











**SECTION I: CONSOLIDATED REVENUE BOND AUDIT**

## INDEPENDENT AUDITORS' REPORT

Board of Regents of Higher Education  
State of Montana  
Helena, Montana

We have audited the accompanying consolidated schedules as outlined in Section I of the table of contents regarding Montana State University (the University) as of and for the year ended June 30, 2017 with comparative totals for 2016.

### **Management's Responsibility for the Consolidated Schedules**

Management is responsible for the preparation and fair presentation of these consolidated schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated schedules that are free from material misstatement, whether due to fraud or error.

### **Auditor's Responsibility**

Our responsibility is to express an opinion on these consolidated schedules based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated schedules. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated schedules, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated schedules in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated schedules.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion, the consolidated schedules present fairly, in all material respects, the balances of the accounts on hand at June 30, 2017 and the results of transactions pertaining to these revenue bond accounts for the fiscal year then ended, in accordance with accounting principles generally accepted in the United States of America.

**Report on Summarized Comparative Information**

We have previously audited the University's consolidated revenue bond schedules for the year ended June 30, 2016, and we expressed an unmodified audit opinion on those audited financial schedules in our report dated February 10, 2017. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

**Other Information**

Our audit was conducted for the purpose of forming an opinion on the consolidated schedules. The introduction section has not been subjected to the auditing procedures applied in the audit of the consolidated schedules and, accordingly, we do not express an opinion or provide any assurance on it.

The consolidated schedule of University revenues, expenses and changes in net position for the year ended June 30, 2017, has been prepared by management. This consolidated schedule has not been subjected to the auditing procedures applied in the audit of the consolidated schedules and, accordingly, we do not express an opinion or provide any assurance on it.



Butte, Montana  
January 8, 2018



MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF PLEDGED FUND REVENUES AND EXPENSES  
For the Year Ended June 30, 2017 with Comparative Totals for 2016

	Years Ended June 30,	
	2017	2016
Housing Operating Revenues		
Residence halls & food services	\$ 43,256,591	\$ 38,147,387
Family & graduate housing	4,370,423	4,077,121
Total housing operating revenues	<u>47,627,014</u>	<u>42,224,508</u>
Housing Operating Expenses		
Residence halls & food services	29,856,822	27,967,611
Family & graduate housing	2,552,855	2,448,748
Total housing operating expenses	<u>32,409,677</u>	<u>30,416,359</u>
Net revenue from housing operations	<u>15,217,337</u>	<u>11,808,149</u>
Other Revenues		
Facility & administrative cost recoveries	1,381,732	1,386,660
Facilities events revenues	3,553,638	3,582,430
Gross parking revenue	2,625,749	2,378,573
Student fees	10,622,070	9,765,580
Land grant income	2,407,245	2,113,539
Sale of fixed assets	405,162	-
Investment income (realized)	610,254	603,510
Museum rent	-	300,000
MSU bookstore lease	372,022	369,049
MSU Alumni Foundation contribution to debt service	1,679,285	1,750,822
Total other revenues	<u>23,657,157</u>	<u>22,250,163</u>
Trustee, advisory & audit fees	<u>(103,760)</u>	<u>(107,125)</u>
Net pledged revenues available for debt service	38,770,734	33,951,187
Less University G&A recharges	<u>(2,876,336)</u>	<u>(2,574,941)</u>
Net pledged revenue less G&A recharges	<u>\$ 35,894,398</u>	<u>\$ 31,376,246</u>

See Accompanying Notes to Schedule.

**MONTANA STATE UNIVERSITY**  
**CONSOLIDATED REVENUE BOND AUDIT**  
**CONSOLIDATED SCHEDULE OF PLEDGED FUND ACTIVITY AND BALANCES**  
As of and For the Year Ended June 30, 2017

	<u>Revenue Fund</u>	<u>Debt Service Fund</u>	<u>Renewal &amp; Replacement Fund</u>	<u>Construction Fund</u>	<u>Total</u>
<b>Net Position, July 1, 2016</b>	\$ 27,023,896	\$ 6,136,121	\$ 4,748,163	\$ 7,756,029	\$ 45,664,209
<b>Increases:</b>					
Distribution of net revenues	36,874,292	1,855,843	9,572	31,027	38,770,734
Other increases	-	-	17,017	-	17,017
Transfers in from other programs	129,167	416,413	319,097	-	864,677
Inter-fund transfers-in	620,482	14,078,448	4,445,640	-	19,144,570
Bond proceeds	-	-	4,567	5,645,433	5,650,000
Total increases	<u>37,623,940</u>	<u>16,575,704</u>	<u>4,795,893</u>	<u>5,676,460</u>	<u>64,671,997</u>
<b>Decreases:</b>					
Bond principal	-	9,735,000	-	-	9,735,000
Bond interest	-	6,079,828	-	-	6,079,828
Bond premium, issue costs & other	-	50,277	-	-	50,277
Construction & Renewal and Replacement	-	-	2,614,694	12,564,940	15,179,634
Unrealized gain on non-hedging derivative	-	808,588	-	-	808,588
University G&A recharges	2,876,336	-	-	-	2,876,336
Non-housing losses in pledged funds	437,766	-	-	-	437,766
Inter-fund transfers-out	19,143,607	-	963	-	19,144,570
Transfers out for other programs	580,716	-	-	-	580,716
Transfers to other programs	12,358,809	225,000	766,557	-	13,350,366
Payments of SBECF Loans	8,800	-	-	-	8,800
Total decreases	<u>35,406,034</u>	<u>16,898,693</u>	<u>3,382,214</u>	<u>12,564,940</u>	<u>68,251,881</u>
<b>Net Position, June 30, 2017</b>	<u>\$ 29,241,802</u>	<u>\$ 5,813,132</u>	<u>\$ 6,161,842</u>	<u>\$ 867,549</u>	<u>\$ 42,084,325</u>
<b>Accounted For By:</b>					
Cash and cash equivalents	\$ 27,552,636	\$ 5,751,132	\$ 2,936,904	\$ 10,404	\$ 36,251,076
Interest receivable	3,514	5,399	539	-	9,452
Prepaid expenses	32,303	-	-	-	32,303
Accounts receivable, net of allowance	679,281	-	-	-	679,281
Investments:					
Cash equivalents	1,800,000	31,184	3,519,527	936,495	6,287,206
Long-term	1,899,712	462,877	-	-	2,362,589
Inventories	928,732	-	-	-	928,732
Loan receivable	-	249,959	-	-	249,959
Deferred outflows	-	4,188,552	-	-	4,188,552
Unearned revenues	(1,829,132)	-	-	-	(1,829,132)
Accounts payable and accrued expenses	(608,285)	-	(295,127)	(79,350)	(982,762)
Deposits payable	(96,730)	-	-	-	(96,730)
Derivative financial instruments, at fair value	-	(4,188,552)	-	-	(4,188,552)
Bond interest payable	-	(687,419)	-	-	(687,419)
Compensated absences	(1,120,230)	-	-	-	(1,120,230)
Total net position	<u>\$ 29,241,802</u>	<u>\$ 5,813,132</u>	<u>\$ 6,161,842</u>	<u>\$ 867,549</u>	<u>\$ 42,084,325</u>

See Accompanying Notes to Schedule.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES  
June 30, 2017 and 2016

**NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Reporting Entity**

In January of 1994, the Montana Board of Regents of Higher Education approved the restructuring of the Montana State University System to merge four separate institutions. The accompanying financial schedules represent the pledged revenue fund activities of the Bozeman, Billings and Northern campuses. The Great Falls College - Montana State University does not have any bonded indebtedness and is not reflected in the accompanying schedules unless otherwise noted.

The University follows U.S. generally accepting accounting principles (GAAP). GAAP includes all relevant Governmental Accounting Standards Boards (GASB) pronouncements, including the provisions of the following GASB pronouncements for the year ended June 30, 2016:

During the year ended June 30, 2016, the University adopted the provisions of GASB *Statement No. 72, Fair Value Measurement and Application*, and *Statement No. 79, Certain External Investment Pools and Pool Participants*, which affected the carrying values and disclosures of investments and hedging derivatives. There would not have been a material change had the University retroactively adopted the statements and as such, the June 30, 2015 balances were not restated.

No new accounting standards were implemented during the year ended June 30, 2017.

The Montana University System is a legal and financial component unit of the State of Montana and is governed by the Board of Regents of Higher Education. The Governor appoints board members.

**Fund Accounting**

The accounts of the University are maintained in accordance with the principles of fund accounting wherein resources are classified for accounting purposes into funds that are identified by the limitations and restrictions placed on their use. Separate accounts are maintained for each fund; however, in the accompanying financial schedules, the accounts related to the pledged revenue of all revenue bonds have been combined into a single fund group for presentation purposes. The schedules are not intended to present the financial activity for all the accounts in the fund or all of the accounts of the University.

The Schedule of Pledged Fund Activity and Balances is presented for in the following four funds:

- Revenue Fund
- Debt Service Fund
- Renewal and Replacement Fund
- Construction Fund

These funds are more fully described in the bond indenture.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**Accounts Receivable and Allowance for Uncollectible Amounts**

Accounts receivable reported by the pledged funds consist of fees charged to students and auxiliary enterprise services provided to students, faculty and staff. In accordance with University policy, revenue and receivables reported in the pledged revenue funds are recorded within the funds net of management's estimate of uncollectible accounts based on historical experience.

**Cash and Cash Equivalents**

The University considers its unrestricted, highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. Certain funds on deposit with trustees, as well as funds invested in the Short Term Investment Pool with the Montana Board of Investments are considered cash equivalents.

**Investments**

Investments consist of guaranteed investment contracts managed by the Bond Trustee, the fair value of the University's non-hedging derivative financial instruments, cash on hand invested through the Montana State Board of Investments Trust Fund Investment Pool (TFIP) and Short-Term Investment Pool (STIP), and money market funds held by the Bond Trustee. Except for pooled funds reported at net asset value (NAV) by the Board of Investments, all investments are recorded at fair value in accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments*. This pronouncement establishes fair value standards for investments in debt securities, which includes U.S. Treasury Obligations. Effective in fiscal 2016, investments are also classified according to the fair value hierarchy established by GASB Statement No. 72 as more fully described below. The University also holds guaranteed investment contracts which are excluded from classification within the fair value hierarchy. These investments are carried at cost. Ordinary income derived from investments is accounted for in the fund owning such investments. All gains and losses from the sale or disposition of investments are included in investment income.

**Derivative Financial Instruments**

The University has implemented GASB Statement No. 53, *Accounting and Reporting for Derivative Instruments*. Under this standard, derivative financial instruments are reported at fair value and are classified as either hedging derivative instruments if determined to be effective under the standard or as investments. Note 4 more fully discloses the nature and value of the derivative financial instruments held by the pledged funds.

