

## Continuing Disclosure Annual Report 2017

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### CONTINUING DISCLOSURE APPLICABILITY

The following continuing disclosure information filed in December 2017 is in compliance with the provisions of Continuing Disclosure Agreements, as amended, into which Vanderbilt University (“Vanderbilt” or “University”) has entered in connection with certain debt financings, including those issued through The Health and Educational Facilities Board of The Metropolitan Government of Nashville and Davidson County, Tennessee. This information is filed in conjunction with Vanderbilt’s most recent audited annual financial report available at <http://finance.vanderbilt.edu/report/>

Through Digital Assurance Certification (“Dissemination Agent”), as successor in this role to US Bank and Wachovia Bank, National Association, Vanderbilt will file the audited consolidated financial statements of the University (“the University Audit”) with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access (“EMMA”). Through the Dissemination Agent, Vanderbilt also will file with EMMA other annual operating data set forth in the Continuing Disclosure Agreements.

Selected disclosure items may not apply to all Continuing Disclosure Agreements for all Vanderbilt bond issues. The following comprehensive disclosure is not necessarily precedent setting for subsequent years.

On April 29, 2016, Vanderbilt transferred to Vanderbilt University Medical Center (“VUMC”) the assets and operations related to the University’s medical center, including post-graduate training programs and clinical department research activities, in exchange for a cash purchase price and other consideration (“VUMC Transaction”). The University retained its medical education and academic activities and remains the degree-granting institution for the University’s School of Medicine, School of Nursing and clinical master’s programs. The University retains control of faculty affairs, graduate school PhD programs in the biomedical sciences, and research in basic science departments and related centers. VUMC is a separate, independent legal entity and is not under common governance with, or controlled by, the University, nor is the University financially responsible for VUMC indebtedness. A Notice of Defeasance and Redemption Plan of The Vanderbilt University was filed on EMMA on April 29, 2016. Vanderbilt University will no longer provide information related to the medical center assets in future continuing disclosures.



## ACADEMIC ENTERPRISE

### Academic Units

Vanderbilt's academic enterprise consists of 10 schools and colleges offering undergraduate, professional, and graduate degrees. All Doctor of Philosophy (Ph.D.) degrees, which are offered in more than 45 separate graduate programs, are conferred by the Graduate School. More than 93% of Vanderbilt's students are considered full-time students. The following table sets forth the fall 2017 student enrollment headcount distribution among Vanderbilt's 10 schools and colleges.

	<b>Undergraduate Students</b>	<b>Graduate and Professional Students</b>	<b>Total Students</b>
College of Arts and Science	4,038	- <sup>(1)</sup>	4,038
Graduate School	-	2,111	2,111
Peabody College of Education and Human Development	1,157	741	1,898
School of Engineering	1,463	26	1,489
School of Nursing	-	875	875
School of Medicine	-	615	615
Law School	-	625	625
Owen Graduate School of Management	-	568	568
Divinity School	-	184	184
Blair School of Music	210	-	210
Students in unclassified studies	17	-	17
Less: Students in multiple schools	-	(38)	(38)
Total enrollment headcount	<u>6,885</u>	<u>5,707</u>	<u>12,592</u>

(1) Master's degrees in the College of Arts and Science disciplines are administered through the Graduate School.

### Faculty and Staff

As of November 2017, Vanderbilt's administrative, teaching, and research faculty (including members of the schools of medicine and nursing) comprised 4,261 full-time faculty members consisting of 888 professors, 764 associate professors, 1,605 assistant professors, 815 instructors, 177 lecturers, and 12 faculty with other academic titles. Faculty data, including administrative, teaching, and research faculty, are listed below.

	<b>Fall 2017</b>	<b>Fall 2016</b>	<b>Fall 2015</b>	<b>Fall 2014</b>	<b>Fall 2013</b>
FTE faculty members	4,412	4,251	4,016	3,886	3,877
FTE tenured faculty members	909	907	882	891	893

After the VUMC Transaction, Vanderbilt continues to grant all faculty appointments, but a portion of its faculty are employees of VUMC rather than the University as part of the transfer of clinical services operations, post-graduate training programs, and clinical department research activities. As of November 2017 approximately 2,800 employees of VUMC held University faculty appointments.

