

ALASKA PUBLIC DEBT



STATE OF ALASKA
Bill Walker, Governor
Byron Mallott, Lieutenant Governor

Department of Revenue

January 2018

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2017-2018

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I. Types of Alaska Public Debt

The State has liability or potential exposure for repayment of principal and interest in nine categories. In descending order of the State's expectation of appropriating State general funds to pay:

- State Debt
- State Guaranteed Debt
- State Supported Debt
- Unfunded Actuarial Assumed Liability (UAAL)
- State Supported Municipal Debt - Eligible for State Reimbursement
- State Moral Obligation Debt
- State and University Revenue Debt
- State Agency Debt
- State Agency Collateralized or Insured Debt
- Municipal Debt

On the following pages, each type of State obligation is briefly discussed and defined. Table 1.1 summarizes Alaska's \$14.26 billion of public debt by type.

In Section II, Alaska issuers of public debt are described and statistical tables are provided for each issuer.

A. State Debt

State Debt is comprised of debt authorized, issued and payable by the State including revenue anticipation notes (RAN's) and general obligation bonds (GOB's). The full faith, credit and resources of the State are pledged to the payment of principal and interest on this debt. If future State revenues are insufficient to make the required principal and interest payments to bondholders and note holders, the State is legally required by its contract with bondholders and note holders to raise taxes in order to meet these obligations.

1. Revenue Anticipation Notes (RANs)

Short-term State borrowing in anticipation of revenues is permitted under AS 43.08.010. RANs may be issued and renewed from time to time, but all such notes, renewals and interest thereon shall be paid from revenues by the end of the fiscal year following the year in which the notes were issued. The full faith, credit, resources, and taxing power of the State are pledged to the payment of RANs and interest thereon. To further secure such payment, and if necessary to effect advantageous borrowing to the State, collateral may also be pledged. The State has not used RANs in over 40 years and there are no State RANs issued or outstanding at June 30, 2017.

2. General Obligation Bonds (GOB's)

The State Constitution provides that GOB's must be authorized by law and ratified by the voters. Generally, the Constitution permits authorization of GOB's only for capital improvements. The legal provisions regarding GOB's are contained in Section 8, Article IX of the Alaska Constitution and AS 37.15, the State Bonding Act. The amount and timing of a bond sale must be approved by the State Bond Committee. There is no statutory limit on the amount of State GOB's that may be authorized. \$110,348,242 in authorized GOB's remain unissued at June 30, 2017.

As of June 30, 2017 the State had issued GOB's 66 times since statehood, raising over \$3 billion. In addition, the State assumed the outstanding debt of the Territory of Alaska as GOB's of the State. In 1959, the Territorial debt was \$2.9 million. As of June 30, 2017, the State had \$776.8 million in GOB's outstanding as shown in Table 1.1.

The interest cost on State bond issues is determined by several factors, the major factor being the general level of interest rates in the global economy. However, the credit rating assigned to an issuer and the related investor assessment of credit risk are important factors. The State's strong fiscal position had resulted in the highest credit rating assignments from all three agencies with a 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. Since this peak in credit strength the State's general obligation bond rating has been downgraded seven times, beginning with the January 5, 2016 downgrade by Standard & Poor's to AA+, the February 29, 2016 downgrade by Moody's Investors Service to Aa1, the June 14, 2016 downgrade by Fitch Ratings to AA+, the July 25, 2016 downgrade by Moody's Investors Service to Aa2, the July 13, 2017 downgrade by Moody's Investors Service to Aa3, the July 18, 2017 downgrade by Standard & Poor's to AA, and the November 2, 2017 downgrade by Fitch Ratings to AA. On November 2nd and December 1st of 2017, Fitch Ratings and Moody's Investors Service, respectively, revised their outlook on the State to stable from negative. Standard & Poor's continues to place a negative outlook on the State of Alaska's credit rating, indicating a probability of additional negative rating action in the future.

B. State Guaranteed Debt

In the 1982 general election, voters approved an amendment to Article IX, Section 8 of the Alaska Constitution that permits the State to guarantee unconditionally as a general obligation of the State, the payment of principal and interest on revenue bonds issued by AHFC for the purpose of purchasing mortgage loans made for residences of qualifying veterans. This is the only purpose for which State Guaranteed Bonds may be issued. Because the bonds are general obligations of the State, they must be authorized by law, ratified by the voters, and approved by the State Bond Committee. In six elections from 1982 through 2010 voters approved propositions authorizing \$3.3 billion of State Guaranteed Bonds for veterans' mortgages.

These bonds are known to investors as "double-barreled" because there are two distinct forms of security behind the bonds. Their first lien is on the revenue stream generated by payments on the mortgage loans made from bond sale proceeds. Additional security to bondholders is provided by the general obligation pledge of the State to make the required debt service payments in the event that revenues are insufficient. In recognition of the creditworthiness of the veterans' bonds, they have been rated AAA.

The constitutional amendment permitting the State general obligation pledge on veterans' mortgage bonds was necessary only to gain tax-exempt status for the bonds. The Mortgage Subsidy Bond Tax Act passed by Congress in 1980 restricted the ability of states or public corporations to sell tax-exempt housing bonds above specified ceilings unless they were also general obligations of the issuing state and the proceeds were used for housing loans for veterans. After the 1980 legislation and before the 1982 constitutional amendment, AHFC had been issuing more expensive taxable bonds for veterans' as well as non-veterans' loans.

Because of the strong support behind the bonds, independent of the State's general obligation pledge, this debt is not counted by the rating agencies as general obligation debt. However, if problems in meeting debt service on veterans' bonds were to arise, the bonds would be treated as general obligation debt for credit rating purposes.

At June 30, 2017, State Guaranteed Debt was \$49.4 million, as shown in Table 1.1.

C. State Supported Debt

State Supported Debt is debt authorized by the State of Alaska for which the source of payment is appropriations from the State's General Fund. As the State's credit is the basis of the credit for obligations that are authorized by state law, a failure to appropriate would impact the State's credit.

State Supported Debt is not considered debt under the Alaska Constitution because the State's payments on the debt obligations, even if they are the subject of a contractual commitment, are subject to annual legislative appropriation. As a result, voter approval of such debt is not required.

State Supported Debt includes lease-purchase financing obligations (structured as certificates of participation (COP's)), and Capital Leases the State has entered into, Atwood Office Building with AHFC, Linny Pacillo Parking Garage with AHFC, and the Goose Creek Correctional Center with the Matanuska-Susitna Borough. When the State is not the issuer of the debt, it will be reported as debt at both the State and political subdivision level.

Generally all State Supported Debt must be authorized by law and by resolution of the State Bond Committee as in the case of COP's or Lease Revenue bonds. Historically State Supported debt was authorized by legislative resolution pursuant to AS 37.05.280 (now repealed) for the Alaska State Housing Authority as well as by law in the case of the University of Alaska.

At June 30, 2017, State Supported Debt was \$237.6 million as shown in Table 1.1.

D. State Supported Unfunded Actuarial Assumed Liability (UAAL)

In 2008 Senate Bill 125 became law, declaring that the State shall fund any actuarially determined employer contribution rate above 22% for the Public Employees' Retirement System (PERS) or 12.56% for the Teachers' Retirement System (TRS) out of the State's general fund. This change was designed to address stress municipal employers were experiencing due to high actuarially determined percentage of payroll amounts to pay for actuarially assumed unfunded liabilities of the retirement systems. In 2015 the General Accounting Standards Board Statement 68 (GASB 68) was enacted, updating reporting and disclosure requirements related to pension liabilities. One of the key changes was requiring a government that is committed to making payments on a pension system's unfunded actuarial assumed liability (UAAL) on behalf of another entity to record the liability as a debt of the government making the payment. As a result of GASB 68 \$5.8 billion of long-term debt was added to the State's fiscal year 2015 Comprehensive Annual Financial Report for a total of \$6.0 billion of UAAL owed by the State.

This debt will be paid over the next 21 years with annual payments determined based on a variety of actuarial assumptions, and the evolving experience at it occurs. The assumption with perhaps the greatest impact on future payments is the assumed rate of return on invested assets. While the actuarial assumption is that the PERS and TRS invested assets will earn 8% per year over the next 21 years, if the earnings rate is 7% the total State payments increase by approximately \$8 billion. Lower earnings rates will result in similar increases in required State payments.

As long as the Senate Bill 125 statutory framework is in place, the State is statutorily obligated to obtain amounts required to meet all actuarially determined employer contribution rate for PERS' employers above 22% and TRS employers above 12.56%. While this payment is subject to annual appropriation, a failure to make the appropriation would be expected to have a negative impact on the State's credit ratings.

The June 30, 2017 State long-term debt for PERS and TRS UAAL was \$6.6 billion as shown in Table 1.1.

E. State Supported Municipal Debt - Eligible for State Reimbursement

The State administers two programs that reimburse municipalities for municipal G.O. bonds in the School Debt Reimbursement Program (SDRP) and the Transportation and Infrastructure Debt Service Reimbursement Authorization (TIDSRA). These are programs that provide for State reimbursement of annual debt service on general obligation or revenue pledges of municipalities. The State may choose not to fund these programs in part or whole without any impact on the State of Alaska's credit rating.

The Department of Education and Early Development (DEED) administers (SDRP) which was created by law in 1970. The SDRP allows municipalities to apply, and if structured correctly be eligible for reimbursement on up to 100% of the debt service on general obligation bonds issued for school construction. All underlying municipal bonds are required to be authorized as general obligation bonds of the municipality, providing the ultimate source

of payment commitment. The program is currently unavailable to new projects and was partially funded at approximately 75% in fiscal year 2017.

The Department of Transportation and Public Facilities (DOTPF) administers the TIDSRA which was created by law in 2002. The program provides for 100% reimbursement of a limited number of municipal transportation and infrastructure related projects. The underlying municipal bonds are issued as either general obligation bonds or utility revenue bonds providing the ultimate source of payment commitment. This was a one-time authorization and no additional authorizations have been proposed.

At June 30, 2017 state supported municipal debt was \$893.1 million as shown in Table 1.1.

F. State Moral Obligation Debt

This type of debt consists of bonds issued by State agencies which are secured, in part, by a reserve fund to which is attached a discretionary replenishment provision. Such a reserve fund is typically called a capital reserve fund. The discretionary replenishment provision typically reads:

The chairman of the authority (or corporation) shall annually, no later than January 1, certify in writing to the Governor and the Legislature the amount, if any, required to restore the capital reserve fund to the capital reserve fund requirement. The Legislature may appropriate to the authority (or corporation) the amount certified by the chairman of the authority (or corporation). Nothing in this section creates a debt or liability of the state.

A capital reserve fund is generally equal in size to the maximum amount of debt service required in any year. Alaska's discretionary replenishment provision means that if the reserve fund should fall below its required level, the State Legislature may, but is not legally required to, appropriate funds sufficient to restore the capital reserve fund to its required level. The most likely reason that such a reserve fund would fall short of the required level is if agency revenues were insufficient to meet a given debt service payment and the reserve fund had to be used to make the payment.

The authority to issue moral obligation bonds is providing in varying amounts and purpose in the enabling legislation of Alaska Aerospace Development Corporation, Alaska Housing Finance Corporation, Alaska Industrial Development and Export Authority, Alaska Student Loan Corporation, Alaska Municipal Bond Bank Authority, and the Alaska Energy Authority. Currently outstanding moral obligation debt is limited to the Alaska Municipal Bond Bank Authority, the Alaska Energy Authority and the Alaska Student Loan Corporation.

At June 30, 2017, State Moral Obligation Debt was \$1,325.7 million, as shown in Table 1.1.

G. State Revenue and University Debt

This type of debt issued by the State on behalf of the Sport fish Program and the Alaska International Airport System or by the University of Alaska is secured only by revenues derived from the issuing enterprise. Revenue Debt is not a general obligation of the State or the University and does not require voter approval. Such debt is authorized by law and issued by the University or by the State Bond Committee. This type of debt includes International Airports Revenue Bonds, Sport Fish Revenue Bonds, Clean Water and Drinking Water Fund Bonds, various University Revenue Bonds and Notes, and Toll Facilities Revenue Bonds. While the State hasn't issued any long-term Clean Water or Drinking Water Fund Revenue Bonds, it does undertake an annual overnight borrowing to provide for operational goals of the Funds.

At June 30, 2017, State Revenue and University Debt was \$742.0 million, as shown in Table 1.1.

H. State Agency Debt

State Agency Debt is secured by revenues generated from the use of bond proceeds or the assets of the agency issuing the bonds. The debt is not a general obligation of the State nor does the State provide security for the debt in any other manner, i.e., by appropriations, guarantees, or moral obligation pledges. The State has, however, in the past appropriated funds to subsidize the interest rate to the underlying borrowers in the case of certain AHFC debt listed as State Agency Debt in Table 1.1.

Nevertheless, if default threatened on any such State Agency Debt, there is some possibility the State would provide relief. The ties between these agencies and the State -- such as their statutory origin and authority, subjection to the executive budget act and State contracting procedures, cabinet membership on boards, legislative approval of bond issuance, and, most fundamentally, achievement of their missions as a political goal of the State -- may mean that the State would consider providing support for such debt even though it has no legal requirement to do so. A default on any State Agency Debt may affect interest costs on unrelated State and State Agency and certain municipal debt.

The exception to any expectation of State response in the event of a default is the Tobacco Settlement Asset Backed Bonds issued by the Northern Tobacco Securitization Corporation. These bonds were deliberately structured without any implication of State support to divest the State of a portion of its position with the settlement. Investors in these bonds have received a commensurately higher yield than for other types of State Agency Debt.

At June 30, 2017, State Agency Debt was \$553.3 million, as shown in Table 1.1.

I. State Agency Collateralized or Insured Debt

As security for this type of debt, the State agency pledges mortgage loans or other securities which may be 100% insured or guaranteed by another party of superior credit standing. This upgrades the credit rating on the debt and lowers the interest cost. It also makes very remote any likelihood of the State having to consider assumption of responsibility for the debt. The details of such debt are explained in the section on AHFC.

At June 30, 2017, State Agency Collateralized or Insured Debt was \$2,129.6 million, as shown in Table 1.1.

J. Municipal Debt

Political subdivisions within the State of Alaska are termed "municipalities." The five categories of municipality are home rule city, general law city, home rule borough, general law borough, and unified municipality.

Alaska municipalities had approximately \$2.29 billion in general obligation bonds outstanding at June 30, 2017. Alaska municipalities' general obligation debt has remained relatively stable over the last ten years, and remains below its peak of \$2.67 billion reached in 1986.

In addition to general obligation debt that is supported by local taxes, cities and boroughs may issue debt that is supported by the revenues generated by the project financed through the issuance of debt. At June 30, 2017, approximately \$941.1 million in municipal revenue bonds was outstanding.

K. Industrial Development Bonds (Informational Only)

While the State has no involvement or commitment to pay, the City of Valdez, Alaska issued approximately \$1.7 billion of Industrial Development Bonds (IDB's), from 1976 - 1986, to finance construction of the Trans Alaska Pipeline System. These bonds are secured solely by revenues from oil companies, and the City of Valdez issued without pledging any local resources. These Industrial Development Bonds are not included in the amounts of Alaska public debt in this publication.