**Fair Value Disclosures**

GASB Statement No. 72, *Fair Value Measurement and Application*, requires that investments be classified according to a "fair value hierarchy." With respect to Statement No. 72's fair value hierarchy, GASB defines "inputs" as "the assumptions that market participants would use when pricing an asset or liability, including assumptions about risk."

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**Fair Value Disclosures (Continued)**

Statement No. 72 further categorizes inputs as observable or unobservable: observable inputs are “inputs that are developed using market data, such as publicly available information about actual events or transactions, and which reflect the assumptions that market participants would use when pricing an asset or liability;” unobservable inputs are “inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing an asset or liability.” GASB Statement No. 79, *Certain External Investment Pools and Pool Participants*, addresses accounting and disclosure for external investment pools and pool participants. The University participates in external investment pools, and has adopted Statement No. 79.

The University records its investments as noted in the table below, and categorizes them within the fair value hierarchy as follows:

- Level 1—Fair value is determined using quoted prices for identical assets or liabilities in active markets.
- Level 2—Fair value is determined using inputs, other than quoted prices included within Level 1, that are observable for an asset or liability, either directly or indirectly.
- Level 3 – Values are determined using unobservable inputs.

In addition, certain investments are classified as NAV, meaning Net Asset Value per share. This includes pooled investments, such as those held in the State of Montana external investment pools. Unit values for these investments are based upon the pledged funds’ allocated proportion of the fair value of underlying assets of the pools. Statement No. 72 also excludes money market accounts and guaranteed investment contracts from fair value measurement. The pledged funds report money market accounts at amortized cost and guaranteed investment contracts at cost.

**Inventories**

Inventories primarily consist of textbooks, school and food service supplies and are valued according to the first in-first out (FIFO) basis at cost.

**Unearned Revenues**

Unearned revenues include amounts received from student fees and certain auxiliary activities prior to the end of the fiscal year but related to events occurring in the subsequent accounting period.

**Deferred Inflows and Outflows**

GASB Statement No. 63 amended the definitions of certain assets and liabilities, resulting in reclassifying certain items previously reported as assets to deferred outflows of resources, and certain items previously reported as liabilities to deferred inflows of resources. As applied to the pledged funds, deferred outflows are limited to the accumulated change in the fair value of the derivative financial instrument classified as a hedging instrument, as more fully disclosed in Note. 4.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)**

**Deferred Inflows and Outflows (Continued)**

Deferred inflows and outflows reported in the University-wide financial statements include additional activity related to its capital assets, debt and liabilities which are not reported in a schedule limited to consolidated pledged fund activity and balances.

**Compensated Absences**

Eligible University employees earn a minimum of 8 hours sick and 10 hours annual leave for each month worked. Eligible employees may accumulate annual leave up to twice their annual accrual, while sick leave may accumulate without limitation. Twenty-five percent of accumulated sick leave earned after July 1, 1971 and 100% of accumulated annual leave, if not used during employment, is paid upon termination.

**Scholarship Support**

Residence hall and food service expenses reported in the schedule of pledged fund revenue and expenses include scholarship support. Scholarship support is computed as the difference between the stated charge for goods and services provided by the University, and the amount that is paid by students and/or third parties making payments on the students' behalf. For the fiscal years ended June 30, 2017 and 2016, scholarship support included in the pledged funds amounted to \$333,306 and \$294,259, respectively.

**Other Net Pledged Operations**

Other net pledged operations consist of other auxiliary services on the campuses of MSU Northern and MSU Billings for which the net revenues are pledged for bond retirement, including the campus bookstores. Because these operations generated a net loss in the fiscal years ended June 30, 2017, and 2016, such operations are not reflected in the accompanying Schedule of Pledged Fund Revenues and Expenses for those years.

**NOTE 2. PLEDGED REVENUE SOURCES**

The following sources of income are pledged to the payment of bonds:

- 1) Net Revenues of the Student Housing System Facilities
  - a) Residence Halls, including all Food Service thereof;
  - b) Family and Graduate Housing;
- 2) Land Grant Income:
  - a) Two federal grants totaling 140,000 acres for the Bozeman campus;
  - b) One federal grant totaling 31,727 acres for the Billings campus;
- 3) All lease rentals derived from the lease of the Museum of the Rockies (lease expired in 2016);

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 2. PLEDGED REVENUE SOURCES (CONTINUED)**

- 4) All money received by the University which is collected each semester from all part-time and full-time (12 credits) student, designated as:

	Fall 2016		
	Bozeman	Billings	Northern
Student building fee - all students	\$ 45.00	\$ 141.00	\$ 135.00
Additional nonresident student building fee	\$ 144.00	\$ 62.40	\$ 55.00
Health and physical education building fee	\$ 19.20	\$ -	\$ -
Student Union O&M fee	\$ 40.80	\$ 53.00	\$ 51.00
Academic Building R & R fee	\$ 14.60	\$ -	\$ -
Health and physical education weight room O&M fee	\$ 0.40	\$ -	\$ -
Fieldhouse fee	\$ 8.40	\$ -	\$ -
Student facilities enhancement project fee	\$ 55.80	\$ -	\$ -
Student athletic fee	\$ 78.75	\$ -	\$ -

- 5) Gross revenue derived from MSU Bozeman Parking Operations, and from a space lease agreement with the MSU Bookstore, a private non-profit corporation;
- 6) Proceeds of the Series A – 1993, Series B – 1996, Series D – 1996, Series E – 1998, Series F – 1998, Series G – 2003, Series I – 2004, Series J – 2005, Series K – 2006; Series M – 2011 Bonds, Series N and O – 2012 Bonds, Series A – 2013 Bonds, Series B – 2014 Bonds and Series C - 2016;
- 7) Earnings on any funds or accounts created under the Indenture (excluding the escrow accounts as defined in the Indenture), including earnings on any Construction Funds covered by the Indenture;
- 8) Certain events revenue, including specified Bozeman Athletics events;
- 9) Limited indirect cost recovery payments relative to the Series H-2004 and Series N-2012 debt service;
- 10) Net revenue from Northern bookstore and Billings rentals, bookstore, student union and parking operations;
- 11) Payments by the counterparties to interest rate exchange agreements.

**NOTE 3. INVESTMENT BALANCES**

The University holds investments as described below, including derivative financial instruments which are more fully described in Note 4. The following are required disclosures regarding credit and interest rate risk associated with financial instruments other than derivatives. Note 4 includes required disclosures of risk and fair value related to derivatives.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 3. INVESTMENT BALANCES (CONTINUED)**

**Permitted Investments**

Under the Master Indenture, permitted investments include US Treasury obligations or other fully guaranteed US agency instruments, general obligation bonds of a US municipality or state, certificates of deposit or fully insured deposit accounts, shares of a registered and properly rated money market fund or state-sponsored investment pool, and guaranteed investment contracts approved by the respective bond insurer. The University's pledged fund investments comply with this provision.

**Concentration of Credit Risk**

The University holds investments in two investment pools managed by the Montana Board of Investments: the Short-Term Investment Pool (STIP) and the Trust Fund Investment Pool (TFIP). Credit risk and policies related to these pools is disclosed in the University's consolidated financial statements.

**Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The TFIP investment policy does not formally address interest rate risk.

The State of Montana has selected the effective duration method to disclose interest rate risk. The University's investments are categorized to disclose interest rate and credit risk as of June 30, 2017. Credit risk reflects the security quality rating, by investment security type, as of the June 30 report date. Interest rate risk is disclosed using effective duration. Unrated securities are denoted as NR. Although STIP and TFIP investments have been rated by investment security type, they have not been rated by an NRSRO.

The following is required disclosure regarding interest rate risk and basis of valuation or fair value level associated with pledged fund investments:

Security Type	Moody's Credit Quality Rating at June 30, 2017	Effective Duration (Years) at June 30, 2017	Basis of Valuation	Liquidity of NAV Assets
STIP	not rated	0.11	Net Asset Value	Daily
TFIP	not rated	5.82	Net Asset Value	Monthly
US Bank Money Market	P-1	N/A	Cash Equivalents at Amortized Cost	N/A
CMS Interest Rate Swap	A3	18.42	Fair Value Level 2	N/A



MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 3. INVESTMENT BALANCES (CONTINUED)**

**Interest Rate Risk (Continued)**

The following is a schedule of investments held in the pledged funds at June 30, 2017:

Type of Investment	Type of Instrument	Date Acquired	Interest Rate	Maturity Date	Cost	Unrealized Gain/(Loss)	Basis of Valuation
<b>Revenue Funds:</b>							
Revenue & Fee Accounts	Cash Equivalents - Short Term Investment Pool	Various	Variable	N/A	\$ 1,800,000	\$ -	\$ 1,800,000
	Long Term - Trust Fund Investment Pool	Various	Variable	N/A	<u>1,899,712</u>	-	<u>1,899,712</u>
	Sub-Total				<u>3,699,712</u>	-	<u>3,699,712</u>
<b>Debt Service Fund:</b>							
Debt Service Accounts	Long Term - CMS Interest Rate Swap	July 2006	N/A	11/15/2034	-	462,877	462,877
	Cash Equivalents - Money Market	Various	Variable	N/A	<u>31,184</u>	-	<u>31,184</u>
	Sub-Total				<u>31,184</u>	<u>462,877</u>	<u>494,061</u>
<b>Construction Fund:</b>							
Construction Accounts	Cash Equivalents - Money Market	Various	Variable	N/A	<u>936,495</u>	-	<u>936,495</u>
	Sub-Total				<u>936,495</u>	-	<u>936,495</u>
<b>Renewal &amp; Replacement Fund:</b>							
R&R Reserve	Cash Equivalents - Money Market	Various	Variable	N/A	3,469,527	-	3,469,527
	Cash Equivalents - Short Term Investment Pool	Various	N/A	N/A	<u>50,000</u>	-	<u>50,000</u>
	Sub-Total				<u>3,519,527</u>	-	<u>3,519,527</u>
Totals - All Funds					<u>\$ 8,186,918</u>	<u>\$ 462,877</u>	<u>\$ 8,649,795</u>

**NOTE 4. DERIVATIVE FINANCIAL INSTRUMENTS**

**Description**

The University has two interest rate swaps as of June 30, 2017 and 2016. Interest rate swaps are classified as hedging derivative instruments if the instruments meet the criteria of paragraph 27 (a) and (b) of Governmental Accounting Standards Board Statement Number 53, or as investment derivative instruments if they do not. The following table summarizes the interest rate swaps outstanding as of June 30, 2017:

Derivative Description	Trade Date	Effective Date	Termination Date	Counterparty
\$25.75 million fixed payer swap	03/10/2005	07/21/2005	11/15/2035	Deutsche Bank AG
\$25.25 million basis swap	12/19/2006	11/15/2007	11/15/2035	Morgan Stanley Capital Services Inc.

