Debt Affordability Analysis

January 2020 State of Alaska
State Bond Committee
Debt Management Policies
And State Debt Capacity

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Executive Summary

The State of Alaska has an estimated capacity for additional debt over the next ten years of approximately $1,690 million or $169 million per year. The shift to include certain investment revenue of the Alaska Permanent Fund as Unrestricted General Fund Revenue (UGF) in the State's Revenue Sources beginning in fiscal year 2019 significantly boosted UGF revenue and the associated debt capacity of the State. This increased capacity is partially offset by the projected annual UGF being insufficient to fund both state services and the historical statutory Alaska Permanent Fund Dividend (PFD) distribution and the budgeting and political uncertainty and tension created by the deficiency. Considering the recently increased UGF revenue and political and budgetary uncertainty combined with historical metrics, current revenue projections, and annual state expenses results in an estimated capacity to issue approximately $2.8 billion of additional State of Alaska general fund paid debt for essential infrastructure projects over the next ten years without impacting its current credit rating. This capacity is diminished by an estimated $1,110 million of authorized, but unissued state debt comprised of $110 million authorized general obligation bonds and up to an additional $1,000 million authorized for subject to appropriation debt of the Alaska Tax Credit Certificate Bond Corporation (ATCCBC). While the ATCCBC is expected to issue something less than the authorized $1,000 and the impact of any ATCCBC debt issuance should be somewhat muted by the refinancing nature of the issuance, given the current rating environment volatility the State has experienced the full amount of the authorization was deducted from capacity. Deductions for the authorized but unissued debt that is currently expected to be sold leaves a new authorization capacity of approximately $1,690 million over the next ten years.

The change in UGF composition since fiscal year 2019 resulted in significant increases in the estimated debt capacity of Alaska as demonstrated by the January 2018 debt capacity estimate of $300-400 million using the prior UGF amount. The decline in State Unrestricted General Fund (UGF) revenue that began in fiscal year 2015 moderated and gradually improved through fiscal year 2018, and while current oil prices and correlated state revenue projections have moderated, the re-classification of revenue coming from investment income of the State's Permanent Fund beginning in FY 2019 has had an overwhelmingly positive effect on debt capacity. The estimated debt capacity should be utilized judiciously for essential projects that span the forecast period to minimize the risk of negative credit impacts.

From fiscal year 2015 through fiscal year 2018 the State primarily used funds from the Constitutional Budget Reserve (CBR) in combination with other funds and UGF revenue to balance the unrestricted budget. This trend continued, but with significantly lower draws on the CBR in fiscal year 2019 and for fiscal year 2020 draws on the CBR were approximately equal to the deposits of non-UGF revenue to the CBR. In the 2018 Legislative Session, Senate Bill 26 was approved and established the precedent beginning in fiscal year 2019 of appropriating investment income of the Permanent Fund for state government expenditure. SB 26 establishes that the amount available for appropriation shall be equal to "5.25% of the average market value of the Permanent Fund for the first five of the preceding six fiscal years, including the fiscal year just ended." On July 1, 2021 the calculation will be diminished to 5% of the average market value as further described. For fiscal year 2019, this change resulted in an additional $2.7 billion of UGF revenue. Chapter 2 Table 1 of the State of Alaska, Department of Revenue, Tax Division's Fall

2019 Revenue Sources Book, estimates UGF at $5,049.4 million for FY 2020 and $5,059.0 million for FY 2021 of which $2,933.1 million and $3,091.5 million respectively, is investment revenue from the Alaska Permanent Fund. For purposes of estimating debt capacity the Department of Revenue has determined that using the revenue projection which includes transfers of revenue from the Permanent Fund is more appropriate, but the nature of the transfer places downward pressure on the historical debt capacity metrics.