TABLE 1.1
State and State Agency Debt by Type at 6/30/17
 \$ (millions)

	principal outstanding	interest to maturity	total debt service to maturity
State Debt			
State of Alaska General Obligation Bonds	776.8	350.7	1,127.5
State Guaranteed Debt			
Alaska Housing Finance Corporation State Guaranteed Bonds (Veterans' Mortgage Program)	49.4	17.5	66.9
State Supported Debt			
Certificates of Participation	25.9	8.8	34.7
Lease Revenue Bonds with State Credit Pledge and Payment	211.7	94.0	305.7
Total State Supported Debt	237.6	102.8	340.4
State Supported Municipal Debt			
State Reimbursement of Municipal School Debt Service	863.6	275.1	1,138.7
State Reimbursement of capital projects	29.5	11.8	41.3
Total State Supported Municipal Debt	893.1	286.9	1,180.0
Pension System Unfunded Actuarial Accrued Liability (UAAL)³			
Public Employees' Retirement System UAAL	4,901.0	N/A	4,901.0
Teachers' Retirement System UAAL	1,707.0	N/A	1,707.0
Total UAAL	6,608.0	N/A	6,608.0
State Moral Obligation Debt			
Alaska Municipal Bond Bank:			
2005, 2010, & 2016 General Resolution General Obligation Bonds	1,187.6	611.8	1,799.4
Alaska Energy Authority:			
Power Revenue Bonds #1 through #6	53.5	7.3	60.8
Alaska Student Loan Corporation			
Student Loan Revenue Bonds	14.9	0.2	15.1
Education Loan Backed Notes	69.7	2.6	72.3
Total State Moral Obligation Debt	1,325.7	621.9	1,947.6
State Revenue Debt			
Sportfish Revenue Bonds	19.8	3.6	23.4
International Airports Revenue Bonds	411.2	209.1	620.3
University of Alaska Debt			
University of Alaska Revenue Bonds	293.0	170.4	463.4
University Lease Liability and Notes Payable	17.2	4.8	22.0
Installment Contracts	0.8	0.0	0.8
Total University of Alaska Debt	311.0	175.2	486.2
Total State Revenue and University Debt	742.0	387.9	1,129.9
State Agency Debt			
Alaska Housing Finance Corporation:			
Commercial Paper	82.6	N/A	82.6
Alaska Municipal Bond Bank Coastal Energy Loan Bonds	10.1	2.3	12.4
Alaska Railroad	130.3	20.3	150.6
Northern Tobacco Securitization Corporation			
2006 Tobacco Settlement Asset-Backed Bonds ¹	330.3	419.6	749.9
Total State Agency Debt	553.3	442.2	995.5
State Agency Collateralized or Insured Debt			
Alaska Housing Finance Corporation:			
Collateralized Home Mortgage Revenue Bonds & Mortgage Revenue Bonds:			
2002 Through 2011 (First Time Homebuyer Program)	760.2	383.3	1,143.5
General Mortgage Revenue Bonds II-2012	212.7	87.3	300.0
Government Purpose Bonds 1997 & 2001	117.0	27.2	144.2
State Capital Project Bonds, 2002-2011 ²	135.8	34.1	169.9
State Capital Project Bonds, II 2012-2015	795.8	301.4	1,097.2
Alaska Industrial Development and Export Authority:			
Revolving Fund Bonds	45.9	15.7	61.6
Power Revenue Bonds, 2015 Series (Snettisham Hydro Project)	62.2	30.6	92.8
Total State Agency Collateralized or Insured Debt	2,129.6	879.6	3,009.2
Total State and State Agency Debt	13,315.5		

TABLE 1.1 (Continued)
State and State Agency Debt by Type at 6/30/17
 \$ (millions)

	principal outstanding	interest to maturity	total debt service to maturity
Municipal Debt			
<i>School G.O. Debt</i>	1,286.7	N/A	N/A
<i>Other G.O. Debt</i>	1,006.5	N/A	N/A
Revenue Debt	<u>941.1</u>	N/A	N/A
Total Municipal Debt	3,234.3		
Debt Reported in More than One Category			
Less: State Reimbursable Municipal Debt and Capital Leases *	-241.2		
Less: State Reimbursable Municipal School G.O. Debt	-863.6		
Less: Alaska Municipal Bond Bank debt included in University debt *	-65.4		
Less: Alaska Municipal Bond Bank debt included in Municipal debt *	<u>-1,122.3</u>		
Total Deductions Due to Reporting in More than One Category	<u>-2,292.4</u>		
Total Alaska Public Debt	<u>\$ 14,257.4</u>		

NOTES

1. "Interest to Maturity" and "Total Debt Service to Maturity" includes accreted interest due at maturity of \$125.2 million
 2. Does not include defeased bonds
 3. From most recent 6/30/2016 valuation. See table 5.3 for a summary of the Retirement System's Funding Levels
- Sources: Annual reports and financial statements of AHFC, AMBBA, AIDEA, AEA, UofA, AKRR, AIAS, and directly from state agencies

II. Issuers of Alaska Public Debt

In Section I, the nine types of Alaska public debt are described. In this section, the issuers of Alaska public debt are described. Issuers include the State, State Agencies, University, and Municipalities.

At June 30, 2017, total public debt of Alaska issuers stood at \$14.26 billion, as follows:

	<u>\$ (millions)</u>
State of Alaska GO Debt	776.8
State Guaranteed Debt	49.4
State Supported Debt	237.6
State Supported Municipal Debt	893.1
State Supported Unfunded Pension Liability	6,608.0
State Moral Obligation Debt	1,325.7
State Revenue and University Debt	742.0
State Agency Debt	2,682.9
Municipalities Debt	3,234.3
Less duplicate reporting *	(2,292.4)
 Total Alaska Public Debt	 <u><u>\$ 14,257.4</u></u>

* \$1,122.3 million of Alaska Municipal Bond Bank debt was issued to purchase municipal debt and another \$65.4 million purchased University of Alaska debt, \$863.6 million of State reimbursable debt, and \$241.2 million in capital leases.

A. State of Alaska

State debt includes general obligation bonds, revenue anticipation notes, state supported debt, International Airport System revenue bonds, sport fish revenue bonds, and toll facility revenue bonds.

1. General Obligation Debt

Tables 2.1-2.5 below summarize the State's general obligation debt issued and outstanding.

TABLE 2.1
General Obligation Bonds Annual Debt Service
 \$ (thousands)

<u>payments made during year ending 6/30/17</u>			
balance outstanding at 6/30/17	principal	interest	total
\$776,785	\$ 46,450	\$ 36,067	\$ 82,517

Source: Department of Revenue bond documents

TABLE 2.2
General Obligation Bonds Authorized, Issued, and Outstanding Since 1996
 \$ (thousands)

fiscal year	authorized	authorization issued	Remaining Authorization	outstanding at 6/30
1996	-			39,101
1997	-			24,206
1998	-			10,891
1999	-			2,376
2000	-			-
2001	-			-
2002	-			-
2003	463,525	461,935	1,590	461,935
2004	-			461,935
2005	-			438,370
2006	-			414,250
2007	-			389,505
2008	-			364,065
2009*	315,050	165,000		502,845
2010	-			475,740
2011	397,200	201,110		643,770
2012	-			575,825
2013	453,499	343,151	110,348	840,249
2014	-	28,878		803,790
2015	-	1,009		744,160
2016	-	161,157		823,235
2017	-			776,785
Total	<u>\$ 1,479,224</u>	<u>\$ 1,362,240</u>		

* In FY 2012 the State Legislature appropriated \$150,050,000 to fund the FY 2009 authorization, extinguishing this remaining bond issuance authority

Source: Department of Revenue bond documents

TABLE 2.3
General Obligation Bond Sales Since 1996

date of bonds	average life in years	true interest rate	underlying ratings Moody's, Standard & Poor's, & Fitch Ratings
April 1, 2003	9.09	3.84%	Aa2/AA/AA
April 14, 2009	12.22	4.06%	Aa2/AA+/AA
December 7, 2010	16.07	2.77%	Aaa/AA+/AA+
Feb. 8, 2012	5.87	1.21%	Aaa/AAA/AA+
January 15, 2014	8.99	1%	Aaa/AAA/AAA
March 27, 2013	0.99	0.09%	MIG1/SP-1+/F1+
March 24, 2014	0.99	0.09%	MIG1/SP-1+/F1+
March 19, 2015	0.99	0.15%	MIG1/SP-1+/F1+
April 9, 2015	10.20	2.38%	Aaa/AAA/AAA
March 17, 2016	11.14	3.02%	Aa1/AA+/AAA
June 30, 2016	11.37	2.76%	Aa1/AA+/AA+

Source: Department of Revenue bond documents

TABLE 2.4
Original Issue General Obligation Bond Issues Since 1996
\$ (thousands)

date	purpose	par issued	New Funding	TIC
April 1, 2003	Various	461,935	461,935	3.84%
April 14, 2009	Transportation	165,000	165,000	4.06%
Dec. 7, 2010	Education	200,000	200,000	2.77%
Jan. 23, 2013	Education	162,480	162,480	1.44%
March 27, 2013*	Transportation	149,645	152,107	0.09%
March 24, 2014*	Transportation	170,000	28,878	0.09%
March 19, 2015*	Transportation	155,215	1,009	0.15%
April 9, 2015***	Transportation	94,425	-	2.38%
March 17, 2016**	Transportation	134,790	5,887	3.02%
June 30, 2016	Transportation	128,300	155,637	2.75%
Total		<u>\$ 1,821,790</u>		

Source: Department of Revenue bond documents

* Bond Anticipation Notes

** Refinanced Bond Anticipation Note with Long Term Bonds

***Refunded a portion of the 2009A bonds

TABLE 2.5
General Obligation Debt
Issued by Purpose Since Statehood
 \$ (thousands)

purpose	authorization issued	percentage
Transportation	\$ 1,276,620	46.2%
Education	1,021,122	36.9%
Water and Sewer	135,640	4.9%
Fish, Game, and Recreation	93,099	3.4%
Public Safety (Fire and Corrections)	86,544	3.1%
Flood Control and Harbor Development	75,790	2.7%
Health and Housing	75,534	2.7%
Total	\$ 2,764,349	100.0%

Source: Department of Revenue bond documents

2. Revenue Anticipation Notes (RAN's)

There have been no RAN's issued.

3. State Supported Debt

State Supported Debts are obligations authorized by a specific stand-alone law of the State passed for the purpose of obligating the State and payable by the State. These obligations may take the form of a Lease-purchase, a State funding commitment on a toll project, or a State funding commitment on a contract.

The currently outstanding State Supported Debt is limited to certificates of participation and lease-purchase obligations facilitated through political subdivisions. The lease payments being subject to annual appropriations precludes the obligations from being considered State debt under the Constitution and thus requiring voter approval. However, because the debt obligations are paid from the State's General Fund, these obligations are counted by the rating agencies in measuring the State's debt burden.

a. Certificates of Participation (COP's)

Certificates of participation (COP's) are obligations based on fractional interests or shares in lease payments from lessees, in this case the State, and are sold to finance construction or purchase of the leased facilities. The State issues COPs by utilizing a trustee to hold title to the property and serve as lessor. COP's are payable solely from the annual lease payments made by the State.

b. Capital Leases

The State is a lessee in three facilities that qualify as capital leases and have associated lease financing, the Atwood Building and the Linny Pacillo parking garage are financed by general obligation bonds of the Alaska Housing Finance Corporation (AHFC), and the Goose Creek Correctional Facility is financed by lease revenue bonds of the Matanuska Susitna Borough. In these financings, legislation authorized the leases to be pledged as security, and while AHFC chose to secure their issues by a general obligation pledge the State is committed to funding the leases. The State will acquire the Atwood Building, the Linny Pacillo parking garage and the Goose Creek

Correctional Facility at the term of the leases. Accordingly, the financings qualify as lease-purchase from an accounting, credit, or federal tax standpoint. In other state facility leases, the leases are not authorized by independent law, the state's credit is not pledged, and while they may be considered capital leases under accounting definitions, they do not qualify as lease-purchases, and are not included as State Supported Debt. The following Table 2.6 summarizes issued and outstanding COPs.

TABLE 2.6
State of Alaska Lease-Purchase Financing
Outstanding \$ (thousands)

<u>Certificates of Participation (COP's)</u>				
	date	amount issued	6/30/2017 principal to maturity	final maturity
ANTHC Housing Facility Project 2014	9/17/2014	30,895	25,855	6/1/2029
Total Certificates of Participation		\$ 30,895	\$ 25,855	

Source: Department of Revenue

c. State Support Funding Commitment to toll project

In April 2014 CSHB23 was approved creating the Knik Arm Crossing project in the Alaska Department of Transportation and Public Facilities. The Legislation provides for the Department of Transportation to enter into a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan and for the Department of Revenue to issue up to \$300 million of state supported subordinate lien toll bridge revenue bonds. Given the green field nature of this project there is a 100% expectation of insufficient toll revenue to cover debt service and the State's general fund having to make debt payments for at least 7 to 10 years, and longer if traffic forecasts aren't realized. While this Statute remains active, no loans or bonds have been entered into or issued at this time.

4. State Supported Unfunded Actuarial Assumed Liability (UAAL)

In the State's 2015 Comprehensive Annual Financial Report released on February 1, 2016 implemented the General Accounting Standards Board Statement 68 (GASB 68) updating the reporting and disclosure requirements related to pension liabilities. One of the requirements of GASB 68 is that if a government is committed to making payments on an actuarially assumed unfunded liability (UAAL) on behalf of another entity, the amount of liability supported by those payments must be reported as a debt of the government making the payments. Senate Bill 125 passed in 2008 commits the State to funding the difference between specific employer contributions of 22% for the Public Employees Retirement System and 12.56% for the Teachers Retirement System and the actuarially determined employer contribution rate. 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 68 the State's payment commitment 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. Projected annual payments for the contribution of the State on behalf of the employers grow from approximately 215.9 million in FY 2017 to \$808.6 million in 2039 as reflected in Table 2.7.

TABLE 2.7
State of Alaska
State Statutory Liability for Retirement System UAAL
As of 6/30/2016 Valuation

Fiscal Year	Assuming Invested Funds Earn 8%
2017	215,865.0
2018	184,328.0
2019	298,494.0
2020	345,692.0
2021	383,271.0
2022	392,381.0
2023	402,294.0
2024	413,687.0
2025	425,976.0
2026	439,853.0
2027	457,237.0
2028	473,529.0
2029	491,695.0
2030	510,284.0
2031	531,420.0
2032	553,250.0
2033	577,309.0
2034	602,877.0
2035	629,880.0
2036	658,974.0
2037	691,178.0
2038	727,256.0
2039	808,612.0
2040	-

5. Municipal Debt Eligible for State Reimbursement

Under a program enacted in 1970 (Alaska Statutes 14.11.100), the State will reimburse Alaskan municipalities for up to 60, 70, 80, 90, or 100 percent of the debt service on prequalified municipal G.O. debt issued for school construction. Access to this program and reimbursement rates have evolved based on the State’s fiscal position. In 2015, the legislature passed a moratorium on State school debt reimbursement, and the Alaska Department of Education and Early Development may not issue agreements for school bonds that voters approved after January 1, 2015, but before July 1, 2020. As of June 30, 2017, \$1,286.7 million in eligible debt was outstanding of which approximately \$863.6 million may be paid by the State through the program as shown subsequently in Table 4.8.

Funding for the program is dependent on annual legislative appropriations. The State is not obligated to appropriate the full amount of the entitled under statute nor contractually obligated to consider doing so. When amounts are insufficient, such as in fiscal year 2017, available funds are allocated pro rata among the eligible

school districts. This does not jeopardize the security of the debt, because the full faith, credit and taxing power of the issuing community is behind it. The program has been funded at the percent of entitlement shown in Table 2.8.

TABLE 2.8
Proration of State Reimbursement of
Municipal School Debt

\$ (thousands) as of 6/30/2017

Fiscal Year	Payments (1983-2017) or Appropriation (2018)	Percent of Entitlement
1999	61,991	100%
2000	64,350	100%
2001	52,099	100%
2002	54,057	100%
2003	51,973	100%
2004	60,593	100%
2005	72,025	100%
2006	81,095	100%
2007	86,924	100%
2008	91,103	100%
2009	93,319	100%
2010	95,789	100%
2011	99,594	100%
2012	100,908	100%
2013	112,300	100%
2014	109,801	100%
2015	118,026	100%
2016	116,739	100%
2017	90,677	75%*
2018	115,061	100%

Source: State of Alaska, Department of Education
& Early Development

* Last partially funded in 1991 at 94%

Rating agencies analyze reimbursement of local school debt in different ways. All analysts recognize that the State's commitment to debt service reimbursements are subject to appropriation annually. Historically the State has not always appropriated the full amount eligible for reimbursement and there have been examples across the country where reimbursement of local debt has been reduced and eliminated. Further the communities participating in the program are required to issue general obligation bonds which they are fully obligated to repay. To the extent that the state continues to appropriate analysts recognize that in general, greater debt capacity does exist at the local level as a result of the reimbursement, and that less debt capacity exists at the State level for similar reasons.

100% funding of currently outstanding bonds eligible for participation in the school debt reimbursement program for FY18 have been appropriated at the estimated \$115.1 million.

6. International Airport System Revenue Bonds

Bonds have been issued to finance improvements to the State's Alaska International Airports System (AIAS) and are secured by a first lien on gross revenues derived from AIAS operations. The Commissioner of Transportation and Public Facilities is required by bond resolution to fix and collect fees, charges, and rentals for the use of facilities of the International Airports sufficient each year to provide adjusted net revenues at least equal to 125 percent of debt service requirements during that year. Table 3.0 indicates that over the past ten fiscal years, adjusted net revenues have exceeded the amount required to pay debt service. In 2013, the State entered into a new rate and fee agreements with air carriers using the airports. The rents and fees calculated according to the agreements are airline terminal building rental rates, landing fees, international terminal docking fees, passenger loading bridge fees, and charges relating to federal inspection services. The agreements also establish procedures for review and adjustment of airline rents and fees for each fiscal year to ensure that revenues are sufficient to meet operations and maintenance expenses, debt service requirements of the revenue bonds and other funding requirements established by the resolution authorizing issuance of the revenue bonds.

The Alaska International Airport System bonds carry ratings of A1 by Moody's and A+ by Fitch Ratings.

The following Tables 2.9 and 3.0 provide additional information on the Airport Revenue Bonds.