As of June 30, 2017, the fixed payer swap is classified as a hedging derivative instrument under Statement No. 53, whereas the basis swap is an investment derivative instrument because there is no identified financial risk being hedged by the basis swap that can be expressed in terms of exposure to adverse changes in cash flows or fair values.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 4. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)**

**Description (Continued)**

Statement No. 53 includes four methods for evaluating hedge effectiveness; a governmental entity may use any of the evaluation methods outlined in the Statement and is not limited to using the same method from period to period. The four methods described in Statement No. 53 are: consistent critical terms, synthetic instrument, dollar-offset, and regression analysis. In addition, Statement No. 53 permits a governmental entity to use other quantitative methods that are based on “established principles of financial economic theory.” The fixed payer swap passes the established criteria using the regression analysis methodology.

The fair values of the interest rate swaps were estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swaps. To measure non-performance risk for a derivative liability, credit spreads implied by the credit rating for debt issues by entities with similar credit characteristics were used. This is the best method available under current market conditions since the University has no credit default swaps that actively trade in the marketplace. For a derivative asset, the adjustment for non-performance risk of counterparties was determined by analyzing counterparty-specific credit default swaps, if available. If not available, credit default swaps in the market for entities of similar type and rating were used, along with information found in various public and private information services. This analysis is used to construct a credit curve that is applied to the discount curve on the net settlement payments of the derivative.

On September 10, 2010, the Series J bonds were converted to index bonds. While in index mode the interest rate is reset weekly at a rate of SIFMA plus a fixed spread. The spread is based on the long-term, unenhanced rating assigned to the issuer; the spread was 0.65% as of June 30, 2017. The dependent variable in the regression is the interest rates of the hedged cash flows; the independent variable is the floating rates due under the hedging derivative.

The counterparty to the fixed payer swap had the right to terminate the swap at \$-0- on December 14, 2016 (a European option) but the option was not exercised. As of the trade date, the option’s value included intrinsic value and time value. The intrinsic value (calculated as the difference between the at-market rate of 4.11% and the off-market rate of 3.953%) is accounted for as a loan receivable and is repaid by the off-market portion of each swap payment.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 4. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)**

**Description (Continued)**

The table below summarizes the reported balances as of and the derivative instrument activity during the years ended June 30, 2017 and 2016.

Type of derivative	Notional	Activity During 2017		Fair Value as of June 30, 2017	
		Classification	Amount	Classification	Amount
Cash flow hedge - Pay fixed interest rate swap	\$ 20,475,000	Interest expense	\$ <u>18,337</u>	Loan receivable	\$ <u>249,960</u>
		Investment income	\$ <u>-</u>		
		Deferred outflow increase (decrease)	\$ <u>(1,908,630)</u>	Derivative liability	\$ <u>4,188,552</u>
Investment derivative -  Basis swap	\$ 20,475,000	Investment income	\$ <u>808,490</u>	Investment (excluding accrued interest)	\$ <u>462,877</u>
Type of derivative	Notional	Activity During 2016		Fair Value as of June 30, 2016	
Type of derivative	Notional	Classification	Amount	Classification	Amount
Cash flow hedge - Pay fixed interest rate swap	\$ 21,200,000	Interest expense	\$ <u>20,169</u>	Loan receivable	\$ <u>268,297</u>
		Investment income	\$ <u>20,182</u>		
		Deferred outflow increase (decrease)	\$ <u>1,512,100</u>	Derivative liability	\$ <u>6,097,182</u>
Investment derivative -  Basis swap	\$ 21,200,000	Investment income	\$ <u>15,634</u>	Investment (excluding accrued interest)	\$ <u>1,271,465</u>

The objective and terms of the University's hedging derivative outstanding as of June 30, 2017 is as follows:

Type	Objective	Notional amount (000s)	Effective Date	Termination Date	Cash (Paid)/ Received (000s)	Terms
Fixed payer swap	Hedge interest rate risk on Series J 2005 Bonds	\$20,475,000	7/21/2005	11/15/2035	-	Pay 3.953% Receive SIFMA

**Credit Risk**

It is the University's policy to enter into derivative agreements with highly rated counterparties. As of June 30, 2017, all interest rate swap counterparties are rated A3 and Baa2 by Moody's, and BBB+ by Standard and Poor's. The University manages credit risk by requiring its counterparties to post collateral in certain events. The University is entitled to collateral from its fixed payer swap counterparty if the interest rate swap's fair value is greater than \$5 million and the counterparty is rated A+ or A, by S&P, or A1 or A2 by Moody's. If the counterparty to the fixed payer swap is rated A- or below, by S&P, or A3 or below by Moody's, the University is entitled to collateral up to 100% of the swap's fair value. The University is not required to post collateral. The University will continue to monitor counterparty credit risk.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 4. DERIVATIVE FINANCIAL INSTRUMENTS (CONTINUED)**

**Credit Risk (Continued)**

The University enters into derivative agreements with multiple counterparties to limit concentration of credit risk. Currently, the University has interest rate swaps with two different counterparties and each counterparty accounts for approximately 50% of outstanding notional. The University monitors counterparty credit risk on an ongoing basis.

**Interest Rate Risk**

Interest payments on variable rate debt will typically increase as interest rates increase. The University believes it has significantly reduced interest rate risk by entering into a pay-fixed, receive floating interest rate swap. As interest rates increase, net swap payments decrease so that changes in hedged variable-rate debt interest payments, attributable to SIFMA, are largely offset by the net swap payments.

**Basis Risk**

The variable-rate cash flows being hedged by the pay-fixed swap will increase or decrease as SIFMA rates increase or decrease. Because the hedged cash flows are SIFMA based and the floating receipts of the pay-fixed swap are SIFMA based, there is no basis risk.

**Termination Risk**

The University or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. In addition, the University's fixed payer swap counterparty has the right to terminate the derivative if the credit rating of the University's unenhanced long-term revenue bond rating is withdrawn, suspended or reduced below BBB-, in the case of S&P, or below Baa3 in the case of Moody's. If such an event occurs, the University could be forced to terminate the fixed payer swap in a liability position. As of June 30, 2017, the University's unenhanced long-term revenue bond rating was Aa3 by Moody's and A+ by S&P.

**Foreign Currency Risk**

All hedging derivatives are denominated in US Dollars and therefore the University is not exposed to foreign currency risk.

**Market Access Risk**

Market access risk is the risk that the University will not be able to enter credit markets or that credit will become more costly. For example, to complete a derivative instrument's objective, an issuance of refunding bonds may be planned in the future. If at that time the University is unable to enter credit market, expected cost savings may not be realized.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 5. RETIREMENT PLANS AND OTHER POST-EMPLOYMENT BENEFITS  
(OPEB)**

**Retirement Plans**

GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*, and GASB Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date – An Amendment of GASB No. 68*, were implemented in the University-wide financial statements for the year ended June 30, 2017 and 2016. Because the University does not expect individual pledged funds to set aside funding for a share of the net pension liability, the net pension liability of \$88,135,195 and \$77,006,798 reported in the consolidated University financial statements for the years ended June 30, 2017 and 2016, respectively, has not been allocated to the fund level and is therefore not included in the consolidated revenue bond schedules. Pledged fund operating expenses include the required employer contribution under the terms of the various plans in which University employees participate. For the year ended June 30, 2017, these amounts for the defined benefit plans above totaled \$564,643 of which \$516,511 was contributed for pledged fund employees on the Bozeman campus, \$41,863 for the Billings campus, and \$6,269 on behalf of Northern campus pledged fund employees. Additional expense under defined contribution plans totaled \$103,871 for fiscal year 2017.

University employees eligible to participate in retirement programs are members of either the Montana Public Employees' Retirement System (PERS), the Game Wardens' and Peace Officers' Retirement System (GWPORS), Montana Teachers' Retirement System (TRS) the Montana University System Retirement Program (MUS-RP), Federal Employees' Retirement System (FERS) or the U.S. Civil Service Retirement System (CSRS). All are defined benefit plans except for the MUS-RP. Effective July 1, 1993, MUS-RP was made the mandatory retirement plan for new faculty and administrators. More detailed disclosure regarding pension data and liabilities for each of these plans can be found in the University consolidated financial statements for the year ended June 30, 2017, on which an unmodified opinion was issued on December 21, 2017.

**Other Post-Employment Benefits**

Montana State law requires state agencies to provide access to health insurance benefits to eligible retirees up to Medicare – eligible age (65) (§2-18-704(1)(a), MCA). The Board of Regents of the Montana University System (MUS), having broad authority to act in the best interests of the MUS, has directed the Office of the Commissioner of Higher Education (OCHE) to provide access to health insurance benefits beyond age 65.

Retirees who are eligible to receive retirement benefits from Teachers Retirement System (TRS) or the Public Employees Retirement System (PERS) at the time employment ceases may participate in the plan. Retirees who are in the Optional Retirement Plan (ORP) (through TIAA-CREF) or any other defined contribution plan associated with the MUS must have worked five or more years and be age 50, or have worked 25 years with the MUS to be eligible for retiree insurance benefits.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 5. RETIREMENT PLANS AND OTHER POST-EMPLOYMENT BENEFITS  
(OPEB) (CONTINUED)**

**Other Post-Employment Benefits (Continued)**

The MUS's Interunit Benefits Committee, at the direction of the OCHE, sets the premiums for such participation. Until a retiree reaches age 65, individual retiree participation premiums ranged from \$847-\$947 per month, depending on the level of deductible and other selected plan features. Upon reaching age 65 (Medicare eligibility), monthly participation premiums ranged from \$387-\$432 for an individual retiree. Coverage is also extended to dependents and surviving dependents of the employee. Retirees who select a non-MUS Medicare Advantage Program are not considered in the above rates.

The MUS Group Benefits Plan does not issue a standalone financial report, but is subject to audit as part of the State of Montana's Basic Financial Statements, included in its Comprehensive Annual Financial Report (CAFR). A copy of the most recent CAFR can be obtained online at <http://afsd.mt.gov/CAFR/CAFR.asp> or by contacting the Montana Department of Administration, PO Box 200102, Helena, MT 59620-0102.