The State of Alaska's credit rating peaked in 2013 with the highest ratings from all three national credit rating agencies. The significant reduction in UGF in fiscal year 2015 and the State's practice of portraying earnings of the Permanent Fund and CBR as well as current year deposits to the CBR as restricted by custom revenue and the resulting recurring UGF category annual deficits placed significant strain on the State's credit rating. While the State continues to maintain high credit ratings, multiple downgrades have occurred over the last four years as detailed below:

> 2015 AAA, AAA, Aaa ratings since 2013 or earlier with Stable Outlook
> January 5, 2016 downgrade by Standard & Poor's to AA+ Negative Outlook
> February 29, 2016 downgrade by Moody's Investors Service to Aa1 Negative Outlook
> June 14, 2016 downgrade by Fitch Ratings to AA+ Negative Outlook
> July 25, 2016 downgrade by Moody's Investor Service to Aa2 Negative Outlook
> July 13, 2017 downgrade by Moody's Investor Service to Aa3 Negative Outlook
> July 18, 2017 downgrade by Standard & Poor's to AA Negative Outlook
> November 1, 2017 downgrade by Fitch Ratings to AA Negative Outlook
> November 2, 2017 outlook adjustment by Fitch upgraded to Stable Outlook
> December 1, 2017 outlook adjustment by Moody's upgraded to Stable Outlook
> June 8, 2018 outlook adjustment by Standard & Poor's to Stable Outlook
> July 25, 2019 outlook adjustment by Moody's to Negative Outlook
> September 5, 2019 downgrade by Fitch Ratings to AA- Stable Outlook

The State's credit rating began stabilizing in fiscal year 2018 with the adjustment of the outlook of the State from negative to stable by all three rating agencies. These adjustments reflected recognition of the financial options that the State has available to it in addressing the challenge of the reported recurring UGF budget deficit, incremental change that had occurred over the prior three years to address the State's fiscal situation, and the State's use of Permanent Fund earnings as UGF in the fiscal year 2019 budget as a result of SB 26. This stability diminished late in fiscal year 2019 through the beginning of fiscal year 2020 as the State experienced political gridlock during the process of creating the fiscal year 2020 budget, with multiple special sessions of the Legislature and high-level policy disagreement between the Executive and Legislative branches of government. This process resulted in Moody's placing the State's credit on negative outlook and Fitch Ratings downgrading their credit rating for the State by one notch.

A carefully considered debt management plan is a useful tool to policy leaders and government professionals when determining appropriate levels of debt while balancing meeting the need of funding the State's capital program and maintaining credit rating. However, the current erosion of the quality of the State's credit rating has been entirely based on the State's diminished UGF generation caused by low oil price and the difficulty in determining how and when to change how the State generates and categorizes revenue or how the State prioritizes spending to resolve the

UGF structural deficit. Options considered for change have included diminishing state UGF spending, implementing a broad-based tax, implementing or increasing other taxes, and using some portion of the Permanent Fund investment earnings. As of fiscal year 2020, the options that have been exercised are reducing state UGF spending, diminishing the PFD distribution and reclassifying a portion of Permanent Fund earnings as UGF revenue.

The State of Alaska experienced a steep decline in unrestricted revenue due to the sharp drop in the price of oil from over $100 per barrel in August 2014 to below $30 per barrel in December 2014. From 2015 through 2017 the Alaska North Slope (ANS) oil price stabilized in the $40-$50 per barrel range, increased in fiscal year 2018 to an average price of $63.61, and increased in fiscal year 2019 to an average price of $69.46. The current forecast for fiscal year 2020 is $63.54 per barrel, the December 20, 2019 fiscal year to date average price was $64.03, and the December 20, 2019 spot price was $67.48. The State's historical UGF classification of revenue declined from $5,390 million in fiscal year 2014 to $2,256 million in fiscal year 2015, $1,533 million in fiscal year 2016, $1,355 million in fiscal year2017, and $2,424.1 million in fiscal year 2018. Fiscal year 2019 UGF increased to $5,354.6 million with the inclusion of $2,722.6 million of Alaska Permanent earnings and fiscal year 2020 UGF is projected to be $5,049 million. Total UGF is projected to increase gradually over the forecast period to $6,071.7 million in 2029. Despite the increase in UGF in FY 2019 and significant budget reductions in 2020, the State is still considering options for long term budget balance including additional reductions in UGF expenditures of the State, additional UGF generation, and the appropriate size of the PFD distribution.

