issued to currently refund a prior tax-exempt governmental obligation will only be taken into account to the extent they exceed the outstanding amount of the refunded bonds.

b. If the Rebate Monitor determines that the total principal amount of tax-exempt governmental obligations (including all tax-exempt leases, etc.) of the State issued or incurred any calendar year is greater than \$5,000,000, plus such additional amount not in excess of \$10,000,000 as is to be spent for the construction of public facilities, the Rebate Monitor will monitor rebate compliance for each issue of tax-exempt governmental obligations issued during that calendar year.

i. *Rebate Exceptions.* The Rebate Monitor will review the tax certificate, if any, in the transcript in order to determine whether the State is expected to comply with a spending exception that would permit the State to avoid having to pay arbitrage rebate. If the tax certificate identifies this spending exception (referred to as the six-month exception, the 18 month exception or the 2-year exception), then the Rebate Monitor will monitor the records of expenditures (see B.1 above) to determine whether the State met the spending exception (and thereby avoid having to pay any arbitrage rebate to the federal government). If the State did not execute a tax certificate in connection with an issue, the Rebate Monitor should consult with bond counsel regarding the potential applicability of spending exceptions.

ii. *Rebate Compliance.* If the State does not meet or does not expect to meet any of the spending exceptions described in (i) above, the State will:

x. review the investment earnings records retained as described in B.1 above. If the investment earnings records clearly and definitively demonstrate that the rate of return on investments of all proceeds of the issue were lower than the yield on the issue (see the tax certificate in the transcript), then the State may opt not to follow the steps described in the following paragraph.

y. retain the services of an arbitrage rebate consultant in order to calculate any potential arbitrage rebate liability. The rebate consultant shall be selected no later than the completion of the project to be financed with the proceeds of the issue. A rebate consultant may be selected on an issue by issue basis or for all securities issues of the State. The Rebate Monitor will obtain the names of at least three qualified consultants and request that the consultants submit proposals for consideration prior to being selected as the State's rebate consultant. The selected rebate consultant shall provide a written report to the State with respect to the issue and with respect to any arbitrage rebate owed if any.

z. based on the report of the rebate consultant, file reports with and make any required payments to the Internal Revenue Service, no later than the fifth anniversary of the date of each issue (plus 60 days), and every five years thereafter, with the final installment due no later than 60 days following the retirement of the last obligation of the issue.

c. *Yield Reduction Payments.* If the State fails to expend all amounts required to be spent as of the close of any temporary period specified in the Tax Certificate (generally 3 years for proceeds of a new money issue and 13 months for amounts held in a debt service fund), the State will follow the procedures described in B.2.b.ii above to determine and pay any required yield reduction payment.

3. *Unused Proceeds Following Completion of the Project.* Following completion of the project(s) financed with the issue proceeds, the Debt Manager will:

a. review the expenditure records to determine whether the proceeds have been allocated to the project(s) intended (and if any questions arise, consult with bond counsel in order to determine the method of re-allocation of proceeds); and

b. direct the use of remaining unspent proceeds (in accordance with the limitations set forth in the authorizing proceedings (i.e., bond ordinance) and if no provision is

otherwise made for the use of unspent proceeds, to the redemption or defeasance of outstanding securities of the issue.

4. *Use of the Facilities Financed with Proceeds.* In order to maintain tax-exemption of securities issued on a tax-exempt basis, the financed facilities (projects) are required to be used for governmental purposes during the life of the issue. The Debt Manager of the State will monitor and maintain records regarding any private use of the projects financed with tax-exempt proceeds. The IRS Treasury Regulations prohibit private business use (use by private parties (including nonprofit organizations and the federal government)) of tax-exempt financed facilities beyond permitted *de minimus* amounts unless cured by a prescribed remedial action. Private use may arise as a result of:

- a. Sale of the facilities;
- b. Lease of the facilities (including leases, easements or use arrangements for areas outside the four walls, e.g., hosting of cell phone towers);
- c. Management contracts (in which the State authorizes a third party to operate a facility (e.g., cafeteria);
- d. Preference arrangements (in which the State grants a third party preference of the facilities, e.g., preference parking in a public parking lot).

If the Debt Manager identifies private use of tax-exempt debt financed facilities, the Debt Manager will consult with the State's bond counsel to determine whether private use will adversely affect the tax-exempt status of the issue and if so, what remedial action is appropriate.

5. *Records Retention.*

a. Records with respect to matters described in this Subsection B will be retained by the State for the life of the securities issue (and any issue that refunds the securities issue) and for a period of three years thereafter.

b. Records to be retained:

- (i) The transcript;
- (ii) Arbitrage rebate reports prepared by outside consultants;
- (iii) Work papers that were provided to the rebate consultants;
- (iv) Records of expenditures and investment receipts (showing timing of expenditure and the object code of the expenditure and in the case of investment, timing of receipt of interest earnings). (Maintenance of underlying invoices should not be required provided the records include the date of the expenditure, payee name, payment amount and object code; however, if those documents are maintained as a matter of policy in electronic form, then the State should continue to maintain those records in accordance with this policy);

(v) Copies of all certificates and returns filed with the IRS (e.g., for payment of arbitrage rebate); and

(vi) Copies of all leases, user agreements for use of the financed property (agreements that provide for use of the property for periods longer than 30 days), whether or not the use was within the four walls (e.g., use of the roof of the facility for a cell phone tower).

C. Ongoing Disclosure. Under the provisions of SEC Rule 15c2-12 (the “Rule”), underwriters are required to obtain an agreement for ongoing disclosure in connection with the public offering of securities. Unless the State is exempt from compliance with the Rule as a result of certain permitted exemptions, the transcript for each issue will include an undertaking by the State to comply with the Rule. The Debt Manager of the State will monitor compliance by the State with its undertakings. These undertakings may include the requirement for an annual filing of operating and financial information and will include a requirement to file notices of listed “material events.” For some types of material events (early bond calls), the State’s fiscal agent has undertaken the responsibility of filing notice of the applicable material event.

D. Other Notice Requirements. In some instances, the proceedings authorizing the issuance of securities will require the State to file information periodically with other parties, e.g., bond insurers, banks, rating agencies. The types of information required to be filed may include (1) budgets, (2) annual financial reports, (3) issuance of additional debt obligations, and (4) amendments to financing documents. The Debt Manager of the State will maintain a listing of t