TABLE 2.9
International Airports System
Debt Issued and Outstanding
\$ (thousands)

revenue bonds	Issuance status	date	amount issued	outstanding at 6/30/17	interest rate (%)	final maturity
Series 1999 A	AMT	1/15/1999	162,500	50	5.00	10/1/2024
Series 1999 B	Non-AMT	1/15/1999	16,675	-	4.60	10/1/2015*
Series 1999 C	Non-AMT	10/1/1999	25,000	-	6.22	10/1/2024
Series 2003 A	AMT	12/3/2003	73,025	-	5.00	10/1/2024
Series 2003 B	Non-AMT	12/3/2003	21,900	-	5.00	10/1/2028
Series 2006 A	AMT	12/3/2003	118,975	33,080	5.00	10/1/2022
Series 2006 B	Non-AMT	12/3/2003	70,760	2,765	5.00	10/1/2027
Series 2006 D(1)	Non-AMT Refinance	12/3/2003	104,860	-	5.00	10/1/2027
Series 2009 A(2)	Non-AMT	1/6/2009	50,000	50,000	variable	10/1/2030
Series 2010 A	AMT	9/29/2010	117,270	110,805	5.00	10/1/2027
Series 2010 B	Non-AMT	9/29/2010	21,685	6,545	5.00	10/1/2018
Series 2010 C(2)	Non-AMT	9/29/2010	12,565	12,565	5.00	10/1/2033
Series 2010 D(3)	Taxable	9/29/2010	19,540	19,540	6.28	10/1/2035
Series 2016A	Non-AMT	2/10/2016	73,635	73,635	5.00	10/1/2031
Series 2016B	Non-AMT	7/6/2016	82,495	82,495	5.00	10/1/2024
Series 2016C	AMT	2/10/2016	11,220	11,220	5.00	10/1/2031
Series 2016D	AMT	7/6/2016	8,510	8,510	5.00	10/1/2024
Total Bonds			<u>\$ 990,615</u>	<u>\$ 411,210</u>		

(1) The 2006 D bonds refunded portions of the 1999 B bonds shortening the final maturity

(2) The 2009 A bonds which refinanced the previously AMT 2006 C bonds, and the 2010 C bonds were issued as Non-AMT as allowed by the American Recovery and Reinvestment Act of 2009.

(3) The 2010 D bonds have a 35% interest rate subsidy as Build America Bonds. The subsidy level has been reduced by federal budget sequestration action to a current subsidy level of 32.5%

Source: State of Alaskas, International Airports System financial statements.

TABLE 3.0
International Airports System Revenue Bonds

fiscal year	net revenue (\$ millions)	debt service (\$ millions) ¹	ratio
			net revenues to debt service ²
1997	19.7	5.7	3.46
1998	20.7	5.7	3.63
1999	16.3	5.7	2.86
2000	18.9	4.8	3.94
2001	37.4	15.2	2.46
2002	30.5	15.2	2.01
2003	33.9	17.6	1.93
2004	33.0	22.1	1.49
2005	48.7	31.1	1.57
2006	43.7	32.4	1.35
2007	58.4	45.4	1.29
2008	62.7	49.1	1.28
2009	38.0	17.9	2.12
2010	52.6	35.4	1.48
2009	38.0	24.9	1.52
2010	51.3	24.6	2.09
2011	44.5	31.7	1.40
2012	41.6	31.2	1.33
2013	41.6	31.2	1.33
2014	51.6	41.2	1.25
2015	59.9	40.2	1.49
2016	60.2	40.4	1.49
2017	65.9	40.4	1.63

1 Required coverage of 1.3 until 1999.

2 Since 1999 coverage of 1.25 is required.

Excludes debt service bonds which are defeased

Source: State of Alaskas, International Airports System financial statements.

7. Toll Facilities' Revenue Bonds

Legislation enacted in 1984 authorizes the issuance of State revenue bonds for toll bridges, tunnels, highways, roads, crossings, and causeways. Under AS 37.15.610, the maximum amount of toll facilities bonds that may be issued is \$500 million. No bonds have been issued. Legislative approval of bonds to be issued and an appropriation of bond proceeds are required before any project proceeds.

B. State Agencies (Alphabetically)

1. Alaska Aerospace Development Corporation

The Alaska Aerospace Development Corporation was created in 1991 as a public corporation of the State. It is located for administrative purposes within the Department of Commerce and Economic Development and affiliated with the University of Alaska but with a separate and independent legal existence. The purpose of the Corporation is to allow the State to take a lead role in the exploration and development of space, to enhance

human and economic development, to provide a unified direction for space-related economic growth, education, tourism, research development, and improve the entrepreneurial atmosphere in the State.

The Corporation may issue moral obligation bonds and otherwise incur indebtedness in order to pay the cost of a project or projects to construct or improve launch facilities or other space and aerospace projects or in order to provide money for the Corporation's purposes. Original bond issues in excess of \$1,000,000 each calendar year must have legislative approval. In addition, legislative approval is required if the annual debt service on all outstanding bonds issued and bonds proposed to be issued exceeds \$1,000,000 in a fiscal year. The Corporation has not issued any bonds.

2. Alaska Energy Authority

The Alaska Energy Authority (AEA) was created by the Alaska State Legislature in 1976 to finance, construct, and operate power production and transmission facilities. In May of 1993, the Alaska Legislature passed a bill which set in motion a fundamental change in the State's role in energy programs and oversight of State owned power projects.

In May of 1993, Governor Hickel signed legislation that substantially revised the duties and responsibilities of the independent corporate entity that was AEA and created a new Division of Energy within the Department of Community and Regional Affairs. Effective August 18, 1993, this new division took on the Authority's rural programs and planning as well as the responsibility and management for a number of small electrical and waste heat recovery systems located throughout Alaska. The Board of the Alaska Industrial Development and Export Authority (AIDEA) also became the Board of AEA and AEA's ability to have employees was eliminated. AEA continued to exist as a public corporation responsible for, among other things, its outstanding bonds, but its ability to construct and acquire projects was eliminated.

From 1993 through mid-1999 AEA existed for the purpose of owning and operating power production and transmission facilities with original costs in excess of \$1 billion. AEA's assets currently include the Bradley Lake hydroelectric project and the Alaska Intertie. The Four Dam Pool hydroelectric facilities (Swan Lake, Tyee Lake, Terror Lake and Solomon Gulch) were sold in January 2002. The Larsen Bay hydroelectric project was transferred to the City of Larsen Bay in September 2010.

Pursuant to legislation effective July 1, 1999 rural energy programs previously administered by the former Department of Community and Regional Affairs, Division of Energy, were transferred to AEA for administration as part of a larger reorganization of state agencies. Five general energy programs, including the rural energy programs originally part of AEA prior to the 1993 reorganization, comprising more than twenty smaller programs were moved to AEA. Effective July 14, 2011, the Legislature empowered AEA to acquire, construct, own and operate a hydroelectric project located on the Susitna River. AEA is currently in the process of obtaining a FERC license for this project. Pursuant to Administrative Order 271, AEA used existing appropriations to incrementally advance the licensing process through the updated FERC Study Plan Determination. The project was left in abeyance and the State's investment was preserved.

a. Debt Issued and Outstanding

Legislation that became effective in August, 1981 established an Energy Program for Alaska administered by AEA. Under the Energy Program, AEA was able to acquire or construct power projects with money appropriated by the Legislature to the Power Development Fund. Debt issued under the Energy Program was secured by power sales contracts which provided that each project constructed under the program bore charges to service the debt based on its pro-rata share of the construction costs of all projects of the program.

In 1982, AEA assumed \$44,858,858 of 5% mortgage notes payable to the Rural Electrification Association (REA) in connection with the Solomon Gulch hydroelectric project, the fourth dam in the Four Dam Pool. At the same

time that AEA assumed the REA debt, it deposited an amount with a trustee sufficient to defease the debt. At June 30, 2017, there was no unpaid principal balance on the note and the trust assets were depleted.

AEA issued short-term debt in the amount of \$200 million to finance construction of three hydroelectric projects known as the Four Dam Pool Hydroelectric Projects under the Energy Program for Alaska. In 1984, a State appropriation was enacted to the Department of Commerce and Economic Development for a loan to AEA to refinance the short-term debt. A loan agreement eventually totaling \$192,847,000 was executed on September 27, 1984 to meet the maturities of the short-term debt.

Legislation enacted into law in 1985 exempted Four Dam Pool wholesale power rates from provisions of the Energy Program for Alaska that tie rates to total debt issued under the program. As a result, power sales agreements effective October 28, 1985 were signed that provided the means for AEA to repay the State loans.

A new loan agreement for \$187,480,249 effective concurrently with the power sales agreements was executed providing for repayment of State loans at approximately 6 percent interest with a 45-year term. On September 22, 1986, the State lent AEA an additional \$1 million under the loan agreement to reimburse local communities for their costs in negotiating the power sales agreements. The loan was secured by the hydroelectric facilities of the Pool and any AEA revenues from power sales from the facilities.

In January 2002, pursuant to legislation enacted in 2000 and 2001, the Four Dam Pool projects were sold to The Four Dam Pool Power Agency, a joint action agency. At the time of sale the Agency's membership was composed solely of the utilities that purchase power from the Four Dam Pool projects. Under the terms of the Sale, the Agency was assigned all of AEA's interest and assumed all of AEA's obligations in the Four Dam Pool projects and the Power Sales agreement. As part of the transaction, the remaining balance of debt owed to the State was forgiven.

On November 20, 1985, \$267,500,000 of AEA bonds were issued to provide interim financing for a fifth project under the Energy Program for Alaska, the Bradley Lake hydroelectric project. The bonds were general obligations of the Authority and were secured by bank letters of credit and a capital reserve fund. The bonds were retired in fiscal year 1991.

Power Revenue Bonds, First and Second Series, were issued in September, 1989 and August, 1990, respectively. They were used to refund AEA's Variable Rate Demand Bonds for the long term financing of the construction costs of the Bradley Lake Hydroelectric Project.

On April 6, 1999 AEA issued \$59,485,000 of Power Revenue Refunding Bonds, Third Series, for the purpose of refunding \$59,110,000 of the First Series Bonds. The refunded First Series Bonds were called on July 1, 1999.

On April 13, 1999, AEA issued \$30,640,000 of Power Revenue Refunding Bonds, Fifth Series, for the purpose of refunding \$28,910,000 of the First Series Bonds. The refunded First Series Bonds were called on July 1, 1999.

On April 4, 2000, AEA issued \$47,710,000 of Power Revenue Refunding Bonds, Fourth Series, for the purpose of refunding \$46,235,000 of the Second Series Bonds. The refunded Second Series Bonds were called on July 1, 2000.

In July 2010 AEA issued \$28,800,000 of Power Revenue Refunding Bonds, Sixth Series, to refund \$30,640,000 aggregate outstanding principal amount of the AEA Power Revenue Bonds, Fifth Series, and to pay costs of issuing the bonds. The refunded bonds were called on August 2, 2010.

In December 2017 AEA issued \$47,000,000 of taxable loans with National Cooperative Services Corporation for the purpose of financing costs and expenses of planning, designing, acquiring, and construction of the West Fork Upper Battle Creek Diversion Project. The project is optional project work under the Bradley Lake Power Revenue Bond Resolution and the loans are parity debt. AEA received a \$40,000,000 allocation of New Clean Renewable Energy Bond (NCREB) volume cap from the Internal Revenue Service for the project. AEA also

used \$1,239,000 of Qualified Energy Conservation Bond (QECCB) volume cap received from the State for the financing. The federal subsidies will be used to offset the interest expense relating to the financing. The financing consists of three loans as follows:

Alaska Energy Authority Power Revenue Bond, Seventh Series (NCREB)-\$40,000,000
 Alaska Energy Authority Power Revenue Bond, Eight Series (QECCB)-\$1,239,000
 Alaska Energy Authority Power Revenue Bond, Ninth Series (Drawdown Bond)-\$5,761,000

The Seventh and Eighth Series bonds were fully drawn on the date of issuance and the Ninth Series will be drawn down as needed. The loans are not included in the tables included in this report because they were issued after June 30, 2017.

The bonds related to the Bradley Lake project are general obligations of AEA and have a capital reserve fund backed by the moral obligation of the State of Alaska. The project and all of the revenues derived by AEA from the operation of the Bradley Lake Project and all moneys, securities and funds (except the excess earnings fund), including a capital reserve fund, held or set aside are pledged and assigned to secure the payment of principal, redemption premium, if any, and interest on the Bradley Lake bonds. AEA has covenanted to notify the State Legislature of any failure to maintain the capital reserve fund at its required level. The first through fifth series bonds are further secured by bond insurance. AEA collects from each power purchaser a percentage share of annual project costs. A portion of the outstanding Bradley Lake bonds mature annually each July 1 through the year 2021 with interest rates ranging from 3.0% to 6.25%.

In 1991, a power sales agreement was signed between AEA and the City of Larsen Bay. Bonds totaling \$855,000 were issued to provide funds to complete the financing and construction of an earth filled dam to generate power for Larsen Bay. The bonds were secured by a letter of credit. In June 2002, all remaining outstanding bonds were defeased and the bonds were called on October 1, 2002.

In May 1992, AEA issued \$56,890,000 of tax-exempt bonds that allowed the City and Borough of Sitka (Sitka) to refinance its 1979 municipal bonds, resulting in significant debt service savings to Sitka. In November 1997, AEA issued \$22,080,000 of tax-exempt bonds to advance refund and defease \$20,145,000 of the Series 1992 bonds (collectively with the Series 1992 bonds, the Sitka Bonds). In December 2010, the Alaska Municipal Bond Bank issued bonds, the proceeds of which were used to refund and defease the Sitka Bonds. The Series 1992 Bonds were defeased. None of the defeased bonds remain outstanding. The Series 1997 bonds were called and redeemed in January 2011.

At June 30, 2017, AEA's outstanding debt was \$53.5 million, as shown below in Table 3.1.

TABLE 3.1
Alaska Energy Authority
Debt Issued and Outstanding
 \$ (thousands)

	date	amount issued	outstanding at 6/30/17	final maturity
Variable Rate Demand Note (Bradley Lake Hydroelectric Project)	9/7/1989	111,755	100	7/1/2021
Power Revenue Bonds, Third Series (Bradley Lake Hydroelectric Project)	4/6/1999	59,485	5,730	7/1/2017
Power Revenue Bonds, Fourth Series (Bradley Lake Hydroelectric Project)	4/4/2000	47,710	19,635	7/1/2021
Power Revenue Bonds, Sixth Series (Bradley Lake Hydroelectric Project)	7/1/2011	28,800	28,030	7/1/2021
Total		<u>\$ 247,750</u>	<u>\$ 53,495</u>	

Source: Alaska Energy Authority financial statements.

3. Alaska Housing Finance Corporation

The Alaska Housing Finance Corporation (AHFC) is a public corporation administratively located within the Department of Revenue but with a separate and independent legal existence. AHFC was chartered in 1971 to provide financing for low and moderate income housing and housing located in remote, underdeveloped, or blighted areas of the State. Effective July 1, 1992, the Alaska State Housing Authority (ASHA) was abolished and the duties assigned to it were transferred to the Alaska Housing Finance Corporation.

Since 1980, when AHFC's powers were expanded by removing borrower income restrictions, the Corporation has emerged as a major supplier of mortgage funds in the State, in addition to being the largest issuer of debt (taxable and tax-exempt). Table 3.0 indicates the amounts of AHFC borrowing since 1973.

The bonds issued by AHFC are secured by the general obligation pledge of the Corporation and mortgages purchased with bond proceeds or, in the case of collateralized debt, by mortgage-backed securities as more fully explained below. AHFC subsidiary issued debt is not secured by the general obligation of the corporation but rather by pledged receipts paid to the state under the Master Settlement Agreement.

Additional security features on various AHFC debt obligations may include federal or private mortgage insurance on individual mortgage loans, mortgage pool insurance, bank loan facility or letter of credit arrangements in the event mortgage prepayments are less than anticipated by the bond redemption schedule, bond insurance, and the full faith and credit guarantee of the State on veterans' mortgage bonds.

TABLE 3.2
Alaska Housing Finance Corporation
Debt Issued by Fiscal Year Ending June 30
\$ (Thousands)

Fiscal Year	Debt Issued
1991-2000	4,618,965
2001	409,670
2002	884,150
2003	382,710
2004	287,200
2005	412,730
2006	333,675
2007	1,192,873
2008	234,290
2009	287,640
2010	354,840
2011	248,345
2012	229,055
2013	482,015
2014 ⁽¹⁾	129,400
2015 ⁽¹⁾	446,187
2016 ⁽¹⁾	59,620
2017 ⁽¹⁾	153,920
Total	\$ 11,147,285

Source: Alaska Housing Finance Corporation

(1) Includes AHFC sponsored conduit debt and subsidiary debt, but not public housing (ASHA)

a. Federal Tax-Exemption and Ceilings

The Federal Tax Reform Act of 1984 established a ceiling of \$302.5 million, in the case of Alaska, for annual issuance of qualified veterans' mortgage bonds on a tax-exempt basis. The Act also makes more restrictive the definition of those who qualify as veterans.