Recent General Accounting Standards Board (GASB) Statements related to accounting for pension liabilities and other post-employment benefits (OPEB) have been implemented since 2016 and updated the reporting and disclosure requirements related to pension liabilities. Requirements of GASB include that if a government is committed to making payments on an unfunded pension liability on behalf of another entity, the amount of liability supported must be reported as a debt of the government making the payments and that the assumed rate of return for retirement trusts must be adjusted up and down by 1% to provide a range of potential outcomes. Senate Bill 125 was passed in 2008 and commits the State to funding the difference between specific employer contributions of 22% for the Public Employees Retirement System (PERS) and 12.56% for the Teachers Retirement System (TRS). Approximately 55% of the supplemental State payment required under this statute for PERS is attributable to employees of the State of Alaska, with the remaining 45% stemming from other employers. While TRS funding is arguably a State responsibility, this debt would be found primarily on local school districts' balance sheets if SB 125 was not in place. Under GASB, the State's payment commitment under SB 125 increased the State of Alaska's long-term debt by $5,801 million to $8,473 million as of June 30, 2015, compared to $2,672 million as of June 30, 2014. Recognition of this long-term obligation was incorporated into the State's debt affordability analysis in 2017. As of June 30, 2019, the PERS total pension combined with other post-employment benefits liability was approximately $5,147,000,000. As of June 30, 2019, the TRS total pension combined with other post-employment liability was approximately $1,520,000,000. A 1% reduction in the rate of return on investments from the actuarially assumed rate increases the PERS liability by $2,795,944,000 and TRS liability by $1,052,460,000. Both the current balance of liabilities as well as the magnitude in change in liability from future outcomes highlight the impact that PERS and TRS funding needs have on the State. Effective January 11, 2019, the Alaska Retirement Management Board changed the actuarially assumed rate of investment return from 8% down to 7.38% along with several other actuarial assumptions. These changes highlight the ability of changes in assumption to impact the pension systems funding levels.

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 certain 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).

As of June 30, 2019, the State had reportable general fund obligations, all in fixed rate mode of approximately:

	Debt Outstanding	**2020 Debt Service**	**Final Maturity**
General Obligation	670,100,000	77,816,000	2038
Subject to Appropriation			
COPS	22,400,000	2,891,650	2029
Lease Revenue	192,800,000	19,669,660	2033
School Debt Reimbursement*	704,800,000	97,600,000	2038
DOT Reimbursements*	22,500,000	4,517,370	2031
Total Pension Liability**	6,667,000,000	300,200,000	2039
TOTAL	**8,279,600,000**	**502,694,680**	

*Debt service listed in this table reflects full authority for statutory reimbursement, which has been reduced or eliminated in the enacted FY 2020 budget, and the Governor’s proposed FY 2021 budget.

**This total includes other municipal employer’s liabilities. From most recent State of Alaska PERS and TRS Actuarial Valuation Reports, 6/30/2018.

As of June 30, 2019, the State had authorized but unissued general fund obligations of:

	Authority	**Estimated Debt Service**	**Term**
General Obligation	$110,348,242	$8,000,000	20 years
Subject to Appropriation			
Knik Arm Crossing	$300,000,000	N/A	N/A
Pension Obligation Bonds	1,500,000,000	N/A	N/A
Tax Credit Certificate Bond Corporation	$1,000,000,000	Uncertain up to $105 million	Uncertain 10 to 15 years
School Debt Reimbursement	Limited	Limited	
TOTAL	**2,910,348,242**	**113,000,000**	

In recent years the State has discussed the potential of issuing debt to provide for a portion of the State's funding requirement for the AKLNG project. The AKLNG project could require issuance of up to tens of billions of dollars in debt over a ten-year period. While in the current environment State debt issuance for AKLNG appears less likely, if approved, this issuance would exceed existing debt by many times.

As of June 30, 2019, the State had debt obligations secured and paid by the general fund of approximately $885.3 million, comprised of $670.1 million of general obligation bonds, $22.4 million of Certificates of Participation, and $192.8 million of lease-revenue bond conduit issues of political subdivisions all issued in fixed rate mode. There is currently $110 million of unissued general obligation bond authority that remains to be issued, and general fund subject to appropriation bond authority of $300 million for the Knik Arm Crossing, $1.5 billion for the Pension Obligation Bond Corporation, and $1 billion for the Tax Credit Certificate Bond Corporation. It is uncertain when, or if the authority for the Knik Arm Crossing or the Pension Obligation Bond Corporation will be issued. The authorization for the ATCCBC has had a legal challenge raised against it which is currently being considered by the Alaska Supreme Court. Any ATCCBC bond issuance will require that the Court issues a ruling affirming the legality of the proposal.

