

\$58 Million Par Value Financing for Housing Construction and Related Bond Issue Costs

Debt service requirements will be met through the Housing and Dining system's current and future revenue streams, which have grown significantly due to occupancy that has already grown beyond the housing system's capacity.

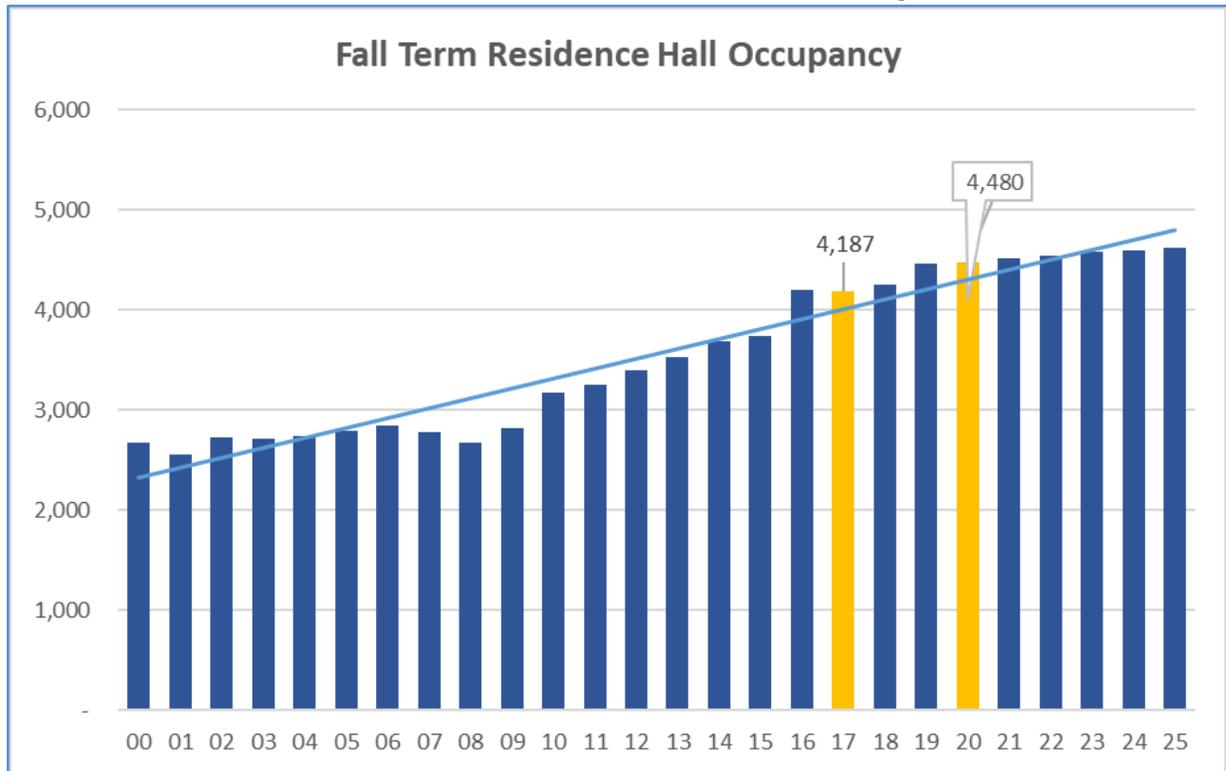
A. Revenue Expectations:

Current Revenues:

- Increased enrollment over the past several years has resulted in the Housing and Dining system generating funds in excess of recurring operating and debt service requirements.
- A significant portion of the revenue generated has been expended to update spaces, make improvements to infrastructure (including energy efficiencies and wireless communications), and to make other improvements that ensure the accommodations operate efficiently and generate a healthy net revenue stream.
- These projects accounted for approximately \$15.5 million in major maintenance expenditures from 2014 to 2017, or an average of nearly \$4 million in each of the past four years.
- Additionally, bond funds have been expended on the renovation of an existing dining hall and construction of a new dining hall; as such, the facilities are in very good condition. The renovated dining facilities have also proven popular with off-campus students, resulting in additional revenue for food operations.