In addition to faculty, Vanderbilt employs 3,898 full-time and 153 part-time employees in a regular status. In addition, Vanderbilt employs more than 600 temporary and term staff in varying capacities. Approximately 569 of Vanderbilt's staff in a regular status are service and maintenance employees who are represented by Local No. 386 of the Laborers' International Union of North America, AFL-CIO (the "Union"). Vanderbilt and the Union negotiated a new collective bargaining agreement ("CBA") effective for three years commencing on November 15, 2017, and expiring on November 15, 2020. Vanderbilt is functioning under an Affirmative Action Plan and is an Equal Opportunity Employer.



**Student Enrollment**

Consistent with Vanderbilt’s admission policy, enrollments have remained relatively stable during the past several years in Vanderbilt’s 10 schools and colleges. All schools and colleges continue to be highly selective in their acceptances, as applicants outnumber places available in each school and college.

Vanderbilt draws its student population from the entire United States and many foreign countries. About 67% of the undergraduate students are from outside the southern region of the United States, and 90% are from outside the State of Tennessee. The following table provides additional enrollment data for undergraduate freshmen.

	<b>Fall 2017</b>	<b>Fall 2016</b>	<b>Fall 2015</b>	<b>Fall 2014</b>	<b>Fall 2013</b>
<i>Undergraduate Freshmen</i>					
Applications received	31,462	32,442	31,464	29,518	31,099
Percentage accepted (selectivity)	11%	11%	12%	13%	13%
Percentage enrolled (yield)	47%	46%	44%	42%	41%

The following table provides total enrollment data for Vanderbilt.

	<b>Fall 2017</b>	<b>Fall 2016</b>	<b>Fall 2015</b>	<b>Fall 2014</b>	<b>Fall 2013</b>
<i>Enrollment Distribution</i>					
Undergraduate headcount	6,885	6,871	6,883	6,851	6,835
Graduate and professional headcount	5,707	5,716	5,684	5,835	5,922
Total enrollment headcount	12,592	12,587	12,567	12,686	12,757
Undergraduate FTE	6,832	6,835	6,842	6,802	6,788
Graduate and professional FTE	5,220	5,250	5,218	5,341	5,441
Total enrollment FTE	12,052	12,085	12,060	12,143	12,229

**Tuition and Fees**

Tuition rates for Vanderbilt’s undergraduate colleges have increased modestly each of the past five academic years. Tuition rates for professional and advanced degree programs differ among Vanderbilt’s schools and colleges. Undergraduate tuition rates and fees for each of the past five academic years were as follows:

	<b>2017-2018</b>	<b>2016-2017</b>	<b>2015-2016</b>	<b>2014-2015</b>	<b>2013-2014</b>
Undergraduate tuition	\$ 46,500	\$ 44,496	\$ 43,620	\$ 42,768	\$ 41,928
Undergraduate activity and recreation fees	\$ 1,164	\$ 1,114	\$ 1,092	\$ 1,070	\$ 1,050

Average undergraduate room and board charges for each of the past five academic years were as follows:

	<b>2017-2018</b>	<b>2016-2017</b>	<b>2015-2016</b>	<b>2014-2015</b>	<b>2013-2014</b>
Average room and board for undergraduates (includes 100% meals)	\$ 15,584	\$ 14,962	\$ 14,670	\$ 14,382	\$ 14,094



## Student Financial Aid

Vanderbilt provides financial aid to eligible students based upon documented financial need and/or merit to help cover their cost of attendance, including tuition, education fees, room, board, books and course materials, plus travel and acceptable miscellaneous expenses. This financial assistance is funded from/through institutional resources, gifts, endowment income, and various externally sponsored/funded (federal, state, and other third party) aid programs. Since the fall of 2009, need-based student financial aid packages awarded to eligible incoming and returning undergraduate students have not included any need-based loans. The amount of need-based loans that students would have been offered prior to the fall of 2009 to meet their full demonstrated financial need has been replaced each year with grant (gift) assistance funded by Vanderbilt and/or other sources while continuing to meet students' full demonstrated need.