As of June 30, 2019, the State had $106.8 million outstanding in the Veteran's Mortgage Loan Program which the general fund guarantees but has never had to pay the debt service. This guarantee was obtained in 1982 as it was required by the 1980 Mortgage Subsidy Bond Tax Act to obtain tax exempt financing of mortgages for US military veterans in Alaska. This is the only debt issued by a political subdivision that is guaranteed by the State. The program maintains the highest credit rating of AAA prior to including the state guarantee, and therefore has no impact on the State's debt capacity.

Per Alaska Statute 14.11.100, "State aid for costs of school construction debt" the state shall allocate payment to municipalities for the reimbursement of qualified debt service issued to fund authorized school district capital projects. This program is administered by the State of Alaska's Department of Education and Early Development and is commonly referred to as the School Debt Reimbursement Program (SDRP). Per Alaska Statute 29.60.700, "Reimbursement for costs of municipal capital projects" the state shall allocate payments to municipalities for the reimbursement of qualified debt service issued to fund authorized municipal capital projects. This program is administered by the Department of Transportation and Public Facilities and is commonly referred to as the Transportation and Infrastructure Debt Service Reimbursement Authorization (TIDSRA).

Although the SDRP and TIDSRA have been either partially funded or not funded in fiscal year 2020 and certain other years, based on the statutory framework of the programs the analysis in this publication continues to assume that the authorized amounts will be paid in the future. The SDRP funding is subject to annual appropriation and partial funding has been appropriated in fiscal years 1983, 1986 through 1991, 2017 and 2020, and the Governor's proposed budget for fiscal year 2021 includes only partial funding. During these partial funding years municipal revenues must be used to pay this debt service. The TIDSRA is also subject to appropriation and no funding was provided in fiscal year 2020 and no funding was included in the Governor's proposed budget for fiscal year

2021. As of June 30, 2019, approximately $704.8 million of municipal general obligation bonds with annual debt service of approximately $97.6 million in FY 2020 gradually diminishing to the final year's payment of $300 thousand in 2038 are eligible for reimbursement under the SDRP and $22.5 million of University and municipal general obligation bonds with $4.5 million in annual payment in fiscal year 2020 gradually diminishing through final maturity in 2031 are eligible for reimbursement under the TIDSRA. The SDRP has existed since 1970 and provides varying levels of municipal reimbursement for qualified school construction projects' debt service from the general fund. The program is currently in the final months of a five-year moratorium on additional participation.

On June 30, 2019, there was $1,229.5 million of moral obligation debt of the State, $647.8 million of State revenue and university debt, and $440.4 million of State agency debt.

The State funds its two main retirement systems the Public Employee's Retirement System (PERS) and the Teachers Retirement System (TRS) as both an employer and by providing assistance payments to limit the percentage of payroll that participating employers need to pay. The limits for employer payments were established as percentages of payroll by Senate Bill 125 in 2008 at 22% for PERS and 12.56% for TRS. The State's assistance payments for PERS and TRS is the only existing outstanding debt with a growing budgetary requirement with payments growing from $300.2 million in 2020 to $468.4 million in FY 2039 if the retirement plans earn 7.38% on pre-funded benefit payments in the trusts. The growth in annual debt payment is significantly increased if the State's earnings rate in the trusts is below the actually assumed rate.

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

- The state recognizes that using "Debt Service as a percent 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. Recognizing the volatile nature of State revenue, the State Bond Committee adopted a formal policy to target no more than 5 percent of annual UGF for debt service on general obligation bonds and other public debt directly secured by a subject to appropriation pledge of the State of Alaska. A higher target of no more than 8 percent of annual UGF for debt service on general obligation bonds and other public debt directly secured by a subject to appropriation pledge of the State of Alaska as well as reimbursement programs of the State of Alaska was also established. This policy was updated in 2019 due to the inclusion of certain Permanent Fund earnings in UGF for fiscal year 2019, for both Permanent Fund Dividends (PFD) as well as other State expenses, combined with uncertainty about how future years' Permanent Fund earnings may be allocated between the PFD and other State expenses, which made an adjustment of these ratios from 5% to 4% and from 8% to 7% prudent.