Expectation of Continued Strong Revenues:

- Demand for housing is expected to remain strong, partially because the modern, well-maintained facilities are attractive to students. Funds generated by increased revenues have been spent on projects that ensure facilities are attractive and in good working order, and that furnishings and other equipment, including loftable beds, are modern and up to date.
- Because significant improvements have now been completed, major maintenance projects are not expected to require as much attention in the next several years. As a result, funds can now be directed towards increased debt service.
- University enrollment has grown from 14,660 in Fall 2012 to 16,703 in Fall 2017, an increase of 14%.
- Residence hall occupancy has increased from 3,402 to 4,187 over the past 5 years, a 23% increase.
- Annual Housing and Dining revenues have increased from \$33 million to \$42 million, or 27%, from 2014 to 2017.



Recent additions to the Housing system have included 93 new beds available to upperclassmen in fall 2013 as a result of a new 72 bed suite-style residence hall, and restoration of 21 bed spaces in historic Atkinson Hall Quad F. Additionally, 436 new beds were available beginning in Fall 2016 upon the opening of Yellowstone Hall. Though this hall was planned for 400 beds, lounges were converted to residences to accommodate additional students.

Even with the new spaces, room for growth and desired occupancy “flex” in the housing system has been exhausted due to housing demand. To accommodate, management has made several adjustments to its operations:

- As of Fall 2017, 86 rooms had been converted from single- to double-occupancy in Johnstone center, leaving only 83 remaining doubles-as-singles in the housing inventory; of these, 80 have been allocated to upperclassmen, and there is not sufficient space to accommodate any such requests from freshmen.
- 298 freshmen have been placed in 95 Family & Graduate Housing units
- 167 students have been placed either in visitor apartments or lounge areas converted to student living spaces

When a new 480-bed (approx.) unit is constructed, the new facility is expected to take pressure off the campus housing enterprise and the Bozeman housing market as follows.

- The 167 beds in converted spaces will be re-located to the new facility, allowing residence hall occupants to reclaim former lounge and gathering space for a better living environment.
- Of the 298 freshmen in Family & Graduate Housing, approximately 120 will be re-located to the new facility. This will provide room for families and graduate students to re-occupy the units currently unavailable to them, generating additional revenue currently not captured and better serving our graduate student population in support of MSU's strategic initiatives.
- A small inventory of unassigned spaces is desired on opening day to provide for housing emergencies, late-enrolling students, re-assignment due to roommate conflicts, etc. At least 30 rooms (one per gender per building) is desirable, and will be reserved if there is sufficient space.

The Bozeman Housing Market continues to be robust with a very tight rental market, especially in the location and price range typically sought by the college student population. A majority of the construction for rental development is concentrated in the northwest area, away from campus; this contributes to traffic congestion within the primary travel corridors across the entire town.

A 500 bed private development targeting students adjacent to campus opened in fall 2015. The university captured a significant number of off campus meal plans utilizing Miller Dining Hall as the students' primary dining venue. An additional apartment complex has been approved for development southwest of campus. Two phases are planned, with 300+ beds expected to open late in 2018 and an additional 500+ in fall 2019, though the second phase is not yet under construction. Given the demand for housing throughout Bozeman, this private development as well as the proposed residence hall are complementary in meeting student needs.