Components of financial aid during each of the past five fiscal years were as follows:

	<i>Fiscal Year Ended June 30,</i>				
	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
	<i>(in thousands)</i>				
<i>Financial Aid</i>					
Institutional scholarships	\$ 200,856	\$ 189,554	\$ 188,547	\$ 187,100	\$ 178,039
Endowed scholarships	47,804	43,309	43,283	39,493	42,272
External financial aid	16,576	16,165	17,648	17,253	18,858
Total financial aid	<u>\$ 265,236</u>	<u>\$ 249,028</u>	<u>\$ 249,478</u>	<u>\$ 243,846</u>	<u>\$ 239,169</u>

Vanderbilt also continues to offer and participate in various other student financial aid programs, including the Federal Work-Study Program, the Federal Perkins Loan Program (previously named the National Direct Student Loan Program), the Federal Nursing Loan Program, the Federal Direct Student Loan Program, and the Federal Direct PLUS Programs. (The PLUS acronym refers to a program that initially was available only as a Parent Loan for Undergraduate Students, but subsequently was expanded to also allow graduate and professional students to borrow on their own behalf). Loans for education-related expenses are also available to eligible students through other public and private lending entities and programs, and a limited amount of loan funds is also available to eligible students through programs funded and administered by Vanderbilt.

## Research Activities and Programs

Sponsored research and project awards (research and project funding commitments that have not yet been expended and recognized as revenue by Vanderbilt), which include multiple-year grants and contracts from government sources, foundations, associations, and corporations, totaled \$230 million at the end of fiscal 2017. Government awards accounted for approximately 82% of the \$237 million in research and project grant and contract revenue realized in the fiscal year. Like other universities, Vanderbilt must continue to win research and project awards and contracts each year to sustain revenue from such sources. Vanderbilt's support from government awards to date has continued relatively unabated, despite pressures on federal funding.

Vanderbilt's research expenditures totaled \$237 million in fiscal 2017, including research-related facilities and administrative costs recovery and research funded by Vanderbilt (including cost sharing), but excluding allocations of institutional and other support costs.



## FINANCIAL INFORMATION

## Summary of Assets, Liabilities, and Net Assets

A summary of Vanderbilt's total assets, liabilities, and net assets (unrestricted, temporarily restricted, and permanently restricted) as of the end of the following fiscal years, derived from Vanderbilt's audited financial statements, were as follows (this information should be read in conjunction with the audited financial statements, along with the notes thereto):

	<i>As of June 30,</i>		
	<u>2017</u>	<u>2016</u>	<u>2015</u>
	<i>(in thousands)</i>		
<b>ASSETS</b>			
Cash and cash equivalents	\$ 935,446	\$ 963,001	\$ 866,981
Accounts receivable, net	146,931	130,259	36,949
Prepaid expenses and other assets	19,386	20,814	24,302
Contributions receivable, net	69,701	90,269	68,959
Promissory notes receivable	94,166	99,166	-
Student loans and other notes receivable, net	31,645	34,329	35,438
Investments	4,434,026	3,963,630	4,355,541
Investments allocable to noncontrolling interests	61,605	83,056	110,954
Property, plant, and equipment, net	1,019,893	943,984	881,487
Interests in trusts held by others	28,577	26,601	33,545
Assets held for sale <sup>(1)</sup>	-	-	1,857,028
<b>Total assets</b>	<b><u>\$ 6,841,376</u></b>	<b><u>\$ 6,355,109</u></b>	<b><u>\$ 8,271,184</u></b>
<b>LIABILITIES</b>			
Accounts payable and accrued liabilities	\$ 84,201	\$ 82,569	\$ 103,452
Accrued compensation and withholdings	84,955	80,044	106,745
Deferred revenue, actuarial liabilities, and government advances for student loans	109,842	111,440	115,854
Commercial paper	114,180	84,530	263,454
Long-term debt	260,030	223,755	971,415
Fair value of securities sold short	353,025	251,855	187,431
Fair value of interest rate exchange agreements, net	54,784	115,169	119,373
Liabilities held for sale <sup>(1)</sup>	-	-	428,451
<b>Total liabilities</b>	<b><u>\$ 1,061,017</u></b>	<b><u>\$ 949,362</u></b>	<b><u>\$ 2,296,175</u></b>
<b>NET ASSETS</b>			
Unrestricted net assets controlled by Vanderbilt	\$ 3,027,864	\$ 2,814,990	\$ 3,167,702
Unrestricted net assets related to noncontrolling interests	61,605	83,056	110,954
Total unrestricted net assets	\$ 3,089,469	\$ 2,898,046	\$ 3,278,656
Temporarily restricted net assets	1,365,694	1,224,134	1,461,162
Permanently restricted net assets	1,325,196	1,283,567	1,235,191
<b>Total net assets</b>	<b><u>\$ 5,780,359</u></b>	<b><u>\$ 5,405,747</u></b>	<b><u>\$ 5,975,009</u></b>
<b>Total liabilities and net assets</b>	<b><u>\$ 6,841,376</u></b>	<b><u>\$ 6,355,109</u></b>	<b><u>\$ 8,271,184</u></b>