- The State has historically used revenue classified as UGF in the State's semi-annual Revenue Sources Book (RSB) as the basis of determining revenue available for debt service. Until fiscal year 2019 this revenue number didn't include large amounts of current year investment revenue and still partially excludes a portion of current year investment revenue that is available for appropriation. Prior to 2019, all of these amounts were saved or distributed to state residents as a PFD and therefore customarily classified as restricted. Beginning in the Fall 2015 RSB a table titled “Current-Year Revenue Subject to Appropriation” was included to highlight the magnitude of the omission of revenues. In the Fall 2019 RSB, fiscal year 2020 UGF revenue projections are $5,049.4 million in Chapter 2 Table 1, while revenue subject to appropriation is $5,842.6 million in Chapter 3 Table 1. Current year earnings projections for the Permanent Fund above the POMV payout from the Permanent Fund Earnings Reserve are not included in the revenue subject to appropriation table, even though they are forecast as investment revenue for the year. For fiscal year 2020 the additional revenue from earnings is $1,183.3 million. If new revenues are generated and are reclassified as unrestricted there will be additional positive impacts on the State’s debt capacity.

- The State Bond Committee shall 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 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.

- The State’s reported broad fiscal position as reflected in the Revenue Sources Book, Comprehensive Annual Financial Report, and official budgetary analysis largely determines debt capacity. Despite the persistent environment of recurring UGF fiscal imbalance between available UGF revenues and unrestricted expenditures the shift of certain Permanent Fund earnings to UGF has increased the State’s capacity for new debt without further credit degradation.

Debt Policy Considerations

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 the State 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 authorized by law and issued directly by the State or issued by another entity but authorized by law and only paid for by the State, including general obligation bonds, lease-revenue bonds, certificates of participation, subject to appropriation obligations, revenue bonds, municipal or other debt reimbursement programs, PERS and TRS unfunded liabilities, 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 be 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 UGF revenues. The State's policy was that state general fund supported debt service should not exceed 5% of UGF 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. This policy was further refined in 2013 to target no more than 5% of UGF for general obligation debt service and no more than 8% for debt service of general obligation bonds, lease revenue bonds, certificates of participation, and the school debt reimbursement program. In fiscal year 2019, with the addition of certain earnings of the Permanent Fund to UGF, including the PFD distribution the policy was amended again. A 1% reduction to each ratio was incorporated to target no more than 4% of UGF for general obligation debt service and no more than 7% for debt service of general obligation bonds, lease revenue bonds, certificates of participation, and the school debt reimbursement 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 credit 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. On June 30, 2019, 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.

Current Debt Position

As of June 30, 2019, the State of Alaska ("State") had approximately $670.1 million in General Obligation debt outstanding all in fixed rate mode. The State has remaining authority to issue general obligation bonds of $110.4 million. Between 1981 and 2003 the State didn't authorize any general obligation bonds. This lack of use of bonds was in part due to significant issuance in the 10-year period from 1975 to 1984 when the amount of general obligation debt outstanding increased from $392 million to $946 million combined with the volatile nature of the State's unrestricted general fund revenue which declined precipitously in 1987. This led to a State preference for pay-go funding as a primary source of capital during years of higher revenue generation and almost no capital spending in years of lower revenue generation. In the 18 years since 2002 the state has authorized just five general obligation bond propositions. It is likely that if State revenues become less volatile and are approximately equal to expenses as the State begins relying on investment income that additional use of general obligation bonds may materialize.

As of June 30, 2019, the State had additional net tax supported debt of approximately $22.4 million in Certificates of Participation and $192.8 million of capital lease obligations securitized through political subdivisions that were authorized by Alaska Law.

Rating agencies have historically highlighted the State's conservative financial management, citing a low debt burden and sizable reserve amounts necessary 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 40 years, there are potential long-term alternatives in the development of natural gas resources, mineral production, implementation of a State wide broad based tax, or use of earnings of the Permanent Fund to offset costs of government services. In fiscal year 2019, the transfer from the Earnings Reserve of the Permanent Fund were classified as UGF for the first time, but without a clear direction for how the revenue should be split between paying for government services or the PFD. This lack of clarity resulted in extended budget discussions in 2019 for the fiscal year 2020 budget.