Since 1980, when the Mortgage Subsidy Bond Tax Act was enacted, Alaska also had been subject to a \$200 million annual ceiling on tax-exemption for qualified mortgage revenue bonds (AHFC's various mortgage revenue bonds, also known as its first-time home-buyer bonds, along with multifamily and conduit bonds). AHFC's allocation and usage of PAB is presented in Table 5.4.

b. Bond Authorization

AS 18.56.110(g) which took effect in FY 1982 placed a statutory ceiling on AHFC annual bond issuance for the first time. The annual issuance amount currently authorized is \$1,500 million.

c. Security for Debt

Included in the above amounts are State Guaranteed veterans' bonds which were authorized by law and the voters in the following amounts (in millions):

<u>Authorization Calendar Year</u>	<u>Authorized</u>	<u>Issued as of June 30, 2017</u>
1982	400.0	400.0
1983	500.0	500.0
1984	700.0	700.0
1986	600.0	600.0
2002	500.0	404.9
2010	600.0	404.9
Total:	<u>3,300.0</u>	<u>2,655.4</u>

As of June 30, 2017, \$644.6 million of state guaranteed bonds remain unissued.

d. Debt Issued and Outstanding

Table 3.3 summarizes AHFC debt issued and outstanding by type of debt.

TABLE 3.3
ALASKA HOUSING FINANCE CORPORATION
Debt Issued and Outstanding by Type of Debt
 \$ (Thousands)

	Credit Rating (1)	Debt Issued In FY 2017	Total Debt Issued	Debt Outstanding (2) at 6/30/17
Home Mortgage Revenue Bonds & Mortgage Revenue Bonds	Aaa/AAA/AAA (3)	-	2,547,215	\$ 760,180
Collateralized Bonds (Veterans Mortgage Program)	Aaa/AAA (4)	50,000	1,950,385	49,400
General Mortgage Revenue Bonds	AA+/AA+ (5)	100,000	295,890	212,730
Governmental Purpose Bonds	Aaa/AA+/AAA (6)	-	403,170	117,135
State Capital Project Bonds	AA+/AA+ (7)	-	1,298,460	931,520
Northern Tobacco Securitization Corporation, AHFC subsidiary				
Tobacco Settlement Asset-Backed Bonds, Series 2006 A-C (8)		-	411,988	330,283
Total		\$ 150,000	\$ 6,907,108	\$ 2,401,248

NOTES:

- 1 Ratings from Moody's, Standard & Poor's, & Fitch
- 2 Does not include defeased bonds
- 3 Ratings for Collateralized Home Mortgage Revenue Bonds sold from 2002-2009 are Aa2/AA+/AA+
- 4 Not rated by Fitch
- 5 Not rated by Moody's
- 6 Ratings for Governmental Purpose Bonds sold in 1997 are Aa2/AA+/AA+
- 7 Not rated by Moody's except for State Capital Project Bonds sold from 2002 - 2011, which are rated Aa2/AA+/AA+
- 8 Not rated by Standard & Poor's; not rated by Fitch; Moody's ratings on the 2006A Senior Current Interest Bonds are Ba2 for the June 1, 2023, term bonds, B3 for the June 1, 2032 and 2046, term bonds, and Not Rated for the 2006B and 2006C Capital Appreciation Bonds.

	Credit rating as of 6/30/2017	Debt Issued In FY 2017	Total debt issued	Debt Outstanding at 6/30/17
Short-term debt outstanding				
Commercial Paper	P-1/A-1+/F-1+	N/A	N/A	82,600
Total				\$ 82,600

e. Collateralized and Insured Bonds

Collateralized bonds, which incorporate the guarantees of the Federal Home Loan Mortgage Corporation (FHLMC), the Federal National Mortgage Association (FNMA), and the Government National Mortgage Association (GNMA), should relieve concern about potential contingent liability to the State for that portion of AHFC indebtedness represented by such bonds. This is particularly reassuring in the case of State Guaranteed bonds (veterans' mortgage program) for which the full faith and credit of the State has been pledged.

The underlying conventional mortgages of AHFC's collateralized bonds issued during part or prior to July 1993 were exchanged for mortgage-backed certificates through FHLMC, FNMA or GNMA. The certificates, and the mortgage payments thereon, are pledged to the bond trustee as security for the bonds. FHLMC, FNMA, and GNMA guarantee that the certificate holder, in this case the bond trustee and thus the bondholders, will receive the principal and interest when due. As of September 1, 2004 all FNMA mortgage-backed certificates were redeemed and replaced by the underlying pooled mortgage loans.

Collateralized bonds lower the cost of funds to AHFC. Collateralized bonds issued after July 1993 are structured to achieve "Triple A" ratings on the basis of the pledged whole loan collateral. Table 3.2 lists collateralized obligations.

During 1985, FNMA decided that it would enter into additional agreements for purchase of AHFC mortgages only if FNMA would have recourse against AHFC for foreclosed properties. With recourse, AHFC's obligation is to buy back the mortgage loans on the foreclosed properties.

Even with recourse to AHFC, the FNMA guarantee still provides an extra layer of insulation for the State from any obligation on AHFC collateralized debt. In the case of collateralized veterans' bonds, the State's guarantee would not be called upon in the event of default on the bonds prior to a default by FNMA on its guarantee. With respect to any other type of collateralized bond, the State has no obligation to step in should AHFC's assets be insufficient to satisfy any recourse. As of September 1, 2004 all FNMA mortgage-backed certificates were redeemed and replaced by the underlying pooled mortgage loans.

AHFC has always been responsible for foreclosure losses on any mortgages supporting GNMA certificates. However, such losses are minimized by the fact that GNMA only guarantees certificates representing pools of mortgages which are FHA insured or VA guaranteed. With the exception of certain mortgage loans, FHLMC does not have recourse against AHFC for losses on foreclosure.

Some bonds of AHFC are subject to bond guaranty insurance. The bond guarantor assures the holder of the debt that interest and principal will be repaid. The effect of the bond guarantee is to provide security in addition to specifically pledged collateral and the pledge of AHFC unrestricted resources.

TABLE 3.4
Alaska Housing Finance Corporation
Collateralized Debt Obligations
\$ (Thousands)

Issue	Tax Status	Debt Issued	Date of Bonds	Guarantor	6/30/2017 Debt Outstanding
Collateralized Bonds (Veterans Mortgage Program)					
2016 First and Second Series	Exempt	50,000	7/27/2016	* State of Alaska	49,400
Total		<u>50,000</u>			<u>49,400</u>
Home Mortgage Revenue Bonds & Mortgage Revenue Bonds					
2002 Series A	Exempt	170,000	5/16/2002	*	53,830
2007 Series A	Exempt	75,000	5/31/2007	*	74,235
2007 Series B	Exempt	75,000	5/31/2007	*	74,235
2007 Series D	Exempt	89,370	5/31/2007	*	88,445
2009 Series A (HMRB)	Exempt	80,880	5/28/2009	*	80,880
2009 Series B	Exempt	80,880	5/28/2009	*	80,880
2009 Series D	Exempt	80,870	8/26/2009	*	80,870
2009 Series A-1	Exempt	64,350	9/30/2010	*	44,430
2010 Series A	Exempt	43,130	9/30/2010	*	28,070
2010 Series B	Exempt	35,680	9/30/2010	*	30,665
2009 Series A-2	Exempt	128,750	11/22/2011		79,520
2011 Series A	Taxable	28,945	11/22/2011		380
2011 Series B	Exempt	71,360	11/22/2011		43,740
Total		<u>1,024,215</u>			<u>760,180</u>
General Mortgage Revenue Bonds II					
Series 2012 A	Exempt	145,890	7/11/2012	*	114,255
Series 2016 A	Exempt	100,000	8/24/2016	*	98,475
Total		<u>245,890</u>			<u>212,730</u>
Governmental Purpose Bonds					
Series 1997	Exempt	33,000	12/3/1997	*	14,600
Series 2001 A,B	Exempt	170,170	8/2/2001	*	102,535
Total		<u>203,170</u>			<u>117,135</u>
Total AHFC Collateralized Debt		<u>\$ 1,523,275</u>			<u>\$ 1,139,445</u>

TABLE 3.5
State Obligations on
Alaska Housing Finance Corporation Debt
\$ (thousands)

State General Obligation Guarantee	outstanding at 6/30/17
Collateralized Bonds Aaa/AAA (1)	\$ 49,400
Total State Obligations On AHFC Debt	<u>49,400</u>
(1) Not rated by Fitch	

f. Mortgage Reorigination

Mortgage reorigination included in a bond indenture permits AHFC to use payments and prepayments on mortgage loans securing the bond issue to purchase new mortgage loans only to the extent the payments and prepayments are in excess of debt service requirements. The recycling of mortgage loans is also limited by the 10-year rule. Ordinarily, these excess revenues would be used to retire bonds. Reorigination gives AHFC the option of making new loans or retiring bonds.

In conjunction with this provision, the maturity of the bond issue is extended beyond the maturity of the mortgage loans. This allows additional mortgages to be added to the bond issue, which then extends the average mortgage maturities to more closely coincide with bond maturities.

The benefit of mortgage reorigination is that it provides continued access to a pool of funds at a known tax-exempt interest rate. It serves as a hedge against a rise in interest rates or a loss of federal tax-exemption on future bond issues.

In the case of Veterans' Mortgage Program Bonds, which are guaranteed by the State of Alaska, the bond indentures require AHFC to suspend reorigination for a calendar year if it receives written notification from the State Bond Committee prior to January 1 that reorigination would impair the ability of the Committee to sell State general obligation bonds on advantageous terms or risk a rating reduction on such bonds.

-The Public Housing Division (formerly Alaska State Housing Authority (ASHA))

In 1992, under Ch. 4, FSSLA 1992, effective July 1, 1992, the Alaska State Housing Authority was abolished and the duties assigned were transferred to the Alaska Housing Finance Corporation. The Alaska State Housing Authority (ASHA), a public corporation of the State, was created in 1949 and authorized to: construct, operate, and manage low and moderate income housing projects; finance rental housing projects; engage in urban renewal programs; and construct and acquire public buildings for lease to the State.

a. Security for Bonds

ASHA had issued bonds which were secured by revenues from the projects financed, by ASHA's general assets, or by pledges of federal grants typically from the U.S. Department of Housing and Urban Development (HUD) for rent supplements on housing projects. The bonds are not general obligations of the State. ASHA was not authorized to issue bonds backed by a capital reserve fund which had the State's moral obligation attached.

b. Bond Authorization

ASHA financing of public building projects for lease to the State required approval by law pursuant to AS 18.55.100(d) which became effective September 4, 1986. Approval by law was not required for other types of ASHA projects or for bond issuance per se.

c. Housing Debt

ASHA had issued debt to finance low and moderate income rental housing. This debt was not considered to be State Supported Debt because the revenue pledged to retire the bonds did not rely on State appropriations.

ASHA's primary responsibility was to provide low income housing to eligible residents throughout the state. ASHA owned and operated subsidized housing programs sponsored by HUD such as Conventional Low Rent, Section 8 New Construction, Turnkey III Remote Housing, Mutual Help, Section 8 Additional Assistance, Section 8 Vouchers, and Section 8 Existing Housing.

d. Collateralized Bond

ASHA had issued FHA Insured Mortgage Revenue Bonds to provide loans to private developers for construction of multi-family rental housing. These were tax-exempt Qualified Private Activity Bonds by virtue of the projects reserving certain percentages of their units for low income tenants.

The FHA Insured Mortgage Revenue Bonds were not general obligations of ASHA but were backed solely by the mortgage payments from the borrower and FHA insurance in the event of the borrower's default. FHA absorbed losses on foreclosure.

The developers of the projects, financed by all but the 1982 and 1983 Series A Bonds, defaulted on their obligations under the mortgage loans by failing to fully pay principal and interest on the due date. The bond trustee applied for and received FHA insurance benefits. The insurance proceeds and bond reserves have been used to defease the bonds secured by the defaulted loans.

The following Table 3.6 summarizes all AHFC outstanding debt.

Bond Program	Date Delivered	Amount Issued	Outstanding at 6/30/17	TIC (%)	Final
Home Mortgage Bonds					
2002 Series A Home Mortgage Revenue Bonds	5/16/2002	170,000	53,830	4.553	2036
2007 Series A Home Mortgage Revenue Bonds	5/31/2007	75,000	74,235	4.048	2041
2007 Series B Home Mortgage Revenue Bonds	5/31/2007	75,000	74,235	4.210	2041
2007 Series D Home Mortgage Revenue Bonds	5/31/2007	89,370	88,445	4.090	2041
2009 Series A Home Mortgage Revenue Bonds	5/28/2009	80,880	80,880	4.375	2040
2009 Series B Home Mortgage Revenue Bonds	5/28/2009	80,880	80,880	4.375	2040
2009 Series D Home Mortgage Revenue Bonds	8/26/2009	80,870	80,870	4.893	2040
2009 Series A-1 Mortgage Revenue Bonds	9/30/2011	64,350	44,430	3.362	2041
2010 Series A Mortgage Revenue Bonds	9/30/2011	43,130	28,070	3.362	2027
2010 Series B Mortgage Revenue Bonds	9/30/2011	35,680	30,665	3.362	2040
2009 Series A-2 Mortgage Revenue Bonds	11/22/2011	128,750	79,520	2.532	2041
2011 Series A Mortgage Revenue Bonds	11/22/2011	28,945	380	N/A	2026
2011 Series B Mortgage Revenue Bonds	11/22/2011	71,360	43,740	2.532	2026
Total		1,024,215	760,180		
State Guaranteed Bonds					
2016 First and Second Series, Collateralized	7/27/2016	50,000	49,400	2.743	2046
Total		50,000	49,400		
General Mortgage Revenue Bonds II					
2012 Series A	7/11/2012	145,890	114,255	3.653	2040
2016 Series A	8/24/2016	100,000	98,475	2.606	2046
Total		245,890	212,730		
Government Purpose Bonds					
1997 Series A	12/3/1997	33,000	14,600	N/A	2027
2001 Series A	8/2/2001	76,580	46,145	N/A	2030
2001 Series B	8/2/2001	93,590	56,390	N/A	2030
Total		203,170	117,135		

TABLE 3.6 (continued)
Alaska Housing Finance Corporation
Debt Outstanding
\$ (Thousands)

Bond Program	Date Delivered	Amount Issued	Outstanding at 6/30/17		
State Capital Project Bonds					
2002 Series C	12/5/2002	60,250	34,910	N/A	2022
2007 Series A (1)	10/3/2007	42,415	14,670	4.139	2027
2007 Series B (1)	10/3/2007	53,110	13,805	4.139	2029
2011 Series A	2/16/2011	105,185	72,365	4.333	2027
Total		260,960	135,750		
State Capital Project Bonds II					
2012 Series A	10/17/2012	99,360	78,980	2.642	2032
2013 Series A	5/30/2013	86,765	83,710	2.553	2032
2013 Series B	5/2/2013	50,000	50,000	N/A	2043
2014 Series A	1/15/2014	95,115	89,175	3.448	2033
2014 Series B	6/12/2014	29,285	26,835	2.682	2029
2014 Series C	8/27/2014	140,000	140,000	N/A	2029
2014 Series D	11/6/2014	78,105	77,945	2.581	2029
2015 Series A	3/19/2015	111,535	105,060	2.324	2030
2015 Series B	6/30/2015	93,365	91,875	3.294	2036
2015 Series C	12/16/2015	55,620	52,190	2.682	2035
		839,150	795,770		
Total Long Term Debt		2,623,385	2,070,965		
Short-term Debt Outstanding					
Commercial Paper	Various	N/A	82,600	NA	VAR
Total Short-term Debt		\$ -	\$ 82,600		

Notes:

1) Does not include Defeased Bonds

4. Alaska Industrial Development and Export Authority

The Alaska Industrial Development and Export Authority (AIDEA or Authority) is a public corporation administratively located in the Department of Commerce, Community and Economic Development but with separate and independent legal existence. Created in 1967, AIDEA promotes economic development within the State by:

- purchasing loan participations for industrial and commercial projects;
- owning, either directly, by owning shares of a corporation, or as a member of an LLC and operating certain types of infrastructure facilities; and
- guaranteeing business loans and loans for export transactions.

Until 1990, AIDEA was able to and did issue bonds secured by a capital reserve fund with a State moral obligation. AIDEA currently has the ability to issue bonds with a State moral obligation on a capital reserve fund only if the bonds are issued to finance a power transmission intertie and are legislatively approved. AIDEA may issue bonds with reserve funds, but they will not have the moral obligation of the State of Alaska. AIDEA has no general obligation bonds with a capital reserve fund requirement outstanding. The Authority has covenanted that it will not incur any General Obligation indebtedness that will cause future estimated net income (as defined

in the Amended and Restated Revolving Fund Bond Resolution) to be less than 150 percent of the General Obligation Annual Debt Service requirements in each year and to take no action to cause its Unrestricted Surplus to be less than the lesser of \$200 million or the amount of General Obligation Indebtedness outstanding and in no event less than \$100 million. The full faith and credit of the Authority's Revolving Fund secures the bonds currently outstanding under the resolution.