B. Housing and Dining Finance Detail

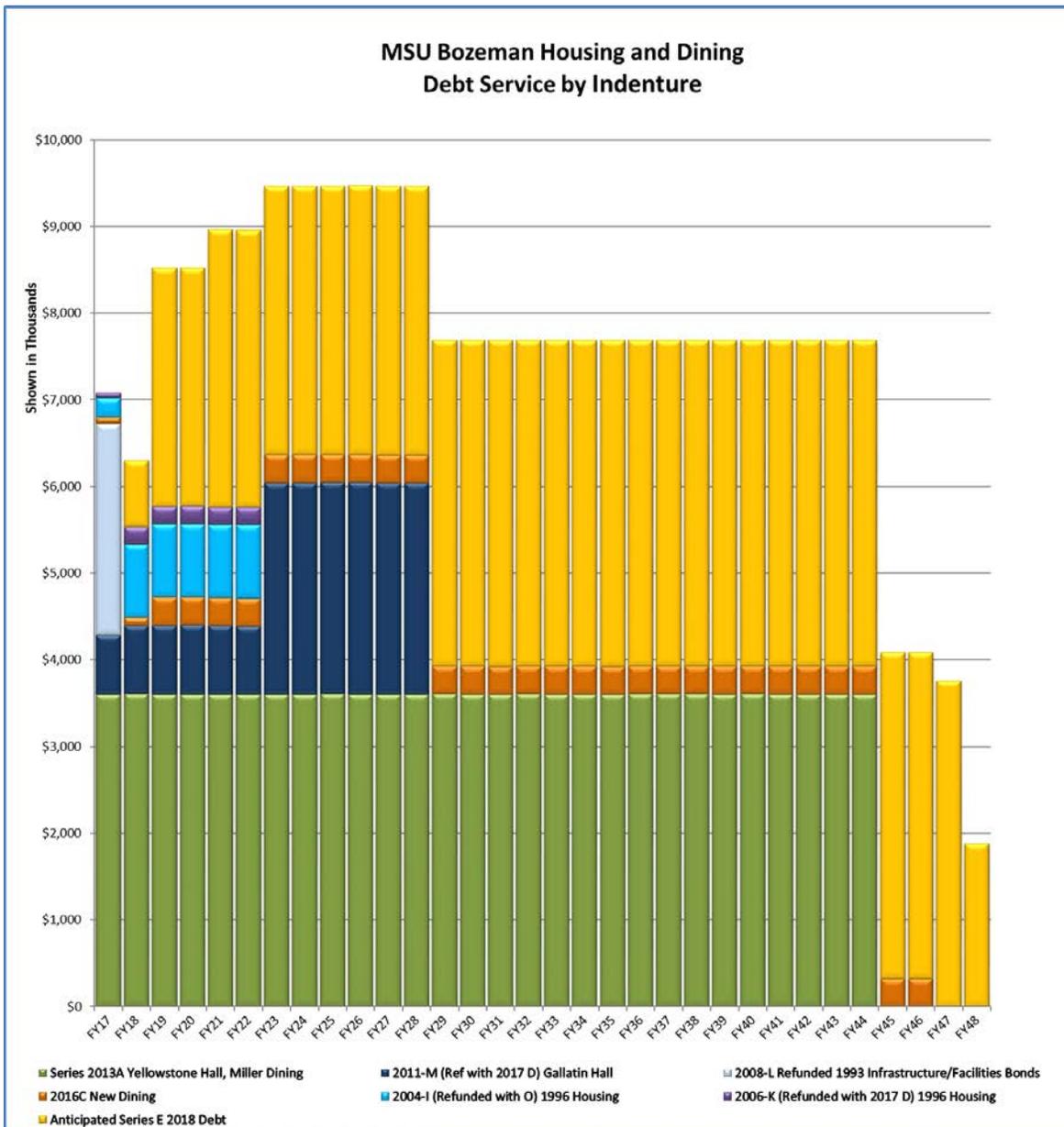
Net revenues have trended upward and are expected to continue doing so. Conservative revenue projections modeled below include enrollment increase assumptions ranging from 0.5% to 3% annually, and price increase assumptions ranging from 1.5% – 2% annually, depending on cost assumptions. Such projections result in cash flows that are sufficient to service additional debt as well as maintain facilities. Should a decline in enrollment and occupancy occur, operating costs would decrease; in addition, planned upgrades could be curtailed, yet still leave sufficient funds for critical maintenance projects and debt service.