An evident factor in assessing the historically conservative nature of the State's debt practices is witnessed by the relatively low level of debt service as a percentage of UGF revenue. While the current State policy is designed to limit the ratio of state and state supported debt obligations to 7% of UGF, during the ten years preceding FY 2019 the State remained below 5% in 6 of those years. In FY 2015, with the loss of UGF due to the falling price of oil, the ratio increased to 10.1% then to 13.9% in FY 2016, to 15% in FY 2017 and 9.5% in 2018. In FY 2019, the ratio dropped to 4.2% and in 2020 the ratio is projected to decrease to 4.1%. Based on the Fall 2019 Revenue Sources Book's projections for UGF, which now incorporates certain Permanent Fund earnings, the State's ratios are projected to remain below allowed percentages throughout the forecast period. However, if statutory payments to the PERS and TRS system are included in the projections the ratio grows to 10% in fiscal year 2020, 10.6% in fiscal year 2021, and gradually decreases to 7.7% through the forecast period. A metric that demonstrates the conservative debt practice of the State is the trajectory of general obligation debt retirement. Approximately 60% of the current general obligation debt outstanding will be repaid over the next 10 years, allowing for the potential of the State to participate and support future projects.

The State has traditionally structured its general obligation bond issues as long-term fixed rate debt and currently has no exposure to floating or variable rate debt or derivative products.

Discussion of Credit Ratings and Applicable Ratios

The State of Alaska's credit ratings as of December 31, 2019 were:

Moody's Investor Service – 'Aa3' with a negative outlook
Standard & Poor's – 'AA' with a stable outlook
Fitch Ratings - 'AA-' with a stable outlook

The current Standard and Poor's Public Finance Criteria focusing specifically on how they assess the strength of a governmental entity's financial management practices was released in January 2011. State general obligation bond ratings are driven by five primary credit factors:

- Government Framework
- Financial Management
- Economy
- Budgetary Performance
- Debt and liability profile

In the update, S&P stated they are "publishing this article to help market participants better understand our approach to assigning state ratings." 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 April 18, 2016 publication "*U.S. State Tax-Supported Rating Criteria*" (see: Appendix C), Fitch stated that, "four key factors that play a significant role in driving the rating outcome for a given issuer." The factors used by Fitch are revenue framework, expenditure framework, long-term liability burden, and operating performance.

In its April 12, 2018 publication "Rating Methodology US States and Territories. Moody's Investors Service explained the rating methodology for states. Primary rating factors identified are economy, finances, governance, and debt and pensions. The document provides general guidance to help readers understand how qualitative and quantitative risk characteristics are likely to affect rating outcomes for US states and territories. Moody's uses a state's gross domestic product as a proxy for its capacity to carry liabilities, because in most states the economy drives current and future tax revenue.

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 purpose 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 10% to be "LOW", and a ratio in the 40% range to be "MODERATE".

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 highly rated states that have adopted a debt policy linked to annual operating revenues:

Table 2

State	Debt Service as a % of Unrestricted Revenues	Legal Authority
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.

The State of Alaska's ratio at June 30, 2019, including state general obligation, and state supported debt service (certificates of participation and lease revenue bonds supported by the general fund), was 2.2% using unrestricted revenue of $5,354.6 million. The School Debt Reimbursement Program represented an additional 2.0% for a total of 4.2%.

Affordable Level of Additional Debt or Obligations

Debt Capacity in the short term is limited to existing general obligation authorizations and $1,300 million of additional obligations. Over the 10-year projection the capacity is expected to grow an additional $390 million and reach approximately $1,690 million based on the current revenue forecast.

The Department of Revenue has developed a multi-pronged debt capacity model which enables the State to calculate its available borrowing capacity based on current fiscal structure. 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 4% 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 7% 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 2029 are set at amounts stipulated in the Fall 2019 Revenue Sources Book of the Tax Division.
- The impact of PERS and TRS state assistance payments is included for context.

While the State ratios were higher than stated debt capacity metrics for the last few years, this level of debt was determined to be feasible without credit downgrade based on the financial alternatives available to the State. As financial resources evolve through time, debt capacity should be expected to either shrink or grow, and caution should be used in deciding to commit to this level of debt prior to revenue recovery or re-identification. 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.

Projected state payments on debt obligations are summarized below. Not including authorized but unissued debt, State obligations paid directly from the general fund or reimbursed by the general fund for municipal obligations both gradually decrease from current levels, but those decreases are more than offset by increases in expected payments for the PERS and TRS special funding situation.