During 1988, reductions in the cash flow from AIDEA's loan portfolio reduced projected debt service coverage below 150 percent. The reduced cash flow stemmed from loan delinquencies, modifications, and foreclosures associated with Alaska's economic recession. In response to the declining debt service coverage, AIDEA defeased \$78,295,000 of its Economic Development Bonds and Consolidated Bonds by deposit of \$91,269,000 of U.S. Treasury securities purchased with AIDEA's general assets into an irrevocable trust. None of the defeased bonds remain outstanding.

During 1994, AIDEA defeased \$23,840,000 of its tax-exempt Umbrella Bonds and its Taxable Umbrella Bonds, in order to improve its projected debt service coverage. None of the bonds chosen for the defeasance would have been eligible for refunding. None of the defeased bonds remain outstanding. AIDEA's underlying ratings on its bonds are Aa3 by Moody's (Moody's upgraded AIDEA's rating in December 2006 from A2 and affirmed the Aa3 rating in June 2013) and AA+ by Standard & Poor's (S&P upgraded AIDEA's rating in August 2012 from AA-). All Revolving Fund Bonds are secured by the general assets and future revenues of the Authority.

AIDEA currently offers nine programs as follows:

i. Tax-Exempt Loan Participation Program

The Tax-Exempt Loan Participation Program can provide up to \$250 million for financing economic development projects. This program in the past was previously referred to as the "tax-exempt umbrella bond program" because many small projects financed under this program were grouped together when AIDEA issued bonds under an "umbrella". The bonds are tax-exempt by virtue of provisions in the federal tax code.

Proceeds of the bonds or Authority funds are generally used to purchase up to 90 percent of an eligible loan from financial institutions. The Tax-Exempt Loan Participation Program combines the previous Economic Development and Consolidated Bond Programs that were separate and which financed participations under and over \$1,000,000, respectively. In December 2010, \$14,470,000 of Tax-Exempt Bonds were issued to fund a loan participation purchase. At June 30, 2017 \$11 million were outstanding.

ii. Taxable Loan Participation Program

In response to escalating federal restrictions on tax-exempt bonds, AIDEA implemented a taxable loan participation program. The program uses bonds or AIDEA funds to purchase loan participations. The provisions of the program are the same as for the Tax-Exempt Loan Participation Program except for the deletion of restrictions related to federal tax-exemption. This program was previously called the Taxable Umbrella Bond Program. The only bonds that have been issued under this program were issued in 1987 in the amount of \$14,540,000; the remaining amounts outstanding were defeased in 1994. None of the defeased bonds remain outstanding.

iii. Conduit Revenue Bond Program

Under the Conduit Revenue Bond program, AIDEA acts as a conduit in the sale and issuance of bonds; the bonds may be tax-exempt or taxable. The bonds are generally secured by the project, the private borrower and/or the project's revenue stream.

AIDEA does not participate financially in the Conduit Revenue Bond projects nor are the Authority's assets or credit pledged as security for the bonds. Bonds issued under this program are not obligations of the Authority or

the State. They are obligations of the private borrower or project only. Furthermore, the State's moral obligation does not stand behind these bonds.

Historically, the program was utilized primarily by financial institutions in conjunction with loans to private borrowers; those bonds generally are sold by private placement to the financial institution originating the loan rather than by public sale. The original demand for the program arose partially from lenders wanting the tax exemption on interest income; the Tax Reform Act of 1986 eliminated the deductibility of bank interest expense allocable to holding of tax-exempt obligations and greatly reduced demand for the program from financial institutions. Recently, the program is being used to provide funds for IRC 501(c)(3) financings.

Most bonds under this program were tax-exempt by virtue of the small issue exemption and, more recently, are for qualified 501(c)(3) projects. A few have been exempt facility bonds. The exempt facility bonds and 501(c)(3) bonds are generally sold via public sale.

From inception to June 30, 2017, AIDEA has issued Revenue Bonds for 318 projects totaling \$1.38 billion (not including bonds issued to refund other bonds). The Authority has legislative authorization to issue revenue bonds to finance power transmission interties to be owned by electric utilities in a collective amount not to exceed \$185.0 million and to finance the infrastructure and construction costs of the Sweetheart Lake hydroelectric project in an amount not to exceed \$120.0 million. Bonding authorization for the Sweetheart Lake hydroelectric project will sunset June 30, 2020.

iv. Development Finance Program

Alaska statutes authorize AIDEA to finance development projects, regardless of the intent to own and operate them. The types of facilities the Authority may finance include those for use in manufacturing, natural resource extraction, transportation of products or materials, and infrastructure for tourism destination facilities.

Bonds for projects may be secured by the project, project revenues, specific assets of AIDEA's economic development account, or AIDEA's general assets. They can be general obligations or revenue bonds of the Authority.

Legislation enacted in 1985 authorized this program and authorized a bond sale of up to \$175.0 million to provide financing for the DeLong Mountain Transportation Project. The Project consists of a road and port owned and operated by AIDEA to facilitate the development of the Red Dog and other mines in Northwest Alaska. In 1987, \$103.3 million of such bonds were issued, the remaining amount outstanding was redeemed in 1997.

The Legislature has enacted legislation authorizing the Authority to finance, design and construct or reconstruct additional Economic Development projects:

- (a) The Legislature authorized the issuance of up to \$25.0 million of bonds for the reconstruction of a public use ore terminal in Skagway, Alaska. A \$25.0 million bond issue was delivered in December 1990. All remaining outstanding bonds were called in April 2002.
- (b) The Legislature authorized the issuance of up to \$10.0 million of bonds for improvements to the City of Unalaska Marine Center. The project was completed in late 1991. Bonds totaling \$7.0 million were issued in December 1991 to finance the project. In May 2000 the City of Unalaska paid all remaining financial obligations related to the project, including providing for the retirement of all outstanding bonds and, in accordance with the terms of the agreement, the project was transferred to the City.
- (c) The Legislature authorized the issuance of up to \$85.0 million of bonds to finance the acquisition, design and construction of aircraft maintenance and air cargo/air transport support facilities located at the Anchorage International Airport. Construction of an aircraft maintenance facility began in August of 1992 and was completed in 1995. Bonds were issued in September, 1992 in the amount of \$28.0 million.

In June 2002, the Authority issued \$20,475,000 of refunding bonds for the purposes of refunding and defeasing the remaining outstanding bonds. The refunded bonds were called in July 2002. All remaining outstanding bonds were called in April 2012. The remaining bonding authorization was repealed by the legislature in 2015.

- (d) The 1990 Legislature authorized AIDEA to issue up to \$85.0 million of bonds to assist in the financing of a coal fired power plant near Healy, Alaska. On July 18, 1996, \$85.0 million of Variable Rate Revolving Fund Bonds were issued to finance a portion of the Healy Clean Coal Project. In May 1998, \$85.0 million of bonds were issued to refund the variable rate revolving fund bonds. The bonds were defeased in March 2008 and retired in April 2008.
- (e) The 1993 Legislature enacted legislation authorizing the Authority to issue bonds not to exceed \$50.0 million for a facility to be constructed in Anchorage for the offloading, processing, storage and transloading of seafood. The Authority purchased the Alaska Seafood International Project in September 1999 and sold the facility in 2005. No bond issuance is anticipated and the legislature repealed the bonding authorization in 2015.
- (f) The 1993 Legislature also enacted legislation authorizing the Authority to issue bonds not to exceed \$50.0 million for a bulk commodity loading and shipping terminal to be located at Point MacKenzie and owned by AIDEA. The 1996 Legislature modified this legislation to require that the facility be located within Cook Inlet. The Authority does not anticipate participating in the financing of this project and the legislature repealed the bonding authorization in 2015.
- (g) The 1995 Legislature authorized the Authority to issue up to \$20.0 million of bonds to finance the acquisition, design and construction of the Kodiak rocket launch complex and tracking station and the Fairbanks satellite ground station space park. The Kodiak rocket launch complex was constructed with other financing and the Authority does not anticipate participating in financing the projects and the legislature repealed the bonding authorization in 2015.
- (h) The 1996 Legislature authorized the Authority to issue up to \$85.0 million of bonds to finance the expansion, improvement and modification of the existing DeLong Mountain Transportation Project port facilities owned by the Authority. In 1997 the Authority issued \$150.0 million of Revolving Fund Bonds which included \$70.0 million for that purpose and \$80.0 million for the purpose of redeeming the 1987 DeLong Mountain Transportation Project Revenue Bonds. In February 2007, the Authority issued \$113,095,000 of refunding bonds for the purpose of refunding and defeasing, along with Authority funds, the remaining outstanding bonds. The defeased bonds were called in April 2007. In May 2008 the Authority issued \$107,385,000 of variable rate Revolving Fund Refunding Bonds for the purpose of refunding \$107,385,000 of Series 2007 A&B Revolving Fund Refunding Bonds and pay costs of issuance. The refunded bonds were redeemed in May 2008. In February 2010, the Authority issued \$87,105,000 of fixed rate Revolving Fund Refunding Bonds for the purpose of refunding \$94,945,000 of Series 2008 A&B Revolving Fund Refunding Bonds. The refunded bonds were redeemed February 24, 2010. At June 30, 2017 \$34.6 million were outstanding with no moral obligation attached.
- (i) The 1996 Legislature authorized the issuance of up to \$100.0 million of bonds for the acquisition of the Snettisham hydroelectric project from the Alaska Power Administration. On August 19, 1998 AIDEA issued \$100.0 million of tax-exempt revenue bonds to finance the acquisition of the project. There is no State moral obligation attached. In December 1999 the Authority defeased \$6.9 million of the bonds using funds on hand. All remaining defeased bonds were retired during the year ended June 30, 2011. In August 2015 \$65.7 million of 2015 Series Power Revenue Refunding bonds were issued to refund all of the outstanding First Series Power Revenue bonds. The refunded bonds were redeemed September 25, 2015. At June 30, 2017 \$62.2 million were outstanding.
- (j) The 1998 Legislature authorized the issuance of bonds (or other financing) up to: a) \$80.0 million to finance the expansion, improvement, and modification of the existing Red Dog Project port facilities

and to finance the construction of new related facilities to be owned by AIDEA; b) \$30.0 million to finance the improvement and expansion of the Nome port facilities to be owned by AIDEA; and c) \$15.0 million to finance phase one construction and improvement of the proposed Hatcher Pass Ski Resort located in the Matanuska-Susitna Borough; in 2006 this authorization was modified and increased to \$25.0 million to finance the development of Hatcher Pass. The Authority does not anticipate participating in financing the Nome facilities or Hatcher Pass development and the legislature repealed the bonding authorization in 2015.

- (k) The 2004 Legislature authorized the issuance of up to \$20.0 million of bonds to finance the acquisition, development, improvement and construction of port and related facilities on Lynn Canal in Southeast Alaska, to be owned by the Authority. The Authority does not anticipate participating in financing the project and the legislature repealed the bonding authorization in 2015.
- (l) The 2011 Legislature authorized the issuance of up to \$65.0 million to finance the expansion, modification, improvement, and upgrading of the Skagway Ore Terminal.
- (m) The 2013 Legislature authorized the issuance of up to \$150.0 million through the Sustainable Energy Transmission and Supply Development (SETS) Fund for the development, construction, and installation of, and the start-up costs of operation and maintenance for, a liquefied natural gas production plant and system and affiliated infrastructure on the North Slope and a natural gas distribution system and affiliated infrastructure in Interior Alaska. This bonding authorization expires June 30, 2018 if the Authority does not issue bonds before that date.
- (n) The 2014 Legislature authorized the issuance of up to \$145.0 million to finance the infrastructure and construction costs of the Bokan-Dotson Ridge rare earth element project. The Bokan-Dotson Ridge rare earth element project's surface complex shall be owned and operated by AIDEA or financed under AS44.88.172. This authorization was effective September 2014.
- (o) The 2014 Legislature authorized the issuance of up to \$125 million to finance the infrastructure and construction costs of the Niblack project. The Niblack project includes a mineral processing mill, associated dock, and loading and related infrastructure facilities at the Gravina Island Industrial Complex, as well as infrastructure at the project site on Prince of Wales Island to be owned by AIDEA or financed under AS44.88.172.

v. Business and Export Assistance Program

The Business and Export Assistance Program (Guarantee Program) was authorized by the 1998 Legislature by merging the Business Assistance Program and the Export Assistance Program, authorized in 1988 and 1987, respectively. AIDEA's goal under the Guarantee Program is to encourage projects that help diversify Alaska's economy and provide or retain jobs for Alaskans. The Guarantee Program provides a guarantee up to 80% of the principal balance, not to exceed \$1 million, to the financial institution who made the loan. The guarantee also covers accrued interest on loans.

vi. Rural Development Initiative Fund Loan Program (RDIF)

The RDIF is a loan program designed to create job opportunities in rural Alaska by providing small businesses with capital that may not be available through conventional markets. This program provides loans for working capital, equipment, construction, or other commercial purposes. To be eligible for a loan under this program, the business must be Alaskan-owned and located in a community with a population of 5,000 or less that is not connected by road or rail to Anchorage or Fairbanks, or with a population of 2,000 or less that is connected by road or rail to Anchorage or Fairbanks. The Department of Commerce, Community and Economic Development, Division of Economic Development administers the program for AIDEA.

vii. Small Business Economic Development Revolving Loan Fund Program

AIDEA’s Small Business Economic Development Revolving Loan Fund Program provides financing to eligible applicants under the United States Economic Development Administration Long-Term Economic Deterioration program and the Sudden and Severe Economic Dislocation program. The Small Business Economic Development Revolving Loan Fund was created to receive loan fund grants from the United States Economic Development Administration. The Department of Commerce, Community and Economic Development, Division of Economic Development administers the program for AIDEA.

viii. Sustainable Energy Transmission and Supply Development Program (SETS)

The SETS program was established under the Alaska Sustainable Strategy for Energy Transmission and Supply (ASSETS) Act. ASSETS, enacted by the 27th Legislature and signed into law in June 2012, creates new programs and powers within AIDEA by offering a number of energy development financing options, including direct lending, loan participation and loan and bond guarantees, for “qualified energy development” projects. The SETS Fund is a legally separate fund within AIDEA.

ix. Arctic Infrastructure Development Program

The Arctic Infrastructure Development Program was created within the Arctic Infrastructure Development Fund to promote and provide financing for arctic infrastructure development. The program provides a variety of financing options for qualified developments including, but not limited to, insuring project obligations, guaranteeing loans or bonds and establishing reserves, acquiring real or personal property, entering into lease agreements or similar financing agreements and borrowing money or issuing bonds. The creation of this program and fund was effective October 2014. The program and fund are currently not capitalized.

a. Bond Authorization

AS 44.88.095 places a statutory ceiling of \$400 million per twelve month period on AIDEA bond issuances, excluding refunding bonds. The Authority has general statutory power to issue bonds, but must obtain prior legislative approval to issue bonds in excess of \$25 million for a development finance project, excluding refunding bonds. Prior to the 2015 legislative session this limit was \$10 million.

b. Debt Issued and Outstanding

AIDEA has issued \$1.34 billion of bonds with \$108.2 million outstanding as shown in Tables 3.7—3.8.