The Plan is considered to be a multi-employer agent plan. All units of the MUS fund the post-employment benefits on a pay-as-you-go basis from general assets. The University's annual other post employment benefit (OPEB) cost (expense) is calculated based on the annual required contribution (ARC) of the employer, an amount actuarially determined in accordance with GASB Statement No. 45. The calculated ARC represents an amount that, if funded, would cover normal cost each year and amortize any unfunded actuarial liability over a period of 30 years. Because MSU does not allocate the liability or impose a funding mandate at the individual fund level, and the state does not require funding, no liability for OPEB is included in the accompanying schedules for post-retirement healthcare costs related to employees paid from pledged funds.

**NOTE 6. OTHER ADVANCES AND LOANS OUTSTANDING**

The University received advances from the Montana Department of Environmental Quality as part of the State Building Energy Conservation Program (SBECP). The program provides funding for projects such as lighting, window replacement and other energy efficiency improvements. The advances are payable in debt service payments of approximately \$44,000 annually, and are included in transfers to other programs in the consolidated schedule of pledged fund activity balances. Payment can be made from either net pledged revenue or other sources, at the discretion of the University, but is subordinate to required debt service payments on the bonds issued under the Master Indenture.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES (CONTINUED)  
June 30, 2017 and 2016

**NOTE 6. OTHER ADVANCES AND LOANS OUTSTANDING (CONTINUED)**

No Intercap proceeds were used for pledged fund projects during the year ended June 30, 2017. The Bozeman campus utilized Intercap proceeds of \$132,403 in fiscal year 2016 for the SUB ballroom project. The Billings campus did not use Intercap financing for pledged fund projects in 2017. In 2016, Billings used Intercap proceeds of \$352,092 for the Student Union roof replacement. Loan payments including interest at a variable rate (2.5% at June 30, 2017) are due semi-annually on February 15<sup>th</sup> and August 15<sup>th</sup>. The loans are secured by net pledged revenue, subordinate to the bonds issued under the Master Indenture. In the years ended June 30, 2017 and 2016, pledged funds of \$1,548,328 and \$1,291,082 were used for Intercap loan debt service, respectively.

**NOTE 7. SUBSEQUENT EVENTS**

Management has evaluated subsequent events through January 8, 2018, the date which the consolidated schedule was available for issue and has identified the following that warrants disclosure:

- Subsequent to June 30, 2017, the University drew an additional \$6.0 million on its Series C bonds, bringing the total outstanding as of January 8, 2018 to \$16.455 million, the full amount available. The funds are required to complete final payment for the parking garage and construct a new dining hall.
- On July 12, 2017, the university issued \$21.0 million in Series 2017D bonds to refund all of the Series 2006 bonds with stated maturities in the years 2017 and thereafter and to refund all of the Series 2011M bonds with stated maturities in the years 2022 and thereafter. The refunded principal amounts for Series 2006K and Series 2011M were \$8.5 million and \$12.9 million, respectively. The refunding resulted in an economic gain to the University of \$1.3 million.
- In November 2017, the Board of Regents approved the issuance of bonds to construct a new residence hall on the Bozeman campus. Construction proceeds of \$50 million, plus cost of issuance, a debt service reserve fund, and capitalized interest (if needed), were authorized for a borrowing term of up to 30 years.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF REVENUE BONDS OUTSTANDING  
June 30, 2017

	Original Issue	Redemption		Outstanding June 30, 2017
		Regular	Defeased and Early	
<b><u>Bonds in Force</u></b>				
Indenture - July 13, 2005:				
Series J 2005 (Note 1)	<u>\$ 25,750,000</u>	<u>\$ 5,275,000</u>	<u>\$ -</u>	<u>\$ 20,475,000</u>
Indenture - August 17, 2006:				
Series K 2006 (Note 2)	<u>\$ 13,705,000</u>	<u>\$ 5,165,000</u>	<u>\$ -</u>	<u>\$ 8,540,000</u>
Indenture - November 1, 2011:				
Series M 2011 (Note 3)	<u>\$ 14,100,000</u>	<u>\$ 285,000</u>	<u>\$ -</u>	<u>\$ 13,815,000</u>
Indenture - October 17, 2012:				
Series N 2012 (Note 4)	<u>\$ 20,460,000</u>	<u>\$ 1,590,000</u>	<u>\$ -</u>	<u>\$ 18,870,000</u>
Indenture - October 17, 2012:				
Series O 2012 (Note 4)	<u>\$ 28,365,000</u>	<u>\$ 3,415,000</u>	<u>\$ -</u>	<u>\$ 24,950,000</u>
Indenture - December 16, 2013:				
Series A 2013 (Note 5)	<u>\$ 55,480,000</u>	<u>\$ 1,025,000</u>	<u>\$ -</u>	<u>\$ 54,455,000</u>
Indenture - January 31, 2014:				
Series B 2014 (Note 6)	<u>\$ 10,000,000</u>	<u>\$ 6,290,000</u>	<u>\$ -</u>	<u>\$ 3,710,000</u>
Indenture - February 24, 2016:				
Series C 2016 (Note 7)	<u>\$ 10,455,000</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 10,455,000</u>

See Accompanying Notes to Schedule.



**MONTANA STATE UNIVERSITY**  
**CONSOLIDATED REVENUE BOND AUDIT**  
**CONSOLIDATED SCHEDULE OF REDEMPTION REQUIREMENTS – ALL SERIES**  
As of and for the Year Ended June 30, 2017

Payment Date Calendar Year Due	December 1		November 15				Janaury 31	November 15	Total
	Series J 2005	Series K 2006	Series M 2011	Series N 2012	Series O 2012	Series A 2013	Series B 2014	Series C 2016	
2017	\$ 675,000	\$ 1,420,000	\$ 175,000	\$ 755,000	\$ 4,195,000	\$ 1,055,000	\$ - *	\$ -	\$ 8,275,000
2018	775,000	1,480,000	185,000	780,000	4,280,000	1,090,000	1,487,500 *	249,201	10,326,701
2019	800,000	1,550,000	195,000	815,000	4,365,000	1,135,000	2,222,500	256,531	11,339,031
2020	775,000	1,620,000	190,000	845,000	4,470,000	1,180,000	-	264,076	9,344,076
2021	875,000	1,700,000	190,000	880,000	4,580,000	1,230,000	-	271,843	9,726,843
2022	850,000	180,000	1,895,000	920,000	730,000	1,280,000	-	279,839	6,134,839
2023	950,000	190,000	1,995,000	955,000	755,000	1,330,000	-	288,070	6,463,070
2024	925,000	195,000	2,095,000	995,000	775,000	1,395,000	-	296,543	6,676,543
2025	1,025,000	205,000	2,205,000	1,035,000	800,000	1,465,000	-	305,265	7,040,265
2026	1,025,000	-	2,300,000	1,070,000	-	1,540,000	-	314,244	6,249,244
2027	1,125,000	-	2,390,000	1,100,000	-	1,620,000	-	323,487	6,558,487
2028	1,150,000	-	-	1,135,000	-	1,705,000	-	333,002	4,323,002
2029	1,175,000	-	-	1,170,000	-	1,790,000	-	342,796	4,477,796
2030	1,250,000	-	-	1,205,000	-	1,880,000	-	352,879	4,687,879
2031	1,300,000	-	-	1,245,000	-	1,980,000	-	363,258	4,888,258
2032	1,375,000	-	-	1,280,000	-	2,080,000	-	373,943	5,108,943
2033	1,400,000	-	-	1,320,000	-	2,185,000	-	384,942	5,289,942
2034	1,475,000	-	-	1,365,000	-	2,290,000	-	396,264	5,526,264
2035	1,550,000	-	-	-	-	2,400,000	-	407,920	4,357,920
2036	-	-	-	-	-	2,510,000	-	419,918	2,929,918
2037	-	-	-	-	-	2,625,000	-	432,269	3,057,269
2038	-	-	-	-	-	2,745,000	-	444,983	3,189,983
2039	-	-	-	-	-	2,880,000	-	458,072	3,338,072
2040	-	-	-	-	-	3,025,000	-	471,545	3,496,545
2041	-	-	-	-	-	3,180,000	-	485,415	3,665,415
2042	-	-	-	-	-	3,345,000	-	499,692	3,844,692
2043	-	-	-	-	-	3,515,000	-	514,390	4,029,390
2044	-	-	-	-	-	-	-	529,519	529,519
2045	-	-	-	-	-	-	-	395,094	395,094
Total Outstanding June 30, 2017	20,475,000	8,540,000	13,815,000	18,870,000	24,950,000	54,455,000	3,710,000	10,455,000	155,270,000
Previously Redeemed/ Refunded	5,275,000	5,165,000	285,000	1,590,000	3,415,000	1,025,000	6,290,000	-	23,045,000
Total Original Issue	<u>\$ 25,750,000</u>	<u>\$ 13,705,000</u>	<u>\$ 14,100,000</u>	<u>\$ 20,460,000</u>	<u>\$ 28,365,000</u>	<u>\$ 55,480,000</u>	<u>\$ 10,000,000</u>	<u>\$ 10,455,000</u>	<u>\$ 178,315,000</u>

\* Minimum of \$500,000. See Note 7.

See Accompanying Notes to Schedule.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS  
June 30, 2017

**NOTE 1. SERIES J 2005 BONDS OUTSTANDING**

**Project**

The proceeds were used to:

- 1) Finance costs of renovating, furnishing and equipping the student union building and the health and physical education complex on the Bozeman campus as well as costs of constructing, furnishing and equipping a new theater on the Bozeman campus; and
- 2) Pay interest on the Series J 2005 Bonds through February 2006; and
- 3) Pay costs associated with the issuance of the Series J 2005 Bonds, including the premium for the bond insurance policy.

**Description of Issue**

On July 21, 2005, the University issued \$25,750,000 of Series J 2005 Auction Rate Facilities Improvement Revenue Bonds at an initial rate of 2.35%, to fund the majority of a student facilities enhancement project on the Bozeman campus. The proceeds, together with University funds, are being used to renovate the student fitness center, construct a theater, and renovate portions of the Strand Union Building. An interest rate swap agreement was arranged relative to the debt, with an intended synthetic fixed rate of 3.953%. Principal payments began during the fiscal year ended June 30, 2007 and continue each May and November through November, 2035.

**Early Redemption**

Outstanding Series J 2005 Bonds are subject to redemption prior to maturity, at the option of the Board, on any date, out of moneys delivered to the Trustee, in whole or in part (and if in part, the Series J 2005 Bonds to be redeemed shall be selected by lot as determined and drawn by the Trustee), at a redemption price equal to the principal amount of Series J 2005 Bonds being redeemed, plus accrued interest to the redemption date, without premium.