	Fall 2019 Unrestricted General Fund Revenue Forecast	Total State or Direct State pay debt	School Debt Reimbursement Program	DOT Reimbursement Program	Expected Payment on Behalf of PERS/TRS	Total State Payments for Debt Obligations
2020	5,049,400,000	100,400,000	97,600,000	4,500,000	300,200,000	502,700,000
2021	5,059,000,000	99,400,000	95,400,000	3,600,000	338,600,000	537,000,000
2022	5,071,400,000	88,900,000	82,600,000	3,600,000	317,100,000	492,200,000
2023	5,206,900,000	88,800,000	83,000,000	3,600,000	318,700,000	494,100,000
2024	5,335,500,000	88,600,000	67,600,000	3,600,000	322,400,000	482,200,000
2025	5,481,000,000	83,700,000	57,900,000	3,600,000	326,300,000	471,500,000
2026	5,588,000,000	83,500,000	48,000,000	2,800,000	331,700,000	466,000,000
2027	5,749,000,000	84,400,000	43,300,000	2,600,000	337,200,000	467,500,000
2028	5,893,400,000	83,500,000	40,600,000	2,200,000	344,800,000	471,100,000
2029	6,071,700,000	79,300,000	35,800,000	900,000	352,400,000	468,400,000

The table below depicts the State's existing debt service as a percentage of UGF. While there is significant additional issuance capacity under the 4% and 7% caps in the forecast period, the transitions occurring with use of permanent fund earnings and unrestricted revenue are still coalescing and these percentages do not include the $110 million of authorized but unissued general obligation bonds, the authorized but unissued $300 million of state supported bonds for the Knik Arm Crossing, the authorized but unissued up to $1 billion of state supported bonds for the Alaska Tax Credit Certificate Bond Corporation, the authorized but unissued up to $1.5 billion of state supported bonds for the Alaska Pension Obligation Bond Corporation or the projected state statutory payments for PERS and TRS employers.

Fiscal Year	Fall 2019 Unrestricted General Fund Revenue Forecast	Percentage of UGF to direct pay State Debt (4% cap)	Percentage of UGF to pay State debt and reimbursement Debt (7% cap)	Percentage of UGF to pay projected special Payments on Behalf of PERS/TRS	Percentage of UGF to pay State Debt, reimbursements & PERS/TRS
2020	5,049,400,000	2.0%	4.0%	5.9%	9.9%
2021	5,059,000,000	2.0%	3.9%	6.7%	10.6%
2022	5,071,400,000	1.8%	3.5%	6.3%	9.8%
2023	5,206,900,000	1.7%	3.4%	6.1%	9.5%
2024	5,335,500,000	1.7%	3.0%	6.0%	9.0%
2025	5,481,000,000	1.5%	2.6%	6.0%	8.6%
2026	5,588,000,000	1.5%	2.4%	5.9%	8.3%
2027	5,749,000,000	1.5%	2.3%	5.9%	8.2%
2028	5,893,400,000	1.4%	2.2%	5.9%	8.1%
2029	6,071,700,000	1.3%	1.9%	5.8%	7.7%

The table above highlights the impact of the State's statutorily committed payments to PERS and TRS with the payments representing between 5.8 and 6.7 percent of forecast UGF. When combined with state debt obligations and state reimbursement obligations the annual payments represent between 7.7 and 10.6 percent of forecast UGF. This level of commitment of State general fund revenue is significant in determining any additional capacity.

School Debt Reimbursement Program

Municipal school districts may apply for school debt reimbursement for construction or major maintenance projects by October 15 of the year preceding the fiscal year in which reimbursement would occur when 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. Then in 2016, Governor Walker vetoed approximately 21% of program funding and in 2020 Governor Dunleavy vetoed approximately 50% of program funding, highlighting the budget flexibility the State has for funding this program. The Department of Education & Early Development ("DEED") staff reviews requests to determine the level of reimbursement for each project. Prior to the moratorium there were tiered levels of reimbursement available. Projects qualified for up to 70 percent debt service reimbursement when the project met all of the Department's eligibility guidelines. When a project exceeds the scale and scope of the Department's eligibility guidelines, they were reimbursed at a lower percentage based on the educational value as determined by the DEED.

The existing statutory and regulatory structure of the program mandates that municipalities issue general obligation bonds to participate in the program, which requires voter approval of the project. After the municipality has both DEED and voter approval, it may issue bonds for the project and to the extent funds are appropriated, the State reimburses the approved percentage of the bond payments.

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. The Department of Revenue recommends that if the program is re-authorized that it be provided a role to coordinate municipal issues' structures, terms and refinancing criteria to ensure the needs of the State are met.