TABLE 3.7
Alaska Industrial Development and Export Authority
Type of Debt Issued
\$ (thousands)

calendar year	economic development bonds	consolidated bonds	umbrella bonds	taxable umbrella bonds	development project bonds	revolving fund bonds
1981-2000	\$141,425	60,475	83,000	14,540	203,250	434,545
2001	-	-	-	-	-	-
2002	-	-	-	-	-	20,475
2003	-	-	-	-	-	-
2004	-	-	-	-	-	-
2005	-	-	-	-	-	-
2006	-	-	-	-	-	-
2007	-	-	-	-	-	113,095
2008	-	-	-	-	-	107,385
2009	-	-	-	-	-	-
2010	-	-	-	-	-	87,105
2011	-	-	-	-	-	14,470
2012	-	-	-	-	-	-
2013	-	-	-	-	-	-
2014	-	-	-	-	-	-
2015	-	-	-	-	-	-
2016	-	-	-	-	65,720	-
2017	-	-	-	-	-	-
Total	<u>\$141,425</u>	<u>\$ 60,475</u>	<u>\$83,000</u>	<u>\$ 14,540</u>	<u>\$268,970</u>	<u>\$ 777,075</u>

TABLE 3.8
Alaska Industrial Development and Export Authority
Debt Issued and Outstanding
\$ (thousands)

	Date	Amount Issued	Outstanding at 6/30/17
Development bonds			
Power Revenue Bonds, First Series (Snettisham Hydroelectric Project)	8/25/2015	65,720	62,160
Total		<u>65,720</u>	<u>62,160</u>
Revolving fund bonds			
Red Dog Port Facility (Refunding)	2/24/2010	87,105	34,565
Loan Participation	12/22/2010	14,470	11,425
		<u>101,575</u>	<u>45,990</u>
Tot: Total Bonds		<u>\$ 167,295</u>	<u>\$ 108,150</u>

Source: Financial Statements, various years, AIDEA

C. Alaska Municipal Bond Bank

The Alaska Municipal Bond Bank (Bond Bank) was created as a public corporation by the State in 1975 for the purpose of lending money to Alaska's governmental units for their capital projects. Additional authority has been provided to the Bond Bank to lend money to Joint Insurance Associations, the University of Alaska, Joint Action Agencies, and Regional Health Organizations. The Bond Bank is empowered to issue a certain amount of bonds for categories of borrowers, the proceeds of which are used to purchase bonds, notes, certificates of participation, or other legal obligations of authorized borrowers. All of the Bond Bank's publicly offered bonds maintain a Capital Reserve Fund with the State's moral obligation attached. The Bond Bank has covenanted to notify the State legislature of any failure to maintain the capital reserve fund at their required levels. The State legislature may appropriate funds to the Bond Bank to restore capital reserve funds to required amounts. (See "Moral Obligation Debt"). The Coastal Energy Loan Program notes issued privately through the National Oceanic and Atmospheric Administration do not have a claim on any capital reserve funds of the Bond Bank and are payable solely from the payments of the municipalities participating in the Program.

a. Advantages to Municipalities and Authorized Borrowers

There are several advantages to Alaska's municipalities and authorized borrowers using the Bond Bank. Interest rates are lower because of the additional security achieved through the structure of the Bond Bank as well as the diversification of risk achieved by pooling municipal and borrower bond issues through the Bond Bank. The Bond Bank, with the moral obligation of the State of Alaska and being a more frequent issuer, is better known than many of Alaska's smaller units of government. This enhances the marketability of the bonds to investors nationally.

b. Municipal Debt Purchased

The Bond Bank has assisted 45 of Alaska's municipalities, two Regional Health Organization, and the University of Alaska obtain financing for capital projects. These borrowers are geographically distributed throughout Alaska and represent virtually all sectors of the State's economy.

TABLE 3.9
Alaska Municipal Bond Bank
Outstanding Loans to Municipalities
Funded with Bonds as of 6/30/2017
\$ (thousands)

Governmental Unit	Total Outstanding Principal	Percentage of Total
City & Borough of Sitka	139,685	11.70%
City & Borough of Juneau	133,675	11.19%
Kenai Peninsula Borough	118,032	9.88%
Yukon-Kuskokwim Health Corp.	100,715	8.43%
City of Ketchikan	94,680	7.93%
Kodiak Island Borough	91,745	7.68%
University of Alaska	86,085	7.21%
City of Unalaska	61,635	5.16%
Fairbanks North Star Borough	55,770	4.67%
Tanana Chiefs Conference	44,135	3.70%
Ketchikan Gateway Borough	37,505	3.14%
City of Seward	33,425	2.80%
Northwest Arctic Borough	30,215	2.53%
Aleutians East Borough	23,275	1.95%
Municipality of Skagway	19,780	1.66%
City of Cordova	16,730	1.40%
Lake & Peninsula Borough	16,500	1.38%
City of Kodiak	12,605	1.06%
Haines Borough	10,835	0.91%
Petersburg Borough	10,240	0.86%
City of Dillingham	9,150	0.77%
City of Nome	4,390	0.37%
Municipality of Anchorage	3,495	0.29%
City of Homer	3,200	0.27%
City of King Cove	2,820	0.24%
City of Sand Point	2,370	0.20%
City of Valdez	2,270	0.19%
City of Bethel	2,175	0.18%
City of Whittier	2,000	0.17%
City of Soldotna	1,900	0.16%
City of Craig	1,695	0.14%
City of Kenai	1,445	0.12%
City of Galena	1,350	0.11%
City of Klawock	1,350	0.11%
City of Hoonah	1,015	0.09%
City and Borough of Wrangell	980	0.08%
City of Wasilla	800	0.07%
City of North Pole	755	0.06%
City of Palmer	710	0.06%
City of Adak	680	0.06%
City of Saxman	155	0.01%
Reserve Obligations	12,120	1.01%
Total	1,194,092	100.00%

Source: Alaska Municipal Bond Bank

Includes AMBBA direct loans and reserve obligations. Does not include conduit debt.

c. Security for Bonds

Municipal general obligation bonds are usually issued to finance facilities that do not generate revenue, such as schools, roads, public safety and municipal buildings. They are issued with the approval of the municipal voters and are secured by the full faith and credit of the municipality. Municipalities within the State of Alaska have no taxing limitations for debt service requirements.

Bonds issued by the Bond Bank to purchase municipal general obligation bonds are secured by:

- Full faith and credit or revenue pledge of each respective community with no taxing limitation for the general bonded debt issued to the Bond Bank.
- The pooled debt service reserve fund founded per the bond resolution. The reserve fund generally is funded to the tax allowed maximum based on the Bond Bank bonds.
- The statutory Bond Bank reserve fund monies available and not pledged to bond issues, which may be used to restore the debt service reserve fund in the event of default.
- The statutory right of the Bond Bank, in the event of default, to demand and receive from a State agency any funds held by that agency which are payable to the defaulting municipality.
- The moral obligation of the State of Alaska to maintain the debt service reserves at their required levels.
- The requirement to seek and successful inclusion of an appropriation in the State's operating budget to replenish the Bond Bank's reserve if there is a draw due to a default.
- Credit ratings of 'AA-'/'AA-' from Standard and Poor's and Fitch Ratings.

c. Bond Authorization

AS 44.85.180(c) was enacted in 1975, limiting Bond Bank bonds outstanding at any time to \$150 million. This statute has been amended seven times to gradually raise the limit to the current \$1.7925 billion. The Bond Bank's current authority is comprised of \$1.5 billion for political subdivisions, \$87.5 million for the University of Alaska, and \$205 million for Regional Health Organizations. Total Bond Bank bonds and notes outstanding as of June 30, 2017, was approximately \$1,187.6 million. Thus, the limit on additional bond issuance at that time was approximately \$604.9 million.

d. Bonds Issued and Outstanding are summarized below and in table 4.1

In fiscal year 2006 a Master General Bond Resolution was approved authorizing the issuance of Bond Bank general obligation bonds to purchase loans for both general obligation and revenue bond issues of municipalities. The ability to combine revenue and general obligation loans increased operational efficiency for the Bond Bank and the economic benefits to communities.

In fiscal year 2010 a Master General Bond Resolution was approved authorizing the issuance of Bond Bank general obligation bonds to purchase loans for both general obligation, revenue bond issues, and certain other obligations of municipalities.

In fiscal year 2016 a Master General Bond Resolution was approved authorizing the issuance of Bond Bank general obligation bonds to purchase loans of Regional Health Organizations.

TABLE 4.0
Alaska Municipal Bond Bank
Summary of Bonds Types Issued and Outstanding
\$ (thousands)

Type	Amount Issued	Outstanding at 6/30/17
General Obligation Bonds	\$ 2,361,045	\$ 1,187,615
Revenue Bonds	<u>173,790</u>	<u>-</u>
	<u>\$ 2,534,835</u>	<u>\$ 1,187,615</u>

Source: Alaska Municipal Bond Bank

Includes Bond Bank Reserve Obligations, but does not include direct loans or conduit debt

TABLE 4.1
Alaska Municipal Bond Bank
Debt Issued and Outstanding
\$ (thousands)

	Date	Amount Issued	Outstanding at 6/30/17
2005 Master Resolution General Obligation Bonds			
2007 Series Three	6/25/2007	14,715	520
2007 Series Four	8/28/2007	15,625	680
2008 Series One	4/15/2008	62,355	1,880
2008 Series Two	7/22/2008	19,700	710
2009 Series One	1/8/2009	26,730	1,630
2009 Series Two	3/18/2009	30,295	2,605
2009 Series Three	9/21/2009	13,390	4,160
2009 Series Four B	12/3/2009	20,425	19,835
2010 Series One A	2/23/2010	20,420	4,285
2010 Series One B	2/23/2010	7,415	7,415
2010 Series Two B	5/20/2010	11,405	10,730
2010 Series Three A	9/16/2010	4,530	1,525
2010 Series Three B	9/16/2010	6,900	6,900
2010 Series Four A	12/9/2010	26,725	15,230
2010 Series Four B	12/9/2010	51,940	45,140
2011 Series One	3/1/2011	8,635	6,310
2011 Series Two	5/10/2011	12,130	6,720
2011 Series Three	9/15/2011	78,115	53,420
2012 Series One	3/6/2012	18,495	6,800
2012 Series Two	5/24/2012	52,795	36,095
2012 Series Three	10/18/2012	21,190	14,715
2013 Series One	3/12/2013	96,045	87,045
2013 Series Two A	6/19/2013	19,145	15,750
2013 Series Two B	6/19/2013	17,110	15,235
2013 Series Three	11/14/2013	72,045	66,435
2014 Series One	2/20/2014	61,205	52,950
2014 Series Two	6/19/2014	45,275	44,670
2014 Series Three	10/30/2014	55,370	52,325
2015 Series One	3/17/2015	60,635	52,305
2015 Series Two	6/4/2015	59,550	55,475
2015 Series Three	9/16/2015	96,210	95,835
2016 Series One	2/2/2016	33,015	32,320
2016 Series Two	4/21/2016	59,595	55,770
2016 Series Three	11/3/2016	80,435	79,975
2016 Series Four	11/3/2016	29,400	28,790
2017 Series One	4/27/2017	12,795	12,795
2017 Series Two	4/27/2017	31,655	31,655
		1,353,415	1,026,635
2010 Master Resolution General Obligation Bonds			
2010 Series A-1	12/21/2010	1,065	310
2010 Series A-2	12/21/2010	3,700	3,700
		4,765	4,010
2016 Master Resolution General Obligation Bonds			
2016 Series A	6/9/2016	44,135	44,135
2017 Series A	3/21/2017	100,715	100,715
		144,850	144,850
		1,503,030	1,175,495

Source: Alaska Municipal Bond Bank Authority.
Does not include direct loans, reserve obligations, or conduit debt

D. Alaska Railroad Corporation

Legislation signed into law during 1984 established the Alaska Railroad Corporation as a public corporation of the State to manage the Alaska Railroad upon its acquisition from the Federal Government until its possible transfer to private ownership. The corporation is administratively placed within the Department of Commerce and Economic Development. The corporation has the power to issue bonds if such issuance is approved by law. Bonds issued by the corporation would not bear the full faith and credit of the State. The Railroad is not authorized to issue State moral obligation bonds.

By Chapter 77, SLA 1994, the Railroad is authorized to issue revenue bonds in the principal amount of \$55.0 million for the construction and acquisition of the Alaska Discovery Center for the Ship Creek Project in Anchorage. To date, no bonds have been issued.

Chapter 71, SLA 2003 authorized the ARRC to issue up to \$17 billion in revenue bonds to finance the construction of a natural gas pipeline and related facilities, subject to an agreement with a third party to pay the debt service and other costs of the bonds. To date, no bonds have been issued.

Chapter 46, SLA 2004 authorized the ARRC to issue up to \$500 million in revenue bonds, subject to an agreement with a third party to pay the debt service, and other related bond costs, to finance the cost of extending its rail line to Fort Greely, Alaska. To date, no bonds have been issued.

Chapter 28, SLA 2006 authorized the Alaska Railroad to issue up to \$165 million in revenue bonds to finance rail transportation projects that qualify for federal financial participation and associated costs. On August 22, 2006, the Alaska Railroad issued \$76.4 million in revenue bonds. On August 29, 2017, the Alaska Railroad issued the remaining \$88.6 million in revenue bonds. One July 15, 2015, the Alaska Railroad executed an advance refunding of \$66.1 million callable maturities by issuing \$63.2 million in refunding bonds.

Chapter 65, SLA 2007 authorized the Alaska Railroad to issue up to \$2.9 billion in revenue bonds to finance all or a portion of the Kenai gasification project and Port MacKenzie rail spur project, subject to an agreement with a third party to pay the debt service and other costs of the bonds. To date, no bonds have been issued.

Chapter 8, SLA 2015 authorized the Alaska Railroad to issue up to \$37 million in revenue bonds to finance a positive train control rail transportation safety project, subject to an agreement with a third party to pay the debt service and other costs of the bonds. One July 15, 2015 the Alaska Railroad issued \$37 million in revenue bonds.

At June 30, 2017 the ARRC had \$130.3 million of revenue bonds outstanding.

E. Alaska Student Loan Corporation

Chapter 92, SLA 1987 created the Alaska Student Loan Corporation (ASLC or Corporation), a public corporation administratively lodged in the Department of Education and Early Development but with a separate and independent legal existence. The Corporation's purpose is to lower costs for Alaskans pursuing education and training at a postsecondary level and for other qualified individuals attending postsecondary institutions in the State, through the financing of education loans. With the exception of the 2012B Series Bonds, the security for the Corporation's debt consists of education loans and other pledged assets of the Corporation. The 2012B Series Education Loan Revenue Bonds are secured by education loans, other pledged assets of the Corporation as well as an irrevocable direct-pay Letter of Credit issued by State Street Bank and Trust Company. The Letter of Credit is secured by a Standby Bond Purchase Agreement issued by the State of Alaska, Department of Revenue. The bonds issued by the ASLC carry the State's moral obligation as security. The debt issued by the Corporation is not a general obligation of the State or the Corporation.

Tax-exempt bonds issued by the ASLC are generally subject to the Private Activity Bond (PAB) ceiling established by the Tax Reform Act of 1986.

Total debt outstanding as of June 30, 2017 was \$84.6 million as shown in Table 4.0. The Education Loan Backed Notes represent taxable debt and are rated AAA by Fitch and AA by Standard & Poor's. The 2012B Series Bonds represent tax-exempt debt and are rated AA by Standard & Poor's.

TABLE 4.2
Alaska Student Loan Corporation
Debt Issued and Outstanding
 \$ (thousands)

Tax-exempt Education Loan Revenue Bonds	Date	Amount Issued	Outstanding at 6/30/17	Final Maturity
2012B Series	9/12/2012	93,435	14,935	12/1/2043
Taxable Education Loan Backed 2013A Series	3/28/2013	<u>144,730</u>	<u>69,693</u>	8/25/2031
		<u>\$238,165</u>	<u>\$ 84,628</u>	

Source: Alaska Student Loan Corp.

F. University of Alaska

In addition to the State issuing general obligation bonds to finance University related projects, the University issues notes and bonds for specific University purposes, some of which are secured by project revenues or University general revenues. Facilities that have been financed include Anchorage, Juneau and Fairbanks student centers, student housing units, research facilities, student recreation centers, and utility system. Net investment in capital assets amounted to \$1.37 billion at June 30, 2017.

The University issued Housing System Bonds for housing and food service facility needs during the 1960's and early 1970's. Between 1960 and 1991, University of Alaska Heating Corporation issued bonds secured by lease payments made by the University from general fund appropriations. All of these bonds have been either repaid over time or defeased through issuance of University of Alaska General Revenue Bonds.

General Revenue Bonds Series O, P, Q, R, S, T, U and V are secured by a pledge of unrestricted current fund revenues generated from tuition, fees, recovery of indirect costs, sales and services of educational departments, miscellaneous receipts and auxiliaries. University general revenue bond debt is not a general obligation of the State nor does the State provide security for the debt in any other manner, i.e., by appropriations, guarantees, or moral obligation pledges.

In December 2012, the University entered into a long-term lease agreement with Community Properties of Alaska, Inc. (CPA) to lease a new student dining facility on the University of Alaska Fairbanks Campus. CPA built the student dining facility using proceeds from its Lease Revenue Bonds 2012. Security for the Lease Revenue Bonds 2012 is the University's lease payments to CPA. The lease is recorded as a capital lease and the obligation is recorded at the present value of future minimum lease payments.

In July 2015, the University issued General Revenue Bonds 2015 Series T with a par amount of \$65,350,000 and a 25-year term. Average annual debt service is \$4.9 million. In September 2015, the University entered into a loan agreement with the Alaska Municipal Bond Bank to borrow \$86,085,000 with a 30-year term. Average annual debt service is \$5.6 million. Both the bond and the loan provide funding for construction of the University of Alaska Fairbanks Combined Heat and Power Plant.

In October 2016, the University issued General Revenue Bonds 2016 Series V-1, with a par amount of \$32,845,000, original issue premium of \$5,699,409, and a 28-year term. Average annual debt service is \$2.1 million. The bonds provide funding for the construction of the University of Alaska Fairbanks Engineering Facility.