**Mandatory Sinking Fund Redemption**

The Series J 2005 Bonds are subject to mandatory sinking fund redemption prior to maturity at a redemption price equal to 100% of the principal amount thereof, together with interest accrued on such Series J 2005 Bonds to the date fixed for redemption but without premium, on November 15 of the years and in the principal amounts as set forth in the maturity schedule below.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 1. SERIES J 2005 BONDS OUTSTANDING (CONTINUED)**

<u>Year Due</u> <u>(December 1)</u>	<u>Interest</u> <u>Rate</u>	<u>Original</u> <u>Issue</u>	<u>Redeemed</u>	<u>Outstanding</u> <u>June 30, 2017</u>
2006	variable	\$ 175,000	\$ 175,000	\$ -
2007	variable	325,000	325,000	-
2008	variable	275,000	275,000	-
2009	variable	450,000	450,000	-
2010	variable	375,000	375,000	-
2011	variable	550,000	550,000	-
2012	variable	575,000	575,000	-
2013	variable	550,000	550,000	-
2014	variable	675,000	675,000	-
2015	variable	600,000	600,000	-
2016	variable	725,000	725,000	-
2017	variable	675,000	-	675,000
2018	variable	775,000	-	775,000
2019	variable	800,000	-	800,000
2020	variable	775,000	-	775,000
2021	variable	875,000	-	875,000
2022	variable	850,000	-	850,000
2023	variable	950,000	-	950,000
2024	variable	925,000	-	925,000
2025	variable	1,025,000	-	1,025,000
2026	variable	1,025,000	-	1,025,000
2027	variable	1,125,000	-	1,125,000
2028	variable	1,150,000	-	1,150,000
2029	variable	1,175,000	-	1,175,000
2030	variable	1,250,000	-	1,250,000
2031	variable	1,300,000	-	1,300,000
2032	variable	1,375,000	-	1,375,000
2033	variable	1,400,000	-	1,400,000
2034	variable	1,475,000	-	1,475,000
2035	variable	<u>1,550,000</u>	-	<u>1,550,000</u>
TOTALS		<u>\$ 25,750,000</u>	<u>\$ 5,275,000</u>	<u>\$ 20,475,000</u>

**Additional Pledged Revenues**

In connection with the issuance of the Series J 2005 Bonds, the Net Pledged Revenues available for debt service include a Student Facilities Enhancement Fee until the Series J 2005 Bonds are paid and discharged, Student Union Building Fees which may be released after June 30, 2015, so long as the rate maintenance test under the Indenture has been met for three consecutive fiscal years without including such Student Union Building Fees revenues; payments by the Counterparty pursuant to an Interest Rate Agreement relating to any Series of Bonds; and capitalized interest and earnings on certain funds created under the Indenture.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 1. SERIES J 2005 BONDS OUTSTANDING (CONTINUED)**

**2008 Remarketing of Series J 2005 Bonds**

On September 11, 2008, the University remarketed its Series J 2005 bonds as Variable Rate Demand Bonds in the Daily Mode, whereas they had previously been marketed as Municipal Auction Rate Securities in the weekly mode. The bonds were remarketed without bond insurance, because variable rate instruments backed by a direct-pay letter of credit were trading at more attractive rates from the bond issuer's perspective, which is a result of the insurer's downgrading and general market conditions. The University entered into a Letter of Credit and Reimbursement Agreement with Wachovia Bank, NA (Wachovia), for a term of two years, in which Wachovia assumes a direct-pay responsibility for the bonds. Wachovia was subsequently acquired by Wells Fargo.

**2010 Remarketing of Series J 2005 Bonds**

Because the Wachovia letter of credit was scheduled to terminate in September of 2010, the University sought pricing on a renewed letter of credit as well as a direct-placement transaction. After reviewing several options, the University selected the direct-placement transaction, and on September 10, 2010, amended its bond indenture to permit issuance of the Series J bonds in the indexed floater mode, and re-issued the bonds in whole to Wells Fargo Bank. In place of a letter of credit fee, the University now pays Wells Fargo Bank a pre-determined basis point spread over and above the SIFMA weekly indexed rate.

**2013 Series 2005J Direct Purchase Agreement**

In September 2013, the University entered into a 5-year renewal of its direct purchase agreement with Wells Fargo Bank, relative to the Series J 2005 bonds, at a rate of .65% above SIFMA, representing a 0.15% decrease in the previous interest rate.

**NOTE 2. SERIES K 2006 BONDS OUTSTANDING**

**Project**

The proceeds were used to:

- 1) Refund portions of the Series E 1998 and Series D 1996 debt and resulted in an economic gain of \$510,293;
- 2) Pay costs associated with bond issuance, including the premium for the bond insurance policy.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 2. SERIES K 2006 BONDS OUTSTANDING (CONTINUED)**

**Description of Issue**

Proceeds of the Series K 2006 Bonds (net of costs of issuance) were deposited into the Escrow Account created pursuant to the Escrow Agreement dated as of August 15, 2006 (the “Escrow Agreement”) between the Board and U.S. Bank National Association (the Escrow Agent). This series is an original issue of \$13,705,000 including \$2,580,000 for the MSU Billings campus and \$11,125,000 for the MSU Bozeman campus of Facilities Refunding Serial Revenue Bonds dated August 17, 2006, consisting of fully registered Bonds in the domination of \$5,000 or any integral multiple thereof. Interest is paid on May 15 and November 15 of each year, commencing November 2006. Principal is payable November 15 each year, commencing November 2006 through November 2025. All bonds are unconditionally and irrevocably guaranteed by Ambac Insurance Corporation.

**Early Redemption**

Outstanding Series K 2006 Bonds with stated maturities on or after November 15, 2017 are subject to redemption prior to maturity, on any date occurring on or after November 15, 2016, at par, plus accrued interest to the redemption date, but without premium.

<u>Year Due (November 15)</u>	<u>Interest Rate</u>	<u>Original Issue</u>	<u>Redeemed</u>	<u>Outstanding June 30, 2017</u>
2006	4.000%	\$ 75,000	\$ 75,000	\$ -
2007	4.000%	80,000	80,000	-
2008	4.000%	125,000	125,000	-
2009	4.000%	530,000	530,000	-
2010	3.750%	550,000	550,000	-
2011	4.000%	570,000	570,000	-
2012	4.000%	590,000	590,000	-
2013	4.000%	620,000	620,000	-
2014	4.000%	645,000	645,000	-
2015	4.000%	675,000	675,000	-
2016	4.050%	705,000	705,000	-
2017	4.125%	1,420,000	-	1,420,000
2018	4.250%	1,480,000	-	1,480,000
2019	4.500%	1,550,000	-	1,550,000
2020	4.500%	1,620,000	-	1,620,000
2021	4.375%	1,700,000	-	1,700,000
2022	4.500%	180,000	-	180,000
2023	4.500%	190,000	-	190,000
2024	4.500%	195,000	-	195,000
2025	4.500%	205,000	-	205,000
<b>TOTALS</b>		<u>\$ 13,705,000</u>	<u>\$ 5,165,000</u>	<u>\$ 8,540,000</u>

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 3. SERIES M 2011 BONDS OUTSTANDING**

**Project**

The proceeds were used to:

- 1) Fund the construction of a new suite-style residence hall as well as renovate public spaces in two existing residence halls and perform energy efficiency improvements, which include window and lighting fixture replacement, on the Bozeman campus.
- 2) Pay costs associated with bond issuance.

**Description of Issue**

In October, 2011, the University issued \$14,100,000 in Series M 2011 Facilities Improvement Revenue Bonds to fund construction of a residence hall, renovate public spaces in existing residence halls, and perform energy efficiency improvements in existing residence halls. Payments are scheduled each May and November through November, 2027. The bonds are secured by a first lien on and pledge of net pledged revenues.

**Early Redemption**

The Series M 2011 Bonds maturing on and after November 15, 2022 are subject to optional redemption prior to maturity on any date on or after November 15, 2022, at a redemption price equal to the principal amount being redeemed, plus accrued interest to the redemption date, without premium.

<u>Year Due</u> <u>(November 15)</u>	<u>Interest</u> <u>Rate</u>	<u>Original</u> <u>Issue</u>	<u>Redeemed</u>	<u>Outstanding</u> <u>June 30, 2017</u>
2013	2.000%	\$ 75,000	\$ 75,000	\$ -
2014	2.000%	55,000	55,000	-
2015	2.000%	90,000	90,000	-
2016	2.000%	65,000	65,000	-
2017	2.250%	175,000	-	175,000
2018	2.500%	185,000	-	185,000
2019	3.000%	195,000	-	195,000
2020	3.000%	190,000	-	190,000
2021	3.000%	190,000	-	190,000
2022	5.000%	1,895,000	-	1,895,000
2023	5.000%	1,995,000	-	1,995,000
2024	5.000%	2,095,000	-	2,095,000
2025	5.000%	2,205,000	-	2,205,000
2026	3.750%	2,300,000	-	2,300,000
2027	4.000%	2,390,000	-	2,390,000
TOTALS		<u>\$ 14,100,000</u>	<u>\$ 285,000</u>	<u>\$ 13,815,000</u>

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 4. SERIES N AND O 2012 BONDS OUTSTANDING**

**Project**

Following is a description of these bond series:

- 1) Series N proceeds were used to refund Series H 2004 bonds outstanding in the amount of \$19,620,000 with stated maturity dates in 2015 through 2034, previously issued to fund construction of the chemistry/biochemistry research facility on the Bozeman campus. Series O Taxable Bonds were used to refund Series I bonds outstanding, in the amount of \$25,780,000 with stated maturity dates of 2015 through 2025. Series O proceeds in the amount of \$7,965,000 were allocated to the Billings campus and proceeds of \$20,400,000 were allocated to the Bozeman campus.
- 2) Pay costs associated with bond issuance.

**Description of Issue**

In November 2012, the University issued \$20,460,000 in Series N 2012 Facilities Refunding Revenue Bonds and \$28,365,000 in Series O 2012 Taxable Facilities Refunding Revenue Bonds. Payments are scheduled each May and November through November, 2034 for Series N and through November 2025 for Series O. The bonds are secured by a first lien on and pledge of net pledged revenues.

**Early Redemption**

The Series N 2012 Bonds maturing on and after November 15, 2023 are subject to optional redemption prior to maturity, on any date on or after November 15, 2022, in whole or in part, at a redemption price equal to the principal amount of Series N 2012 Bonds being redeemed, plus accrued interest to the redemption date, without premium.

The Series O 2012 Bonds maturing on November 15, 2025 are subject to optional redemption prior to maturity, at the option of the Board, on any date on or after November 15, 2021, in whole or in part, at a redemption price equal to the principal amount of Series O 2012 Bonds being redeemed, plus accrued interest to the redemption date, without premium.