Level and Impact of Moral Obligations

Specific 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, the Alaska Tax Credit Certificate Bond Corporation 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. There is no direct obligation of the State to pay any debt service associated with these bonds, however there is an implied commitment of the State to appropriate funds (at the Legislature's discretion) to cover any shortfall in the event of a default by these issuers. This implied commitment is based on a specific statutory framework that the State provided the agencies that requires a debt service reserve and reporting the sufficiency of that reserve to the Legislature and Governor. 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 generally 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. In the case of the Alaska Municipal Bond Bank Authority (AMBBA) the State has provided an annual appropriation funding any reserve deficiency due to a borrower default in advance. This appropriation has helped reduce the cost of borrowing for many municipal borrowers, but as a result of the appropriation there is a higher level of scrutiny for these bonds from Standard and Poor's and Fitch Ratings.

Consideration of Debt Structuring Elements

Structuring

As a matter of practice, in the late 1970's, 1980's, and the early 1990's the State issued bonds with 10-year amortizations to match the "Prudhoe Curve." In the late 1990's and early 2000's the State began issuing more 15 and 20 year amortizations, and in issues since 2009 the State has almost uniformly issued bonds with level 20 year amortizations with principal paid annually and interest paid semiannually. This practice is consistent with other highly-rated states and local governments. Debt will be structured to obtain the lowest possible net cost to the State or State Issuer including the use of reserves, pre-paid debt service funds, over collateralizations, rate covenants, additional bonds tests and the use of serial or term bonds 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 to 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, to maintain a preference for equal annual 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 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 what has historically been the least expensive cost of financing without becoming overexposed to interest rate risk.

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 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 Chapter 08. Although not utilized for the last 50 years, RAN's may be issued and renewed from time to time, but must be structured to mature and be 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. 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.

Bond Anticipation notes (BAN's) are authorized under AS 37.15 Article Three for both general obligation and revenue bonds. The State has issued BAN's in advance of long-term financings for both general obligation and revenue bond issuances, most recently to fund portions of the 2012 General Obligation Bond Transportation Act.

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 as they are a higher cost of capital than other current interest structures. The State has no outstanding Capital Appreciation Bonds.

Certificates of Participation

Certificates of Participation (COPs) are issued based on a lease, authorized by stand-alone law that the State enters into with a trustee, being fractionalized and sold in bond size blocks to investors to raise funds for the acquisition and/or improvement of real property. COPs are the only way that a lease transaction can have the State of Alaska listed as the issuer. The State can also allow political subdivisions to securitize state lease payments and credit through lease revenue bonds by passing stand-alone law. Lease revenue bonds result in the loss of control of the State's credit, the reliance on a political subdivision's 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. The preference of the State is to use COPs for State of Alaska 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 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 enhance the financing structuring or marketing process and outcome.

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.

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

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

- Current Refunding
- Advance Refunding (no longer allowed on a tax-exempt basis after 2017)
- 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. Bonds which are currently callable. A refinancing should be pursued if total net present value savings of greater than 3% of the refunded debt service and each maturity being refunded has positive NPV savings. 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 and sizing goals may be diminished.

- Advance refundings. The Tax Reform Legislation of 2017 eliminated the ability to advance refund or refinance callable bonds in advance of the call date with tax-exempt bonds. Taxable bonds may be used to advance refund tax-exempt issues. When considering using taxable bonds in this scenario savings should at least achieve the same savings levels as a current refunding and overwhelm the cost of shifting to a taxable mode versus waiting to the call date and maintaining the tax-exempt mode in the market of the day.

- Forward refundings 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 current 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 current refunding threshold unless a traditional financing is not possible because of tax or legal limitations. In that case, the advance refunding thresholds will apply.

APPENDIX A

Alaska Public Debt Report Tables

http://treasury.dor.alaska.gov/Portals/0/docs/Debt%20book%202018%20FINAL.pdf

<u>APPENDIX B</u>
<u>State's Post Issuance Policy</u>

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 <u>following</u> 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. <u>Transcripts</u>.

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. <u>Federal Tax Law Requirements</u> (Applicable <u>only</u> 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, <u>except</u> 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 the U.S. Securities and Exchange Commission's (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, as well as any regulatory disclosure changes released by the SEC amending the Rule. 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 information filed and monitor compliance with other notice requirements.

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