- (1) The Summary of Assets, Liabilities, and Net Assets for fiscal years 2016 and 2015 show the effect of transferring healthcare operations including clinical services operations, post-graduate training programs, and clinical department research activities, along with related assets and liabilities, to VUMC effective April 29, 2016 through line items relating to assets and liabilities "held for sale." This presentation is consistent with the audited financial statements of the University for fiscal years 2016 and 2015, explained more fully in Note 20 to such financial statements, and allows a comparison of the retained assets and liabilities and ongoing operations of the University for those fiscal years.



## Summary of Revenues and Expenses

Detailed below is a summary of Vanderbilt's consolidated revenues and expenses. This summary has been derived from Vanderbilt's audited financial statements. Certain reclassifications have been made to prior year amounts to conform to current presentation format. Non-operating activity from unrestricted, temporarily restricted, and permanently restricted net asset categories are combined.

	<i>Fiscal Year Ended June 30,</i>		
	<u>2017</u>	<u>2016</u>	<u>2015</u>
	<i>(in thousands)</i>		
<b>OPERATING REVENUES</b>			
Tuition and educational fees, net	\$ 281,679	\$ 279,767	\$ 272,203
Government grants and contracts	155,446	147,980	150,760
Facilities and administrative costs recovery	57,489	55,426	54,610
Private gifts, grants, and contracts	51,064	48,505	45,143
Endowment distributions	96,060	105,132	86,369
Investment income	21,727	15,685	12,274
Trademark, license, and royalty revenue	113,165	22,831	8,386
Affiliated entity revenue	173,945	262,524	289,018
Room, board, and other auxiliary services, net	162,581	132,500	115,698
Other sources	45,216	39,689	31,635
Net assets released from restrictions	115,792	86,394	69,428
<b>Total operating revenues and other support</b>	<u>\$ 1,274,164</u>	<u>\$ 1,196,433</u>	<u>\$ 1,135,524</u>
<b>OPERATING EXPENSES</b>			
Salaries, wages, and benefits	\$ 645,805	\$ 643,886	\$ 628,626
Supplies, services, and other	440,022	369,473	368,850
Interest expense	14,618	14,839	16,769
Depreciation	81,331	76,909	74,478
Grants to affiliates	22,396	24,446	24,815
Total operating expenses	<u>\$ 1,204,172</u>	<u>\$ 1,129,553</u>	<u>\$ 1,113,538</u>
<b>Change in unrestricted net assets from operating activity</b>	<b>\$ 69,992</b>	<b>\$ 66,880</b>	<b>\$ 21,986</b>
<b>OTHER CHANGES IN NET ASSETS</b>			
Change in appreciation of interest rate exchange agreements, unrestricted	32,287	(41,408)	(27,728)
Debt defeasance cost, unrestricted <sup>(1)</sup>	(6,059)	(76,599)	-
Other non-operating activity, unrestricted	116,654	(169,278)	(309)
<b>Total unrestricted other changes in net assets</b>	<u>\$ 142,882</u>	<u>(287,285)</u>	<u>(28,037)</u>
Increase (decrease) in net assets, unrestricted	\$ 212,874	\$ (220,405)	\$ (6,051)
Increase (decrease) in net assets, temporarily restricted	141,560	(205,156)	5,686
Increase (decrease) in net assets, permanently restricted	41,629	54,797	39,043
<b>Increase (decrease) in net assets from continuing operations</b>	<b>\$ 396,063</b>	<b>\$ (370,764)</b>	<b>\$ 38,678</b>
Income (loss) on discontinued operations <sup>(1)</sup>	-	(170,600)	131,698
Decrease in net assets related to noncontrolling interests	(21,451)	(27,898)	(39,113)
<b>Total change in net assets</b>	<u><b>\$ 374,612</b></u>	<u><b>\$ (569,262)</b></u>	<u><b>\$ 131,263</b></u>

(1) The Summary of Revenues and Expenses for fiscal years 2016 and 2015 shows the effect of transferring healthcare operations including clinical services operations, post-graduate training programs, and clinical department research activities, along with related assets and liabilities, to VUMC effective April 29, 2016 through line items relating to "discontinued operations." This presentation is consistent with the audited financial statements of the University for fiscal years 2016 and 2015, explained more fully in Note 20 to such financial statements, and allows a comparison of the retained assets and liabilities and ongoing operations of the University for those fiscal years.