**Mandatory Sinking Fund Redemption**

The Series N 2012 Bonds maturing on November 15, 2031 and 2034 are subject to redemption in part by operation of sinking fund installments, at a redemption price equal to 100% of the principal amount of the Series N 2012 Bonds to be redeemed, together with accrued interest to the date of redemption, beginning in November 2029.

The Series O 2012 Bonds maturing on November 15, 2025 shall be subject to redemption in part by operation of sinking fund installments, at a redemption price equal to 100% of the principal amount of the Series O 2012 Bonds to be redeemed, together with accrued interest to the date of redemption, beginning in November 2022.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 4. SERIES N AND O 2012 BONDS OUTSTANDING (CONTINUED)**

Following is a schedule of Series N outstanding bonds, interest rates and stated maturity dates:

<u>Year Due</u> <u>(November 15)</u>	<u>Interest</u> <u>Rate</u>	<u>Original</u> <u>Issue</u>	<u>Redeemed</u>	<u>Outstanding</u> <u>June 30, 2017</u>
2013	2.000%	\$ 75,000	\$ 75,000	\$ -
2014	2.000%	80,000	80,000	-
2015	4.000%	700,000	700,000	-
2016	3.000%	735,000	735,000	-
2017	3.000%	755,000	-	755,000
2018	4.000%	780,000	-	780,000
2019	4.000%	815,000	-	815,000
2020	4.000%	845,000	-	845,000
2021	4.000%	880,000	-	880,000
2022	4.000%	920,000	-	920,000
2023	4.000%	955,000	-	955,000
2024	4.000%	995,000	-	995,000
2025	4.000%	1,035,000	-	1,035,000
2026	2.750%	1,070,000	-	1,070,000
2027	3.000%	1,100,000	-	1,100,000
2028	3.000%	1,135,000	-	1,135,000
2029	3.000%	1,170,000	-	1,170,000
2030	3.000%	1,205,000	-	1,205,000
2031	3.000%	1,245,000	-	1,245,000
2032	3.125%	1,280,000	-	1,280,000
2033	3.125%	1,320,000	-	1,320,000
2034	3.125%	<u>1,365,000</u>	<u>-</u>	<u>1,365,000</u>
TOTALS		<u>\$ 20,460,000</u>	<u>\$ 1,590,000</u>	<u>\$ 18,870,000</u>

Following is a schedule of Series O outstanding bonds, interest rates and stated maturity dates:

<u>Year Due</u> <u>(November 15)</u>	<u>Interest</u> <u>Rate</u>	<u>Original</u> <u>Issue</u>	<u>Redeemed</u>	<u>Outstanding</u> <u>June 30, 2017</u>
2013	0.628%	\$ 460,000	\$ 460,000	\$ -
2014	0.886%	460,000	460,000	-
2015	1.142%	1,235,000	1,235,000	-
2016	1.451%	1,260,000	1,260,000	-
2017	1.701%	4,195,000	-	4,195,000
2018	2.057%	4,280,000	-	4,280,000
2019	2.207%	4,365,000	-	4,365,000
2020	2.490%	4,470,000	-	4,470,000
2021	2.690%	4,580,000	-	4,580,000
2022	3.090%	730,000	-	730,000
2023	3.090%	755,000	-	755,000
2024	3.090%	775,000	-	775,000
2025	3.090%	<u>800,000</u>	<u>-</u>	<u>800,000</u>
TOTALS		<u>\$ 28,365,000</u>	<u>\$ 3,415,000</u>	<u>\$ 24,950,000</u>



MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 5. SERIES A 2013 BONDS OUTSTANDING**

**Project**

The proceeds are being used to:

- 1) Fund the construction of a new 400 bed residence hall on the Bozeman campus, as well as renovate and expand the main dining hall, begin construction of a new dining hall, and fund major and deferred maintenance projects in two existing residence halls.
- 2) Pay costs associated with bond issuance.

**Description of Issue**

In December 2013, the University issued \$55,480,000 in Series A 2013 Facilities Improvement Revenue Bonds to fund construction of a new 400 bed residence hall, renovate three existing dining halls and to fund major maintenance projects on existing residence halls, all on the Bozeman campus. Payments are scheduled each May and November through November 2043. The bonds are secured by a first lien on and pledge of net pledged revenues.

**Early Redemption**

The Series A 2013 Bonds maturing on and after November 15, 2024 are subject to optional redemption prior to maturity on any date on or after November 15, 2023, at a redemption price equal to the principal amount being redeemed, plus accrued interest to the redemption date, without premium.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 5. SERIES A 2013 BONDS OUTSTANDING (CONTINUED)**

Following is a schedule of Series A outstanding bonds, interest rates and stated maturity dates:

<u>Year Due (November 15)</u>	<u>Interest Rate</u>	<u>Original Issue</u>	<u>Redeemed</u>	<u>Outstanding June 30, 2017</u>
2016	2.000%	\$ 1,025,000	\$ 1,025,000	\$ -
2017	3.000%	1,055,000	-	1,055,000
2018	4.000%	1,090,000	-	1,090,000
2019	4.000%	1,135,000	-	1,135,000
2020	4.000%	1,180,000	-	1,180,000
2021	4.000%	1,230,000	-	1,230,000
2022	4.000%	1,280,000	-	1,280,000
2023	4.000%	1,330,000	-	1,330,000
2024	5.000%	1,395,000	-	1,395,000
2025	5.000%	1,465,000	-	1,465,000
2026	5.000%	1,540,000	-	1,540,000
2027	5.000%	1,620,000	-	1,620,000
2028	5.000%	1,705,000	-	1,705,000
2029	5.000%	1,790,000	-	1,790,000
2030	5.000%	1,880,000	-	1,880,000
2031	5.000%	1,980,000	-	1,980,000
2032	5.000%	2,080,000	-	2,080,000
2033	5.000%	2,185,000	-	2,185,000
2034	4.500%	2,290,000	-	2,290,000
2035	4.500%	2,400,000	-	2,400,000
2036	4.500%	2,510,000	-	2,510,000
2037	4.500%	2,625,000	-	2,625,000
2038	4.500%	2,745,000	-	2,745,000
2039	5.000%	2,880,000	-	2,880,000
2040	5.000%	3,025,000	-	3,025,000
2041	5.000%	3,180,000	-	3,180,000
2042	5.000%	3,345,000	-	3,345,000
2043	5.000%	<u>3,515,000</u>	-	<u>3,515,000</u>
TOTALS		<u>\$ 55,480,000</u>	<u>\$ 1,025,000</u>	<u>\$ 54,455,000</u>

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 6. SERIES B 2014 BONDS OUTSTANDING**

**Project**

The proceeds were used to bridge fund construction of a new gift-funded academic building on the Bozeman campus. A total of approximately \$19 million was expected for a new academic building. The donor provided \$10 million up front and is providing the remaining funds over an up to ten-year time period. The University borrowed the funds necessary to complete the building and debt service will be provided by the Montana State University Alumni Foundation as the gift is received from the donor.

**Description of Issue**

In January 2014, the University issued \$10,000,000 in Series B 2014 Facilities Improvement Revenue Bonds to fund the construction of a new academic building on the Bozeman campus. The bonds were a direct placement with Wells Fargo Bank. The bonds contain an index rate mode whereby the interest rate is reset periodically at SIFMA plus an applicable spread based on the term of the rate period. Payments are scheduled each January and will amortize over a 5-year term at the greater of: 1) a minimum of \$500,000 per year, or 2) 85% of pledge receipts, so long as there is no more than \$8,000,000 outstanding at the time the index floating rate mode matures. The bonds are secured by a first lien on and pledge of the net pledged revenues.

Following is a schedule of Series B outstanding bonds, interest rates and stated maturity dates, based on the University's fiscal year:

<u>Fiscal Year Due (January 31)</u>	<u>Interest Rate</u>	<u>Original Issue</u>	<u>Redeemed</u>	<u>Outstanding June 30, 2017</u>
2015	Variable	\$ 2,975,000	\$ 2,975,000	\$ -
2016	Variable	1,700,000	1,700,000	-
2017	Variable	1,615,000 *	1,615,000	-
2018	Variable	1,487,500 *	-	1,487,500
2019	Variable	<u>2,222,500</u>	-	<u>2,222,500</u>
TOTALS		<u>\$ 10,000,000</u>	<u>\$ 6,290,000</u>	<u>\$ 3,710,000</u>

\* Minimum of \$500,000.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 7. SERIES C 2016 BONDS OUTSTANDING**

**Project**

The proceeds are to be used to acquire a research building adjacent to the Bozeman campus, and to design, construct and equip a new parking structure and a new dining hall, both located on the Bozeman campus. Bond proceeds will also be used to fund the costs of issuance.

**Description of Issue**

In February 2016, the University closed on its Series C 2016 Facilities Improvement Revenue bonds. The bonds are draw-down bonds, which means that the \$16,455,000 total will be drawn as needed for the construction, subject to certain minimum draws, and with final draws required by February 2018. The bonds bear interest on the outstanding principal balance. The interest rate is set at 2.92% per year until the first reset date, which is November 24, 2031. Thereafter, the rate will be equal to the Wall Street Journal Prime Rate plus 1.00% and will be set each quarter, although the University intends to re-evaluate that arrangement in 2031. Payments are scheduled each May and November through November 2045. The bonds are secured by a first lien on and pledge of the net pledged revenues.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
NOTES TO CONSOLIDATED SCHEDULES OF REVENUE BONDS OUTSTANDING  
AND REDEMPTION REQUIREMENTS (CONTINUED)  
June 30, 2017

**NOTE 7. SERIES C 2016 BONDS OUTSTANDING (CONTINUED)**

Following is a schedule of Series C outstanding bonds, interest rates and stated maturity dates, based on the University's fiscal year, for only the proceeds drawn as of June 30, 2017. The final maturity schedule will be determined when all proceeds are drawn.