Auxiliary Services
Combined FGH, ResLife/University Food Service
Projections

Account Description	2014 ACTUAL	% of Rev	2015 ACTUAL	% of Rev	2016 ACTUAL	% of Rev	2017 Actual	% of Rev	2018 ESTIMATE	Prct	2019 ESTIMATE	Prct	2020 ESTIMATE	Prct
Revenue	\$ 33,101,755		\$ 34,603,035		\$ 36,270,652		\$ 42,072,166		\$ 43,986,450		\$ 45,987,833		\$ 48,287,225	
Expenses	24,032,046	73%	24,757,281	72%	26,884,530	74%	29,841,525	71%	31,051,476	71%	32,627,577	71%	34,314,305	71%
Net Housing Revenue	\$ 9,069,708	27%	\$ 9,845,754	28%	\$ 9,386,122	26%	\$ 12,230,641	29%	\$ 12,934,974	29%	\$ 13,360,256	29%	\$ 13,972,920	29%
Debt Service	4,527,873	14%	5,857,492	17%	6,003,672	17%	6,995,618	17%	7,148,331	16%	8,658,181	19%	8,661,495	18%
Major Maintenance	4,184,259	13%	3,503,474	10%	3,107,646	9%	4,709,414	11%	5,000,000	11%	3,750,000	8%	4,400,000	9%
BOI Interacap debt	-		-		-		-		397,008	1%	327,694	1%	323,324	1%
Total capital and debt	8,712,132	26%	9,360,966	27%	9,111,318	25%	11,705,032	28%	12,545,339	29%	12,735,875	28%	13,384,819	28%
Net After Debt and Major Mtce	357,577	1%	484,788	1%	274,804	1%	525,609	1%	389,634	1%	624,381	1%	588,101	1%
Accumulated Fund Balance									\$ 389,634		\$ 1,014,015		\$ 1,602,116	
Occupancy			3,691		3,735		4,200		4,187		4,197		4,323	
Operating maintenance	2,143,403		2,493,933		2,221,273		2,506,368		2,606,623		2,710,888		2,887,096	
Operating maintenance plus major R&R funding	\$ 6,327,661		\$ 5,997,407		\$ 5,328,919		\$ 7,215,782		\$ 7,606,623		\$ 6,460,888		\$ 7,287,096	
Account Description	2021 ESTIMATE	Prct	2022 ESTIMATE	Prct	2023 ESTIMATE	Prct	2024 ESTIMATE	Prct	2025 ESTIMATE	Prct	2026 ESTIMATE	Prct	2027 ESTIMATE	Prct
Revenue	\$ 50,025,565		\$ 51,526,332		\$ 52,943,306		\$ 54,266,888		\$ 55,623,561		\$ 57,014,150		\$ 58,296,968	
Expenses	36,046,165	72%	37,337,663	72%	38,729,614	73%	39,753,852	75%	40,961,517	77%	42,232,632	80%	43,459,297	82%
Net Housing Revenue	\$ 13,979,400	28%	\$ 14,188,668	28%	\$ 14,213,691	27%	\$ 14,513,037	27%	\$ 14,662,043	28%	\$ 14,781,518	28%	\$ 14,837,671	28%
Debt Service	8,650,153	17%	8,647,461	17%	9,254,290	17%	9,254,840	17%	9,256,115	17%	9,257,115	17%	9,253,740	17%
Major Maintenance	4,400,000	9%	4,550,000	9%	4,000,000	8%	4,300,000	8%	4,450,000	8%	4,450,000	8%	4,750,000	9%
BOI Interacap debt	325,981	1%	323,324	1%	323,324	1%	323,324	1%	323,324	1%	323,324	1%	128,022	0%
Total capital and debt	13,376,134	27%	13,520,785	26%	13,577,614	26%	13,878,164	26%	14,029,439	26%	14,030,439	27%	14,131,762	27%
Net After Debt and Major Mtce	603,267	1%	667,884	1%	636,078	1%	634,873	1%	632,605	1%	751,079	1%	705,909	1%
Accumulated Fund Balance	\$ 2,205,383		\$ 2,873,267		\$ 3,509,344		\$ 4,144,217		\$ 4,776,822		\$ 5,527,901		\$ 6,233,810	
Occupancy	4,392		4,447		4,491		4,525		4,559		4,593		4,616	
Operating maintenance	3,002,579		3,092,657		3,200,900		3,312,931		3,420,602		3,540,323		3,646,532	
Operating maintenance plus major R&R funding	\$ 7,402,579		\$ 7,642,657		\$ 7,200,900		\$ 7,612,931		\$ 7,870,602		\$ 7,990,323		\$ 8,396,532	

Housing and Dining Debt Service Projections

Existing debt service for the housing and dining system is approximately \$6 million through 2028, then decreases significantly when debt that was issued in 2011 is retired. A relatively short debt horizon, in comparison with the size of the housing and dining operations, leaves capacity for additional debt. This short debt horizon, coupled with a substantial increase in revenues over the past several years, enables the University to take on additional debt for housing and dining projects. Debt commitments, as well as proposed new debt (shown in yellow) are shown in the following graph.