In October 2016, the University issued General Revenue Refunding Bonds 2016 Series V-2 with a par amount of \$14,645,000, original issue premium of \$1,906,984, and a 17-year term. Average annual debt service is \$1.1 million. The bonds refund General Revenue Bonds 2005 Series N and 2008 Series O, except for the October 1, 2017 maturity.

Moody's Investors Service have assigned rating of 'A1' and "stable outlook" to the ratings of the University in August 2017. S&P Global Ratings have assigned rating of "AA-" and "negative outlook" to the rating of the University in September 2016.

Total debt issued by the University and outstanding is summarized on Table 4.3.

TABLE 4.3
University of Alaska
Debt Issued and Outstanding
\$ (thousands)

	Date	Amount	Principal Outstanding at 6/30/17	Interest to maturity	Total debt service to maturity	Final maturity
Revenue Bonds						
2008 Series O	1/31/2008	23,795	1,265	22	1,287	10/1/2017
2009 Series P	12/8/2009	11,696	5,220	683	5,903	10/1/2023
2011 Series Q	10/5/2011	48,870	37,745	11,538	49,283	10/1/2032
2012 Series R	3/5/2012	32,805	23,955	5,702	29,657	10/1/2030
2013 Series S	3/6/2013	31,020	25,925	6,730	32,655	10/1/2035
2015 Series T (1)	7/15/2015	65,350	65,350	45,656	111,006	10/1/2039
2015 Series U	9/16/2016	86,085	86,085	68,851	154,936	10/1/2044
2016 Series V-1	10/12/2016	32,845	32,845	26,513	59,358	10/1/2044
2016 Series V-2	10/12/2016	14,645	14,645	4,652	19,297	10/1/2033
Total		347,111	293,035	170,347	463,382	
Installment Contracts	varies	4,573	752	20	772	7/15/2020
Capital Lease Liability (2)	12/19/2012	24,507	25,025	13,525	38,550	10/1/2044
Notes Payable						
Alaska Housing Corp	6/1/2015	49,398	17,251	4,789	22,040	2/1/2032
Total		49,398	17,251	4,789	22,040	
Total University Debt		\$ 425,589	\$ 336,063	\$ 188,681	\$ 524,744	

(1) Series T was privately placed with the Alaska Municipal Bond Bank Authority

(2) "Principal Outstanding" represents the present value of future payments on the University's long-term lease with Community

Source: University of Alaska

G. Municipal Debt

1. General Obligation Bonds

Alaskan municipalities had approximately \$2.3 billion in general obligation debt outstanding at the end of June, 2017. The level of Alaska municipalities' general obligation debt has been relatively stable over the last ten years, and the current amounts remain below the peak of \$2.673 billion in 1986.

Municipal debt issuance levels are influenced by State appropriations for capital projects and reimbursement programs, primarily the School Debt Reimbursement Program. Due to low State revenue projections the Legislature placed a 5-year moratorium on additional bonds for the school debt reimbursement program in 2015 and State appropriations for municipal capital projects have been severely reduced. The school debt reimbursement program moratorium will lower the amount of municipal debt outstanding while the near elimination of State appropriations for municipal grants should increase the amount of municipal debt outstanding.

When State reimbursement is netted out of municipal school debt, it becomes apparent that many Alaska municipalities have substantial debt capacity.

The following Table 4.4 summarizes municipal debt outstanding.

TABLE 4.4
Municipal General Obligation Bonds Outstanding
\$ (millions)

June 30	Amount	June 30	Amount	June 30	Amount
1975	351.4	1990	\$ 2,002.1	2005	\$ 2,345.8
1976	420.8	1991	1,854.8	2006	2,357.8
1977	519.5	1992	1,729.8	2007	2,402.1
1978	545.2	1993	1,814.0	2008	2,397.9
1979	768.5	1994	1,759.9	2009	2,423.0
1980	827.1	1995	1,901.6	2010	2,501.0
1981	1,091.0	1996	1,779.1	2011	2,499.9
1982	1,316.2	1997	1,777.5	2012	2,424.3
1983	1,619.1	1998	1,774.7	2013	2,406.8
1984	2,105.8	1999	1,832.0	2014	2,417.7
1985	2,084.0	2000	1,603.0	2015	2,394.9
1986	2,673.5	2001	1,850.4	2016	2,386.6
1987	2,463.9	2002	1,980.9	2017	2,293.2
1988	2,170.4	2003	1,932.6		
1989	1,966.9	2004	2,107.2		

Source: Alaska Taxable

2. General Obligation Debt Ratios

Table 4.5 present ratios of municipal debt to population and to the estimated full value of taxable property in Alaska. Alaska's sparse population leads to higher debt ratios than might be found in other states. The presence of enormous oil and gas property values in certain municipalities has been a significant contributed to high debt capacity.

TABLE 4.5
Per Capita Municipal and State
General Obligation Debt
1996-2017

Year	Population (thousands)	Municipal Debt \$ (millions)	State of Alaska debt \$ (millions)	Total G.O. Debt \$ (millions)	Per Capita G.O. Debt (dollars)
1996	619,100	1,779	39	1,818	2,937
1997	611,300	1,778	24	1,802	2,947
1998	621,400	1,775	11	1,786	2,874
1999	622,000	1,832	2	1,834	2,949
2000	622,000	1,603	0	1,603	2,577
2001	628,800	1,850	0	1,850	2,942
2002	634,892	1,981	0	1,981	3,120
2003	643,786	1,933	0	1,933	3,003
2004	643,786	2,107	462	2,569	3,991
2005	655,435	2,346	438	2,784	4,248
2006	663,661	2,358	414	2,772	4,177
2007	670,053	2,402	390	2,792	4,166
2008	676,987	2,398	364	2,762	4,080
2009	679,720	2,424	503	2,927	4,306
2010	692,314	2,501	476	2,977	4,300
2011	710,231	2,500	644	3,144	4,426
2012	722,190	2,424	576	3,000	4,154
2013	732,298	2,407	840	3,247	4,434
2014	736,399	2,418	804	3,222	4,375
2015	735,601	2,395	754	3,149	4,281
2016	737,625	2,387	823	3,210	4,352
2017	739,828	2,293	777	3,070	4,150

Source: Alaska Taxable

TABLE 4.6
Municipal G.O. Debt, Population and Valuation
6/30/2017

Boroughs and Cities within Boroughs	Population	Full Value Determination (thousands)	Per Cap Full Value	Municipal G.O. Debt (thousands)	Per Capita G.O. Debt
Aleutians East Borough	3,001	\$194,152	\$ 64,696	\$26,201	\$ 8,731
<i>City of Sand Point</i>	943	\$54,426	\$ 57,716	\$3,800	4,030
<i>City of King Cove</i>	923	\$61,482	\$ 66,611	\$4,012	4,347
Municipality of Anchorage	299,037	\$40,244,451	\$ 134,580	\$965,345	3,228
Fairbanks North Star Borough	98,957	\$11,345,631	\$ 114,652	\$137,260	1,387
<i>City of North Pole</i>	2,145	\$460,794	\$ 214,822	\$755	352
Haines Borough	2,466	\$412,101	\$ 167,113	\$9,939	4,030
City & Borough of Juneau	32,739	\$5,415,383	\$ 165,411	\$83,706	2,557
Kenai Peninsula Borough	58,060	\$10,265,418	\$ 176,807	\$85,905	1,480
<i>City of Kenai</i>	7,098	\$1,076,920	\$ 151,722	\$1,445	204
<i>City of Seward</i>	2,663	\$427,731	\$ 160,620	\$3,210	1,205
<i>City of Soldotna</i>	4,376	\$755,974	\$ 172,755	\$1,900	434
Ketchikan Gateway Borough	13,758	\$1,769,525	\$ 128,618	\$33,495	2,435
<i>City of Ketchikan</i>	8,191	\$1,011,778	\$ 123,523	\$57,697	7,044
Kodiak Island Borough	13,563	\$1,605,840	\$ 118,399	\$74,080	5,462
<i>City of Kodiak</i>	6,124	\$817,982	\$ 133,570	\$8,000	1,306
Lake and Peninsula Borough	1,629	\$169,266	\$ 103,908	\$16,500	10,129
Matanuska-Susitna Borough	102,598	\$11,715,013	\$ 114,184	\$349,795	3,409
<i>City of Palmer</i>	6,268	\$758,919	\$ 121,078	\$710	113
<i>City of Wasilla</i>	8,704	\$1,653,528	\$ 189,973	\$800	92
North Slope Borough	10,528	\$22,372,593	\$ 2,125,056	\$253,580	24,086
Northwest Arctic Borough	7,944	\$766,544	\$ 96,493	\$35,442	4,461
Petersburg Borough	3,179	\$448,101	\$ 140,957	\$10,260	3,227
City & Borough of Sitka	8,920	\$1,318,435	\$ 147,807	\$20,745	2,326
Municipality of Skagway	1,065	\$384,713	\$ 361,233	\$19,993	18,773
City & Borough of Wrangell	2,458	\$216,853	\$ 88,223	980.00	399
Municipalities Outside Boroughs					
City of Adak	309	-	\$ -	\$680	2,201
City of Cordova	2,386	\$325,715	\$ 136,511	\$17,666	7,404
City of Craig	1,102	\$155,823	\$ 141,400	\$1,695	1,538
City of Dillingham	2,316	\$247,797	\$ 106,993	\$9,150	3,951
City of Hoonah	793	\$80,982	\$ 102,121	\$1,295	1,633
City of Nome	3,777	\$397,302	\$ 105,190	\$2,803	742
City of Unalaska	4,448	\$650,564	\$ 146,260	\$5,825	1,310
City of Valdez	4,011	\$2,378,268	\$ 592,936	\$48,515	12,095
Municipal Totals	679,044.0	\$112,880,470	166,234	\$2,293,184	3,377
Statewide					
State of Alaska G.O. Debt				\$ 776,785	
Statewide Total	739,828	\$ 127,408,831	\$ 172,214	\$ 3,069,969	\$ 4,150
Source: Alaska Taxable					

3. Revenue Bonds

In addition to General Obligation Debt that is supported by local taxes, cities and boroughs may issue debt that is supported by the revenues generated by the project financed through the issuance of debt. At the end of June, 2017, approximately \$941.1 million in revenue bonds were outstanding, as shown on Tables 4.7 and 4.8.

TABLE 4.7
Alaska Municipal Debt Issued and Outstanding
\$ (millions)

Fiscal Year	Amount Outstanding		Revenue Debt
	G.O.	revenue	Outstanding as % of total
1996	1,779.1	580.8	24.6%
1997	1,777.5	682.0	27.7%
1998	1,705.0	664.0	28.0%
1999	1,832.0	471.0	20.5%
2000	1,602.9	541.3	25.2%
2001	1,850.4	590.3	24.2%
2002	1,980.8	550.2	21.7%
2003	1,932.6	544.5	22.0%
2004	2,107.2	513.8	19.6%
2005	2,345.5	603.8	20.5%
2006	2,357.8	606.0	20.4%
2007	2,402.1	503.3	17.3%
2008	2,391.9	721.4	23.2%
2009	2,423.6	874.4	26.5%
2010	2,500.4	778.2	23.7%
2011	2,499.9	761.0	23.3%
2012	2,424.3	714.3	22.8%
2013	2,398.5	743.8	23.7%
2014	2,417.7	887.6	26.9%
2015	2,394.9	954.3	28.5%
2016	2,386.6	960.2	28.7%
2017	2,293.2	941.1	29.1%

Source: Alaska Taxable

TABLE 4.8
Alaska Municipal Debt Outstanding by Issuer
June 30, 2017
\$ (thousands)

boroughs and cities within boroughs	G.O. debt	revenue debt	total debt	school G.O. total	% of debt state's share
Adak	\$ 680	\$ -	\$ 680	\$ -	-
Aleutians East	26,201	-	26,201	11,116	61%
Anchorage	965,345	501,750	1,467,095	496,607	65%
Bethel	-	2,175	2,175	-	-
Cordova	17,666	1,464	19,130	12,740	66%
Craig	1,695	-	1,695	-	-
Dillingham	9,150	-	9,150	9,843	70%
Fairbanks NSB	137,260	-	137,260	134,982	68%
Haines	9,939	1,050	10,989	10,595	70%
Hoonah	1,295	-	1,295	136	70%
Juneau	83,706	53,380	137,086	71,022	69%
Kenai	1,445	-	1,445	-	-
Kenai Borough	85,905	32,127	118,032	39,340	70%
Ketchikan	57,697	47,803	105,500	-	-
Ketchikan Bor.	33,495	-	33,495	21,437	67%
King Cove	4,012	-	4,012	-	-
Kodiak	8,000	7,000	15,000	-	-
Kodiak Bor.	74,080	13,180	87,260	77,610	69%
Lake Peninsula	16,500	-	16,500	17,145	68%
Mat-Su	349,795	22,975	372,770	285,757	69%
Nome	2,803	6,705	9,508	1,960	67%
North Pole	755	488	1,243	-	-
North Slope	253,580	40,315	293,895	918	60%
Northwest Arctic Bor	35,442	-	35,442	32,318	71%
Palmer	710	1,786	2,496	-	-
Petersburg	10,260	-	10,260	5,120	64%
Saint Paul	-	6,006	6,006	-	-
Sand Point	3,800	-	3,800	-	-
Seward	3,210	27,325	30,535	-	-
Sitka	20,745	118,940	139,685	23,440	68%
Skagway	19,993	-	19,993	-	-
Soldotna	1,900	-	1,900	-	-
Unalaska	5,825	55,810	61,635	3,005	70%
Valdez	48,515	-	48,515	30,505	60%
Wasilla	800	-	800	-	-
Wrangell	980	794	1,774	1,085	70%
Total	<u>\$ 2,293,184</u>	<u>\$ 941,073</u>	<u>\$ 3,234,257</u>	<u>\$ 1,286,681</u>	

Source: Alaska Dept. of Community & Economic Development
and Dept. of Education and Early Development

In FY 2017, revenue bonds accounted for approximately 29.1% of all local debt outstanding in Alaska. Some major municipal borrowers in Alaska have no revenue debt at all. Such borrowers include the Fairbanks North Star Borough, Northwest Arctic Borough, and Aleutians East Borough, among others. In these boroughs, one reason for the lack of revenue debt may be the presence of oil and gas property. That is, substituting G.O bonds for revenue bonds transfers much of the debt burden that would otherwise fall on local users to the State. This is because the State also taxes oil and gas property but allows a credit against tax liabilities for taxes paid to municipalities. Thus municipal property taxes on oil and gas property directly reduces the State payment.

4. Property Tax Limits

Two municipalities that have large oil and gas property values, the North Slope Borough and Valdez, may be subject to limitations on the amount of full value that can be taxed. A municipality may choose to levy property taxes for its operating budget under one of two methods. Under AS 29.45.080(b), total property tax revenues may not exceed the equivalent of \$1,500 per capita.

Under AS 29.45.080(c), the total property value that can be taxed is limited to the municipality's population multiplied by 225 percent of the average statewide per capita full value. Although AS 29.45.090(a) limits municipal property tax rates to 3 percent or less (30 mills), AS 29.45.100 provides that taxes may be levied without limitation as to rate or amount to pay debt service.

III. Supplementary Information

A. State Debt Capacity

The State has historically used the ratio of debt service to revenue as a guideline for determining debt capacity of the State. This policy was established due to the State's relatively small population and high per capita revenue due to oil resource-generated revenue. Historically the State's policy has been that debt service should not exceed five percent of unrestricted revenue when considering only general obligation bonds, certificates of participation and the University of Alaska bonds that are State supported. More recently, the State has included more discretionary General Fund supported obligations and programs, including the School Debt Reimbursement Program, the Capital Project Reimbursement Program and statutorily required payments to pay for UAAL amortization. The State's policy has been amended in the past to allow the annual payments on these items other than the UAAL payments to range up to eight percent of unrestricted revenue. Additional analysis on UAAL funding obligation is required before additional amendment of debt capacity is made.

1. Debt Capacity as Measured by Revenues

The State's debt capacity is determined by comparing debt service and state supported debt obligations to unrestricted general fund revenues. The State's debt capacity is conservative to compensate for potential reduction to unrestricted general fund revenue due to low petroleum prices. The state releases a revenue sources book semi-annually, the fall issuance of which is used as the basis for forecasting future years' revenue and associated debt capacity. Tables 4.9, 5.0, and 5.1, show past and projected debt service, revenue and ratios of State debt service on general obligation bonds and general obligation bonds combined with other state supported debts.