<u>Fiscal Year Due (January 31)</u>	<u>Interest Rate</u>	<u>Original Issue</u>	<u>Redeemed</u>	<u>Outstanding June 30, 2017</u>
2018	2.920%	\$ 249,201	\$ -	\$ 249,201
2019	2.920%	256,531	-	256,531
2020	2.920%	264,076	-	264,076
2021	2.920%	271,843	-	271,843
2022	2.920%	279,839	-	279,839
2023	2.920%	288,070	-	288,070
2024	2.920%	296,543	-	296,543
2025	2.920%	305,265	-	305,265
2026	2.920%	314,244	-	314,244
2027	2.920%	323,487	-	323,487
2028	2.920%	333,002	-	333,002
2029	2.920%	342,796	-	342,796
2030	2.920%	352,879	-	352,879
2031	2.920%	363,258	-	363,258
2032	2.920%	373,943	-	373,943
2033	2.920%	384,942	-	384,942
2034	2.920%	396,264	-	396,264
2035	2.920%	407,920	-	407,920
2036	2.920%	419,918	-	419,918
2037	2.920%	432,269	-	432,269
2038	2.920%	444,983	-	444,983
2039	2.920%	458,072	-	458,072
2040	2.920%	471,545	-	471,545
2041	2.920%	485,415	-	485,415
2042	2.920%	499,692	-	499,692
2043	2.920%	514,390	-	514,390
2044	2.920%	529,519	-	529,519
2045	2.920%	<u>395,094</u>	<u>-</u>	<u>395,094</u>
<b>TOTALS</b>		<b><u>\$ 10,455,000</u></b>	<b><u>\$ -</u></b>	<b><u>\$ 10,455,000</u></b>

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF HOUSING STATISTICS  
June 30, 2017

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
<b>Bozeman Campus</b>					
Rooms Available	2,057	2,145	2,145	2,209	2,429
Rooms Occupied	1,992	2,068	2,063	2,127	2,364
Percent Room Occupancy	97%	96%	96%	96%	97%
Average Number of Occupants	3,196	3,330	3,452	3,516	3,986
Average Number of Occupants per Room	1.60	1.61	1.61	1.66	1.69
Family and Graduate Housing					
Average Capacity	563	574	560	541	540
Average Occupancy	512	529	518	502	505
Average Occupancy %	91%	92%	93%	93%	94%
<b>Billings Campus</b>					
Rooms Available	390	390	390	390	390
Rooms Occupied	349	328	315	326	300
Percent Room Occupancy	89%	84%	81%	84%	77%
Average Number of Occupants	544	535	462	438	405
Average Number of Occupants per Room	1.56	1.63	1.47	1.34	1.35
<b>Northern Campus</b>					
Rooms Available	193	193	198	196	190
Rooms Occupied	163	172	192	180	174
Percent Room Occupancy	84%	89%	97%	92%	92%
Average Number of Occupants	209	222	261	269	267
Average Number of Occupants per Room	1.28	1.29	1.36	1.49	1.53
Family and Graduate Housing					
Average Capacity	45	43	45	45	45
Average Occupancy	43	39	37	42	42
Average Occupancy %	96%	91%	82%	93%	93%

The following family and graduate student apartments were converted to undergraduate housing on the Bozeman campus due to overflow needs:

	<u>Units Converted</u>
2012	62
2013	64
2014	64
2015	80
2016	96
2017	96

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF STUDENT FEES  
June 30, 2017 and 2016

	<u>2017</u>	<u>2016</u>
Building Fee	\$ 2,443,731	\$ 2,385,638
Nonresident Building Fee	1,611,561	1,249,824
Physical Education Complex Fee	558,243	528,422
Student Union O&M/other Fees	1,649,427	1,551,815
Academic Building Renewal & Replacement Fee	488,334	390,232
Health and Physical Education Weight Room O&M Fee	13,333	12,625
Fieldhouse Fee	244,212	231,167
Student Facilities Enhancement Project Fee	<u>1,629,645</u>	<u>1,556,276</u>
Sub-total Building Fees	8,638,486	7,905,999
Student Athletic Fee	<u>1,983,584</u>	<u>1,859,581</u>
Total Fees	<u>\$10,622,070</u>	<u>\$ 9,765,580</u>

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF ENROLLMENT TRENDS  
For June 30, 2017

Full-Time Equivalent by Campus, Fall Semester:

	<u>Bozeman</u>	<u>Billings</u>	<u>Northern</u>	<u>Total</u>
2016:				
Resident	9,123	2,909	881	12,913
Nonresident	<u>5,680</u>	<u>377</u>	<u>182</u>	<u>6,239</u>
Total 2016	<u><u>14,803</u></u>	<u><u>3,286</u></u>	<u><u>1,062</u></u>	<u><u>19,151</u></u>
2015:				
Resident	8,706	3,052	862	12,620
Nonresident	<u>5,109</u>	<u>432</u>	<u>164</u>	<u>5,705</u>
Total 2015	<u><u>13,815</u></u>	<u><u>3,484</u></u>	<u><u>1,026</u></u>	<u><u>18,325</u></u>
2014:				
Resident	8,638	3,314	892	12,844
Nonresident	<u>4,818</u>	<u>510</u>	<u>147</u>	<u>5,475</u>
Total 2014	<u><u>13,456</u></u>	<u><u>3,824</u></u>	<u><u>1,039</u></u>	<u><u>18,319</u></u>
2013:				
Resident	8,793	3,497	942	13,232
Nonresident	<u>4,509</u>	<u>515</u>	<u>139</u>	<u>5,163</u>
Total 2013	<u><u>13,302</u></u>	<u><u>4,012</u></u>	<u><u>1,081</u></u>	<u><u>18,395</u></u>
2012:				
Resident	8,611	3,593	924	13,128
Nonresident	<u>4,143</u>	<u>500</u>	<u>135</u>	<u>4,778</u>
Total 2012	<u><u>12,754</u></u>	<u><u>4,093</u></u>	<u><u>1,059</u></u>	<u><u>17,906</u></u>



MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF ENROLLMENT TRENDS (CONTINUED)  
For June 30, 2017

15<sup>th</sup> Class Day Census Headcount, Fall Semester:

	<u>Bozeman</u>	<u>Billings</u>	<u>Northern</u>	<u>Total</u>
2016:				
Resident	10,122	3,939	1,049	15,110
Nonresident	<u>6,318</u>	<u>427</u>	<u>183</u>	<u>6,928</u>
Total 2016	<u><u>16,440</u></u>	<u><u>4,366</u></u>	<u><u>1,232</u></u>	<u><u>22,038</u></u>
2015:				
Resident	8,651	3,941	1,066	13,658
Nonresident	<u>7,037</u>	<u>488</u>	<u>168</u>	<u>7,693</u>
Total 2015	<u><u>15,688</u></u>	<u><u>4,429</u></u>	<u><u>1,234</u></u>	<u><u>21,351</u></u>
2014:				
Resident	8,846	4,218	1,097	14,161
Nonresident	<u>6,575</u>	<u>563</u>	<u>148</u>	<u>7,286</u>
Total 2014	<u><u>15,421</u></u>	<u><u>4,781</u></u>	<u><u>1,245</u></u>	<u><u>21,447</u></u>
2013:				
Resident	9,024	4,379	1,188	14,591
Nonresident	<u>6,270</u>	<u>590</u>	<u>146</u>	<u>7,006</u>
Total 2013	<u><u>15,294</u></u>	<u><u>4,969</u></u>	<u><u>1,334</u></u>	<u><u>21,597</u></u>
2012:				
Resident	9,836	4,516	1,141	15,493
Nonresident	<u>4,824</u>	<u>565</u>	<u>141</u>	<u>5,530</u>
Total 2012	<u><u>14,660</u></u>	<u><u>5,081</u></u>	<u><u>1,282</u></u>	<u><u>21,023</u></u>

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF LAND GRANT INCOME AND STATE  
APPROPRIATIONS  
June 30, 2017

***Land Grant Income***

Land Grant income is derived from lands granted by Congress in 1881 to the State (then the Territory) of Montana for the benefit of the State's universities and colleges. The land so granted has been allocated and dedicated to each of the units of the University System by the State Legislature and the income from each unit's allocated land is dedicated to the support of each such unit. Montana State University-Billings has been allocated 31,727 acres; Montana State University-Bozeman has been allocated a total of 140,000 acres. The Land Grant income is derived from two principal sources: (i) leases of trust land (consisting of grazing leases, agricultural leases, oil and gas leases, and recreational leases) and (ii) royalties received from timber harvesting, oil and gas extraction and mining on the land.

***State Appropriations and Mil Levy Funding***

**Total State Appropriations <sup>(1)</sup> to University  
Fiscal Years Ended June 30**

Fiscal Year	MSU Bozeman	MSU Billings	MSU Northern	Great Falls College MSU	Montana Extension & Agricultural Research Centers	Total
2013	\$ 46,979,055	\$ 19,569,809	\$ 9,100,500	\$ 6,124,436	\$ 19,216,874	\$ 100,990,674
2014	\$ 52,409,004	\$ 20,580,150	\$ 10,166,240	\$ 6,941,133	\$ 20,355,283	\$ 110,451,810
2015	\$ 56,538,513	\$ 22,197,045	\$ 10,462,946	\$ 7,369,367	\$ 21,178,965	\$ 117,746,836
2016 <sup>(2)</sup>	\$ 61,729,762	\$ 22,947,180	\$ 11,088,141	\$ 7,673,111	\$ 23,120,167	\$ 126,558,361
2017 <sup>(2)</sup>	\$ 59,383,528	\$ 22,856,690	\$ 11,594,453	\$ 7,673,111	\$ 22,989,437	\$ 124,497,219

(1) Excludes tuition and fees.

(2) Excludes specially allocated research funding (MREDI).

State law authorizes the University to carry-forward unexpended appropriations into the following fiscal year of a biennium. There are no pledged revenues or Bond Debt at the Great Falls campus or the Extension and Agricultural Research Centers.