The anticipated Series E 2018 debt will result in an average of \$3.2 million in annual debt service through 2028, rising to \$3.9 million annually beginning in 2029f ., after certain existing debt, with annual debt service of \$2.1 million is repaid.

C. The Big Picture

All borrowings must be viewed in relation to the University's overall outstanding bond debt service. The information below summarizes all MSU campuses' pledged revenues and debt service historically, and demonstrates the ability to take on additional debt from a broad perspective while maintaining a healthy debt service coverage ratio of 2:1.

To present the most conservative picture possible, no additional housing revenues are assumed in the pro forma column, even though it is anticipated that additional revenues will be generated when the new residence hall opens.

Montana State University-- Bozeman, Billings, Northern						
Historical Net Pledged Revenues and Debt Service Coverage						
Fiscal Years Ended June 30						
	2013	2014	2015	2016	2017 (unaudited)	2017 (pro forma with additional debt)
Student Housing and Dining Revenues						
Residence Halls and Food Services	\$32,294,536	\$34,730,243	\$36,420,261	\$38,147,387	\$43,477,515	\$43,477,515
Family and Graduate Housing	4,097,206	4,200,439	4,131,548	4,077,121	4,148,435	4,148,435
Total:	<u>\$36,391,742</u>	<u>\$38,930,682</u>	<u>\$40,551,809</u>	<u>\$42,224,508</u>	<u>\$47,625,950</u>	<u>\$47,625,950</u>
Student Housing and Dining Operation and Maintenance Expenses						
Residence Halls and Food Services	\$23,275,116	\$24,860,828	\$24,893,536	\$27,967,611	\$32,183,758	\$32,183,758
Family and Graduate Housing	2,363,866	2,738,736	2,660,099	2,448,748	351,216	351,216
Total:	<u>\$25,638,982</u>	<u>\$27,599,564</u>	<u>\$27,553,635</u>	<u>\$30,416,359</u>	<u>\$32,534,974</u>	<u>\$32,534,974</u>
Net Student Housing and Dining Pledged Revenues	\$10,752,760	\$11,331,118	\$12,998,174	\$11,808,149	\$15,090,976	\$15,090,976
Other Pledged Revenues						
Gift revenue from the MSUAF	-	-	3,039,053	1,750,822	1,679,285	1,679,285
Other Revenue Facilities Pledged Revenues	2,243,790	2,592,313	2,650,762	2,747,622	2,997,601	2,997,601
Student Fee Revenues	8,449,487	9,016,393	9,406,659	9,765,580	10,623,680	10,623,680
Land Grant Income	1,931,797	3,375,355	3,572,401	2,113,539	2,407,245	2,407,245
Investment Income	462,917	678,902	777,720	603,510	610,254	610,254
Events Receipts	2,429,118	3,002,755	3,205,020	3,582,430	3,553,638	3,553,638
Museum Lease Income	300,000	300,000	300,000	300,000	-	-
Expenses	(42,608)	(114,568)	(97,576)	(107,125)	(101,251)	(101,251)
F&A Cost Recovery Payments	1,472,103	1,388,104	1,380,027	1,386,660	1,381,732	1,381,732
Net Pledged Revenues	<u>\$27,999,364</u>	<u>\$31,570,372</u>	<u>\$37,232,240</u>	<u>\$33,951,187</u>	<u>\$38,243,160</u>	<u>\$38,243,160</u>
Debt Service	\$10,151,070	\$11,345,541	\$15,964,296	\$14,685,248	\$15,886,466	\$19,086,466
Debt Service Coverage Ratio	2.76	2.78	2.33	2.31	2.41	2.00

The University's anticipated debt service schedule, assuming the additional proposed debt (shown in yellow), is as follows. This includes debt service from all projects for all four MSU campuses. Note that in 2023 certain existing debt is repaid, leaving capacity should additional borrowing be desired for future projects.