TABLE 4.9
State of Alaska
Ratio of General Obligation Bond Debt Service
To Expenditures and Unrestricted Revenues
 \$ (millions)

Fiscal Year	Debt Service	General Fund Expenditures*	unrestricted Revenues**	Total Revenues	Ratio of Debt Service to Expenditures	Ratio of Debt Service to Unrestricted Revenues
1996	21.3	3,386	2,133		0.6%	1.0%
1997	16.5	3,350	2,495	3,727	0.5%	0.7%
1998	14.2	3,296	1,826	3,018	0.4%	0.8%
1999	8.8	3,425	1,348	2,556	0.3%	0.7%
2000	0.0	3,554	2,082	3,725	0.0%	0.0%
2001	0.0	3,758	2,282	4,187	0.0%	0.0%
2002	0.0	5,406	1,660	3,710	0.0%	0.0%
2003	0.0	5,582	1,948	4,194	0.0%	0.0%
2004	19.4	5,419	2,346	4,680	0.4%	0.8%
2005	46.4	5,903	3,189	5,648	0.8%	1.5%
2006	45.7	6,216	4,200	6,730	0.7%	1.1%
2007	45.0	6,777	5,159	7,914	0.7%	0.9%
2008	44.4	7,836	10,728	13,546	0.6%	0.4%
2009	43.9	9,549	5,831	8,185	0.5%	0.8%
2010	48.9	8,419	5,513	8,803	0.6%	0.9%
2011	53.8	9,307	7,673	11,187	0.6%	0.7%
2012	84.2	9,363	9,485	13,517	0.9%	0.9%
2013	81.1	9,813	6,929	15,809	0.8%	1.2%
2014	90.4	9,978	5,390	17,238	0.9%	1.7%
2015	78.0	13,107	2,257	8,541	0.6%	3.5%
2016	85.2	10,258	1,533	5,894	0.8%	5.6%
2017	82.5	10,745	1,351	12,343	0.8%	6.1%

Source: State of Alaska, CAFR, and Revenue Sources Book

* Federal income, Permanent Fund income and Constitutional Budget Reserve Draws included from 2002 forward; FY2017 from 8-2-2017 OMB Fiscal Summary

* Forward funding of future fiscal year expenditures included from 2007 forward

** Federal Revenue, Permanent Fund income and other restricted and restricted by custom revenues are not included in unrestricted revenue

TABLE 5.0
State of Alaska
Payments on General Fund Paid Debt as of June 30, 2017
 \$ (millions)

fiscal year	state G.O.	lease / purchase	(1) Capital Leases	(2) school debt reimbursement	Capital Project Reimbursements	Statutory Debt	
						Payment to PERS/TRS	total debt service
2017	82.5	2.9	23.0	114.6	4.6	215.9	443.5
2018	89.7	2.9	19.7	112.9	4.6	184.3	414.1
2019	89.3	2.9	19.7	105.8	4.5	298.5	520.7
2020	77.8	2.9	19.7	98.0	4.5	345.7	548.6
2021	77.0	2.9	19.5	95.8	3.6	383.3	582.1
2022	66.5	2.9	19.5	82.9	3.6	392.4	567.8
2023	66.4	2.9	19.5	83.9	3.6	402.3	578.6
2024	66.2	2.9	19.5	68.5	3.6	413.7	574.4
2025	61.3	2.9	19.5	59.3	3.6	426.0	572.6
2026	61.1	2.9	19.5	48.0	2.8	439.9	574.2
2027	60.6	2.9	20.9	43.4	2.6	457.2	587.6
2028	59.7	2.9	20.9	40.7	2.2	473.5	599.9
2029	58.8	2.9	17.6	35.9	0.9	491.7	607.8
2030	58.1	-	17.6	33.3	0.9	510.3	620.2
2031	45.8	-	17.6	30.9	0.4	531.4	626.1
2032	45.4	-	17.6	27.6	-	553.3	643.9
2033	45.0	-	17.6	20.6	-	577.3	660.5
2034	44.5	-	-	18.1	-	602.8	665.4
2035	20.9	-	-	13.0	-	629.9	663.8
2036	20.9	-	-	5.4	-	658.9	685.2
2037	0.5	-	-	-	-	691.2	691.7
2038	12.2	-	-	-	-	727.2	739.4
2039	-	-	-	-	-	808.6	808.6
2040	-	-	-	-	-	-	-

1 - There are two prisons, and a parking garage financed with capital leases

2 - FY2018 - 2036 payments are based on actual bond repayment schedules on file with the Department of Education & Early Development as of 6/30/2017

3 - State G.O. debt service is net of federal subsidies on interest expense through 2038

TABLE 5.1
State of Alaska Debt Service to Unrestricted Revenues
Fall 2017 Revenue Forecast of the Department of Revenue

Fiscal Year	Unrestricted	State G.O. Debt	State Supported	Total State	School Debt	Statutory	Total
	Revenues	Service	Debt Service	Debt Service	Reimburse-ments	Payment to PERS/TRS	Payments to Revenues
	(\$Millions)	%	%	%	%	%	%
1996	2,133.3	1.0	0.5	1.4	3.7		5.2
1997	2,494.9	0.7	0.4	1.0	2.5		3.5
1998	1,825.5	0.8	0.6	1.3	3.4		4.7
1999	1,348.4	0.7	1.1	1.8	4.6		6.3
2000	2,081.7	0.1	0.9	1.0	3.1		4.1
2001	2,281.9	0.0	0.7	0.7	2.3		3.0
2002	1,660.3	0.0	1.3	1.3	3.3		4.5
2003	1,947.6	0.0	1.1	1.1	2.7		3.7
2004	2,345.6	0.8	0.9	1.7	2.6		4.3
2005	3,188.8	1.5	0.7	2.2	2.2		4.4
2006	4,200.4	1.1	0.6	1.7	1.9		3.6
2007	5,158.6	0.9	0.5	1.4	1.7		3.1
2008	10,728.2	0.4	0.3	0.6	0.8		1.4
2009	5,831.2	0.8	0.6	1.3	1.6		2.9
2010	5,513.3	0.9	0.8	1.7	1.7		3.4
2011	7,673.0	0.7	0.6	1.3	1.3		2.6
2012	9,485.2	0.8	0.4	1.3	1.1		2.3
2013	6,928.5	1.1	0.6	1.7	1.6		3.3
2014	5,390.1	1.4	0.7	2.1	2.0		4.1
2015	2,256.4	3.3	1.6	4.9	5.2		10.1
2016	1,533.0	4.0	2.3	6.3	7.6		13.9
2017	1,350.6	6.1	2.3	8.4	8.5		16.9
<u>projected</u>							
2018	2,081.6	4.3	1.1	5.4	5.4	8.9	19.7
2019	2,047.1	4.4	1.1	5.5	5.2	14.6	25.2
2020	2,063.2	3.8	1.1	4.9	4.7	16.8	26.4
2021	2,155.7	3.6	1.0	4.6	4.4	17.8	26.8
2022	2,218.9	3.0	1.0	4.0	3.7	17.7	25.4
2023	2,275.2	2.9	1.0	3.9	3.7	17.7	25.3
2024	2,297.1	2.9	1.0	3.9	3.0	18.0	24.9
2025	2,426.8	2.5	0.9	3.4	2.4	17.6	23.4
2026	2,641.3	2.3	0.8	3.2	1.8	16.7	21.6
2027	2,838.8	2.1	0.8	3.0	1.5	16.1	20.6

As shown on Table 5.1, debt service on State G.O. and State Supported debt plus school debt reimbursement payments were 16.9% of unrestricted revenues in FY 2017 and are projected to be approximately 10.8% of revenues in FY 2018. Adding in the anticipated payments of the State on behalf of PERS and TRS employers in FY 2018 brings the ratio up to 19.7%. The spike in the percentages beginning in FY 2015 is due to the sharp reduction in the price of oil and correlated state unrestricted revenue in the fall of 2014. As existing debt is paid down the ratio gradually improves by 2027 to 4.5%. However, the ascending payments required of the State for UAAL amortization nearly entirely offset the decrease and including these payments the State's ratio is still 20.6% in 2027.

Table 5.2 presents the ratio of State G.O.'s to full value of taxable property since 1996. The ratio has declined from 6.0% in 1974 to 0.7% in 2017. As a measure of debt capacity, debt to full value is of minor significance in Alaska due to the existence of a State petroleum property tax.

TABLE 5.2
State of Alaska
Ratio of State General Obligation Debt to Property Values

Year	Full Value: Cities, Boroughs & Unincorporated Areas at	G.O. Bonds Outstanding at	Ratio of Debt to Full Value (%)
	1/1 (millions)	6/30 (millions)	
1996	45,232	39	0.1%
1997	47,013	24	0.1%
1998	47,541	11	0.0%
1999	49,158	2	0.0%
2000	50,773	0	0.0%
2001	53,230	0	0.0%
2002	55,247	0	0.0%
2003	58,361	462	0.8%
2004	59,230	462	0.8%
2005	66,308	438	0.7%
2006	66,847	414	0.6%
2007	84,253	390	0.5%
2008	86,717	364	0.4%
2009	90,428	503	0.6%
2010	93,138	476	0.5%
2011	98,969	628	0.6%
2012	101,328	576	0.6%
2013	107,471	840	0.8%
2014	108,633	804	0.7%
2015	111,751	744	0.7%
2016	111,751	823	0.7%
2017	112,880	777	0.7%

Source: Alaska Taxable Alaska Department of Commerce,
Community, and Economic Development.

B. Public Pension Systems Liabilities

The State administers two major retirement systems -- the Public Employees' Retirement System (for State employees and employees of political subdivisions who elect to join the system) and the Teachers' Retirement System (for teachers and school administrators).

The difference between the present value of projected accrued benefits for employees who are covered by the pension system and the market value of the particular pension system's assets is the amount of the State's unfunded liability. An unfunded pension liability has historically been treated by the rating agencies as a soft liability with more flexibility than other debt. In the State's 2015 Comprehensive Annual Financial Report released on February 1, 2016, General Accounting Standards Board Statement 68 (GASB 68) was implemented updating the reporting and disclosure requirements related to pension liabilities. One of the requirements of GASB 68 is 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. Senate Bill 125 passed in 2008 commits the State to funding the difference between specific employer contributions of 22% for the Public Employees Retirement System and 12.56% for the Teachers Retirement System. 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 68 the State's payment commitment 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.

The financial status of each of the State's public pension systems since FY 2009 is shown in Table 5.3. Actuarial results for FY 2017 will be available in 2018.

TABLE 5.3
State of Alaska
Retirement System's Financial Status
 \$ (millions)

	<u>Public Employees' Retirement System (PERS)</u>							
	6/30/2009	6/30/2010	6/30/2011	6/30/2012	6/30/2013	6/30/2014	6/30/2015	6/30/2016
Present Value of								
Accrued Benefits	\$ 16,579	\$ 18,132	\$ 18,741	\$ 19,292	\$ 19,993	\$ 20,897	\$ 20,648	\$ 21,369
Value of Assets	\$ 10,243	\$ 11,157	\$ 11,814	\$ 11,832	\$ 12,163	\$ 14,645	\$ 16,173	\$ 16,468
Funding Level								
for Accrued Benefits	\$ (6,336)	\$ (6,975)	\$ (6,927)	\$ (7,460)	\$ (7,830)	\$ (6,252)	\$ (4,475)	\$ (4,901)
Funding Ratio	61.8%	61.5%	63.0%	61.3%	60.8%	70.1%	78.3%	77.1%
	<u>Teachers' Retirement System (TRS)</u>							
	6/30/2009	6/30/2010	6/30/2011	6/30/2012	6/30/2013	6/30/2014	6/30/2015	6/30/2016
Present Value of								
Accrued Benefits	\$ 7,848	\$ 8,848	\$ 9,129	\$ 9,346	\$ 9,592	\$ 9,841	\$ 9,729	\$ 9,907
Value of Assets	4,473	4,739	4,938	4,869	4,974	6,019	8,129	8,200
Funding Level								
for Accrued Benefits	\$ (3,375)	\$ (4,109)	\$ (4,191)	\$ (4,477)	\$ (4,618)	\$ (3,822)	\$ (1,600)	\$ (1,707)
Funding Ratio	57.0%	53.6%	54.1%	52.1%	51.9%	61.2%	83.6%	82.8%

Source: State of Alaska PERS and TRS valuation reports

As of June 30, 2016 the Public Employees' Retirement System's actuarial accrued liabilities are funded at 77.1 percent and the Teachers' System's actuarial accrued liabilities funded at 82.8 percent. It is important to note that these funding levels include accrued benefit costs otherwise known as Other Post Employment Benefits (OPEB).

C. Credit Ratings of the State of Alaska

The State of Alaska's general obligation bond rating was re-established in 2003 with the issuance of the 2003 Series A and B bonds. The State received AA ratings from the three national bond credit rating agencies. On March 27, 2008 Standard & Poor's increased their credit rating on the State to AA+ with a stable outlook. March 25, 2010 Fitch Investors Service upgraded the State to AA+. On November 22, 2010 Moody's upgraded the State to Aaa. On January 5, 2012 Standard & Poor's upgraded the State to AAA. On January 7, 2013 Fitch upgraded the State to AAA. Moody's and Standard & Poor's revised the *outlook* for the State to negative in December 2014, and August 2015 respectively, while affirming the State's Aaa/AAA rating. Since this peak in credit strength the State's general obligation bond rating has been downgraded seven times, beginning with the January 5, 2016 downgrade by Standard & Poor's to AA+, the February 29, 2016 downgrade by Moody's Investors Service to Aa1, the June 14, 2016 downgrade by Fitch Ratings to AA+, the July 25, 2016 downgrade by Moody's Investors Service to Aa2, the July 13, 2017 downgrade by Moody's Investors Service to Aa3, the July 18, 2017 downgrade by Standard & Poor's to AA, and the November 2, 2017 downgrade by Fitch Ratings to AA. On November 2nd and December 1st of 2017, Fitch Ratings and Moody's Investors Service, respectively, revised their outlook on the State to stable from negative. Standard & Poor's continues to place a negative outlook on the State of Alaska's credit rating, indicating a probability of additional negative rating action in the future.

Following is the State of Alaska's credit rating history, shown on Table 5.4.

TABLE 5.4
State of Alaska Credit Rating History
ratings as of date shown

Moody's Investor Service		Standard and Poor's Corp.		Fitch Investors Service	
July 13, 1961	Baa	June 4, 1971	A	May 3, 1994	AA
September 12, 1969	Baa1	January 23, 1975	A+	March 25, 2010	AA+
August 29, 1974	A1	June 14, 1980	AA-	January 7, 2013	AAA
June 13, 1980	Aa	August 5, 1992	AA	June 14, 2016	AA+
November 26, 1998	Aa2	March 27, 2008	AA+	November 2, 2017	AA
November 22, 2010	Aaa	January 5, 2012	AAA		
February 29, 2016	Aa1	January 5, 2016	AA+		
July 25, 2016	Aa2	July 18, 2017	AA		
July 13, 2017	Aa3				

D. Private Activity Bond Ceiling

The Tax Reform Act of 1986 established a ceiling on annual issuance of Qualified Private Activity Bonds (PAB's), effective August 15, 1986, at the level of \$250 million for the remainder of 1986 and for 1987, and \$150 million thereafter. Effective in calendar year 2001 the PAB cap became subject to annual adjustment and has been increased each year since. In calendar year 2017 the cap was approximately \$305.3 million. The PAB ceiling encompasses qualified mortgage revenue bonds, student loan bonds some of the types of tax-exempt debt issued by AIDEA and AEA, and certain other types of tax-exempt bonds to promote industrial development.

The responsibility for allocating Alaska's annual ceiling is assigned to the State Bond Committee by State law. Allocation carry-forwards expire after three calendar years. Table 5.5 summarizes the allocation of the PAB ceiling over the past seven years.

TABLE 5.5
Alaska Private Activity Bond Ceiling Allocations
\$ (thousands)

Calendar Year	Annual Cap	Allocations	Recipient
2011	277,820	277,820	to AHFC
2012	284,560	284,560	to AHFC
2013	291,875	291,875	to AHFC
2014	296,285	288,825	to AHFC
		8,000	to AIDEA
2015	301,515	200,248	to AHFC
		101,267	to AIDEA
2016	302,875	202,875	to AHFC
		100,000	to AIDEA
2017	305,315	305,315	to AHFC

E. State Bond Committee

AS 37.15 includes the State's Bonding Act and creates the State Bond Committee (SBC). The members of the SBC are the Commissioner of Commerce, Community and Economic Development (who serves as chairman), the Commissioner of Revenue (who serves as secretary), and the Commissioner of Administration.

The duties of the State Bond Committee include adopting resolutions and preparing documents necessary for the issuance, sale, and delivery of State bonds. The State Bond Committee must fix the principal amount, denomination, date maturities, place of payment, terms, rights of redemption if any, form, condition and covenants of the bonds; fix the date of sale and the form of the notice of sale; and provide the notice of sale of State debt.

Additionally, the State Bond Committee manages and administers the State debt policy including requests for appropriations to the debt retirement fund, the repayment of State debt and related administrative matters.

Staff support for the State Bond Committee is provided by the Treasury Division of the Department of Revenue.