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF EMPLOYEES  
June 30, 2017 with Comparative Totals for 2016

Fall 2016 and 2015 employment statistics on a head count basis for Montana State University campuses with bonded indebtedness were as follows:

	Fall 2016				Fall 2015
	Bozeman	Billings	Northern	Total	Total
Faculty/professional	2,153	446	155	2,754	2,734
State classified system	1,277	199	73	1,549	1,432
Temporary hourly	250	81	55	386	3,177
Graduate/other students	<u>3,074</u>	<u>275</u>	<u>142</u>	<u>3,491</u>	<u>701</u>
Total	<u><u>6,754</u></u>	<u><u>1,001</u></u>	<u><u>425</u></u>	<u><u>8,180</u></u>	<u><u>8,044</u></u>

**OTHER INFORMATION**

MONTANA STATE UNIVERSITY  
CONSOLIDATED REVENUE BOND AUDIT  
CONSOLIDATED SCHEDULE OF UNIVERSITY REVENUES, EXPENSES AND CHANGES IN  
NET POSITION  
Year Ended June 30, 2017

	2017 <u>(unaudited)</u>
<b>OPERATING REVENUES</b>	
Tuition and fees (net of \$34,346,316 scholarship discount)	\$ 181,933,705
Federal appropriations	5,860,596
Federal grants and contracts	74,672,167
State grants and contracts	7,257,655
Non-governmental grants and contracts	11,561,030
Grant and contract facilities and administrative cost recoveries	18,062,102
Educational, public service and outreach revenues	26,850,358
Auxiliary revenues:	
Housing (net of \$3,286,811 scholarship discount)	24,026,866
Food services (net of \$3,321,901 scholarship discount)	23,788,858
Other auxiliary sales and services (net of \$500,688 scholarship discount)	9,376,844
Interest earned on loans	36,814
Other operating revenues	<u>2,444,475</u>
<b>Total operating revenues</b>	<u>385,871,470</u>
 <b>OPERATING EXPENSES</b>	
Compensation and benefits, including pension (Note 15)	336,673,509
OPEB expense (Note 15)	5,455,285
Operating expenses (Note 14)	159,748,355
Scholarships and fellowships (net of \$41,455,716 scholarship discount)	23,720,757
Depreciation and amortization	<u>34,561,290</u>
<b>Total operating expenses</b>	<u>560,159,196</u>
<b>Operating loss</b>	<u>(174,287,726)</u>
 <b>NONOPERATING REVENUES (EXPENSES)</b>	
State and local appropriations	134,669,273
Federal Pell grant revenue	24,431,509
Land grant income (pledged as security for repayment of bonds)	2,407,245
Gifts (expendable)	18,350,603
Investment income	2,066,392
Interest expense	<u>(4,371,340)</u>
<b>Net nonoperating revenues (expenses)</b>	<u>177,553,682</u>
<b>Income before other revenues, expenses, gains and losses</b>	3,265,956
Loss on disposals of capital assets	(887,981)
Additions to permanent endowment	15,837
Capital gifts, grants and contributions	<u>25,840,914</u>
<b>Change in net position</b>	<u>28,234,726</u>
 Net position, beginning of year	<u>335,168,926</u>
 <b>Net position, end of year</b>	<u>\$ 363,403,652</u>

**SECTION II: COMPLIANCE EXAMINATION**

## REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

Board of Regents of Higher Education  
of Montana State University  
Helena, Montana

We have examined management's assertion that Montana State University (the University) is in compliance with the requirements of the 1993 Master Indenture as amended and restated, and as presented in the accompanying schedules, as of June 30, 2017 and 2016. The University's management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion about the University's compliance based on our examinations.

Our examination was conducted in accordance with the attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion. The nature, timing and extent of the procedures selected depend on our judgement, including an assessment of the risks of material misstatement of management's assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

In our opinion, management's assertion that Montana State University complied with the requirements referred to above as of June 30, 2017 and 2016 is fairly stated, in all material respects.



Butte, Montana  
January 8, 2018

MONTANA STATE UNIVERSITY  
CONSOLIDATED BOND COMPLIANCE EXAMINATION  
CONSOLIDATED SCHEDULE OF REQUIREMENTS AND RATIO COMPUTATION  
June 30, 2017 and 2016

	Year Ended June 30,	
	2017	2016
<b>Distribution of Net Pledged Revenues</b>		
Revenue funds	\$ 36,874,292	\$ 31,808,416
Debt Service fund	1,855,843	2,009,110
Renewal and Replacement fund	9,572	5,879
Construction and Equipment fund	31,027	127,782
Total distribution	<u>\$ 38,770,734</u>	<u>\$ 33,951,187</u>
<b>Earnings Requirement Prior to G&amp;A Recharges</b>		
Actual	\$ 38,770,734	\$ 33,951,187
Required current year debt service	(15,812,588)	(14,685,248)
Excess	<u>\$ 22,958,146</u>	<u>\$ 19,265,939</u>
<b>Coverage Ratio Prior to G&amp;A Recharges</b>	<u>2.45</u>	<u>2.31</u>
<b>Earnings Requirement After G&amp;A Recharges</b>		
Actual	\$ 35,894,398	\$ 31,376,246
Required current year debt service	(15,812,588)	(14,685,248)
Excess	<u>\$ 20,081,810</u>	<u>\$ 16,690,998</u>
<b>Coverage Ratio</b>	<u>2.27</u>	<u>2.14</u>

See Accompanying Notes to Schedule.



MONTANA STATE UNIVERSITY  
CONSOLIDATED BOND COMPLIANCE EXAMINATION  
NOTES TO CONSOLIDATED SCHEDULE OF REQUIREMENTS  
AND RATIO COMPUTATION  
June 30, 2017 and 2016

**NOTE 1. EARNINGS REQUIREMENT**

Section 6.01 of the Indenture specifies that the application of the annual net pledged revenues shall be sufficient to provide debt service coverage and to provide, when necessary, for the annual repair and replacement deposit. The earnings requirement for the years ended June 30, 2017 and 2016 under this provision is computed as follows:

	<u>2017</u>	<u>2016</u>
Annual debt service	\$ 15,812,588	\$ 14,685,248
Debt service reserve	-	-
Repair and replacement deposit	<u>-</u>	<u>-</u>
Total earnings requirement	<u>\$ 15,812,588</u>	<u>\$ 14,685,248</u>

Annual debt service for purposes of this calculation consists of actual cash payments for bond principal and interest expense. The balance per this schedule reconciles to principal and interest payments per the Consolidated Schedule of Pledged Fund Activity as follows:

	<u>2017</u>	<u>2016</u>
Bond principal payments	\$ 9,735,000	\$ 8,470,000
Bond interest expense		
Per Schedule of Pledged Fund Activity	6,079,828	6,186,887
Change in accrued interest expense	<u>(2,240)</u>	<u>28,361</u>
Actual cash paid for interest	<u>6,077,588</u>	<u>6,215,248</u>
Earnings requirement, per this schedule	<u>\$ 15,812,588</u>	<u>\$ 14,685,248</u>

**NOTE 2. COVERAGE RATIO**

The coverage ratio is the ratio of net revenues available for debt service for the fiscal year to the required principal and interest due during the fiscal year.

MONTANA STATE UNIVERSITY  
CONSOLIDATED BOND COMPLIANCE EXAMINATION  
NOTES TO CONSOLIDATED SCHEDULE OF REQUIREMENTS  
AND RATIO COMPUTATION (CONTINUED)  
June 30, 2017 and 2016

**NOTE 3. AVERAGE ANNUAL DEBT SERVICE**

	Scheduled Outstanding Debt Service		Years Remaining	Average Annual Debt Service
Series J 2005	\$ 29,190,233	*	19	\$ 1,536,328
Series K 2006	9,666,196		9	1,765,291
Series M 2011	18,599,556		11	1,690,869
Series N 2012	24,920,502		18	1,384,472
Series O 2012	26,967,978		9	4,741,600
Series A 2013	97,303,100		27	3,603,819
Series B 2014	3,785,884	**	2	1,892,942
Series C 2016	<u>15,542,224</u>		29	<u>535,939</u>
Total Scheduled Debt Service as of June 30, 2017	<u>\$ 225,975,673</u>			<u>\$ 17,151,260</u>

\* The Series J 2005 Revenue Bonds are variable rate instruments and the applicable interest rate was re-established periodically through June 30, 2017. The University has utilized the synthetic fixed rate of 3.953% for purposes of this calculation.

\*\* The Series B 2014 Revenue Bonds are variable. The June 30, 2017 rate of 1.56% was used for these calculations.

Additional calculations of average annual debt service, as defined in the indenture, would be required should the University wish to issue debt on parity with existing bonds.

**NOTE 4. REQUIRED MINIMUM FUND BALANCES**

**Revenue Fund**

The Indenture does not require a specific fund balance.

**Bond Fund**

The Indenture does not require a specific fund balance.

**Debt Service Reserve Fund**

Section 5.04 of the Indenture authorizes the University to fund the Debt Service Reserve required, equal to the Combined Average Annual Debt Service, through a surety bond issued and delivered by the Municipal Bond Insurance Association, as the bond insurer. The University procured such a surety bond on the date of the issuance delivery of the Series A 1993 bonds.

MONTANA STATE UNIVERSITY  
CONSOLIDATED BOND COMPLIANCE EXAMINATION  
NOTES TO CONSOLIDATED SCHEDULE OF REQUIREMENTS  
AND RATIO COMPUTATION (CONTINUED)  
June 30, 2017 and 2016

**NOTE 4. REQUIRED MINIMUM FUND BALANCES (CONTINUED)**

**Renewal and Replacement Fund**

Sections 1.01, 3.06 and 6.01 (d) of the Indenture specify a minimum level of \$1,500,000 as computed for all MSU campuses. However, in the event the amount is less than the requirement specified, deposits are to be made annually, by June 30, of amounts equal to not less than one-fifth of the difference then on deposit and the Repair and Replacement Reserve Requirement. Annual deposits are to be made until there is on deposit an amount equal to the Repair and Replacement Reserve Requirement for the bonds then outstanding. The required deposit as of June 30, 2017 under these provisions is zero, computed as follows:

Renewal and Replacement Reserve Requirement		\$ 2,150,000
Renewal and Replacement Reserve Funds on deposit:		
Bozeman	2,527,025	
Northern	214,246	
Billings	728,257	3,469,527
Excess (deficiency)		\$ 1,319,527
Annual Deposit Required (20% of any deficiency)		\$ -

MONTANA STATE UNIVERSITY  
CONSOLIDATED BOND COMPLIANCE EXAMINATION  
NOTES TO CONSOLIDATED SCHEDULE OF REQUIREMENTS  
AND RATIO COMPUTATION (CONTINUED)  
June 30, 2017 and 2016

**NOTE 4. REQUIRED MINIMUM FUND BALANCES (CONTINUED)**

**Construction Fund**

Sections 1.01 and 5.01 specify that the amount remaining, plus anticipated capitalized interest earnings, be sufficient to pay the cost of the project created or continuing under the Indenture. The required balance on June 30, 2017 under these provisions is computed as follows:

<u>Series</u>	<u>Total Project Cost, Including University Funding Sources</u>	<u>Project Cost To Be Funded With Bond Proceeds &amp; Bond Interest Earnings</u>	<u>Total Project Expenditures Through June 30, 2017</u>	<u>Project Balance To Be Funded With Bond Proceeds</u>	<u>Project Balance To Be Funded With Other Funding Sources</u>	<u>Balance of Unexpended &amp; Undrawn Bond Proceeds</u>
A - 2013	\$ 58,395,370	\$ 58,395,370	\$ 58,395,370	\$ -	\$ -	\$ -
C- 2016	<u>27,716,500</u>	<u>16,286,500</u>	<u>17,433,378</u>	<u>6,000,000</u>	<u>4,283,122</u>	<u>6,000,000</u>
	<u>\$ 86,111,870</u>	<u>\$ 74,681,870</u>	<u>\$ 75,828,748</u>	<u>\$ 6,000,000</u>	<u>\$ 4,283,122</u>	<u>\$ 6,000,000</u>



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