## Endowment

The overarching objective of Vanderbilt's endowment is to preserve and enhance the real purchasing power of the fund in perpetuity, net of distributions. Assets are invested to provide earnings to meet spending needs and attain long-term return objectives without the assumption of undue risks. Vanderbilt utilizes a spending policy equal to 5.0% of the endowment's trailing three-year market value, up from 4.5% in fiscal year 2015 and before. The effective spending rate (dollars appropriated for spending each year as a percentage of average annual endowment value) over the past five years was 4.5%, which is equal to the endowment's trailing five-year compound nominal investment return.

**Endowment Market Value:** The market value of Vanderbilt's endowment as of the end of each of the past five fiscal years was as follows:

	<b>2017</b>	<b>2016</b>	<i>As of June 30,</i> <b>2015</b>	<b>2014<sup>(1)</sup></b>	<b>2013<sup>(1)</sup></b>
	<i>(in thousands)</i>				
Endowment market value	\$ 4,136,465	\$ 3,795,586	\$ 4,093,388	\$ 4,046,250	\$ 3,635,343

(1) Balances for fiscal years 2013 through 2014 agree to the audited financial statements. Those balances include the quasi-endowment related to VUMC's clinical enterprise. The cash equivalent value of these quasi-endowments in the amount of \$78.8 million as of April 29, 2016 was transferred as part of the VUMC Transaction.

**Investment Allocation:** The targeted and actual asset allocation percentages of Vanderbilt's endowment portfolio as of June 30, 2017, were as follows:

	<u><b>Actual</b></u>
Global equities	23%
Hedged strategies <sup>(1)</sup>	24
Private equity	23
Inflation hedges <sup>(2)</sup>	8
Fixed income	8
Cash and other	11
Commodities	3
	<u>100%</u>

(1) Hedged strategies investments reflect multiple strategies such as event driven, relative value, and equity funds to diversify risks and reduce volatility in the portfolio generally in hedge fund structures. Investments may include mortgage-backed securities, trade finance, debt and asset-backed securities, repurchase agreements, senior loans, and bank loans.

(2) Inflation hedges include real estate and natural resources.



**Returns and Distributions:** Investment returns and distributions of Vanderbilt's endowment assets for each of the past five fiscal years were as follows:

	<i>Fiscal Year Ended June 30,</i>				
	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014<sup>(1)</sup></b>	<b>2013<sup>(1)</sup></b>
	<i>(in thousands)</i>				
Total endowment investment return	\$ 428,677	\$ (172,420)	\$ 148,787	\$ 491,337	\$ 319,370
Endowment distributed per spending formula	(203,197)	(184,763)	(164,831)	(157,560)	(150,556)
Endowment distributed for strategic initiatives	-	-	-	-	-
Annual return net of distributions	<u>\$ 225,480</u>	<u>\$ (357,183)</u>	<u>\$ (16,044)</u>	<u>\$ 333,777</u>	<u>\$ 168,814</u>
Endowment rate of return <sup>(2)</sup>	11.5%	(4.3)%	3.7%	13.3%	9.3%
Total endowment distributed <sup>(3)</sup>	5.1%	4.7%	4.1%	4.1%	4.3%

- (1) Balances and returns for fiscal years 2013 through 2014 agree to the audited financial statements for those years. They have not been recast to exclude the returns on quasi-endowment investments whose cash equivalent was transferred to VUMC as part of the VUMC Transaction.
- (2) Endowment rate of return is calculated before distributions.
- (3) The endowment distribution percentages are calculated based on the distributed amounts shown above divided by the average endowment market value during each respective fiscal year. From 1998 to 2015, the endowment distributions per the spending formula have been based on 4.5% of the average of the previous three calendar year-end market values. In 2016 and 2017, it was based on 5.0% of the average of the previous three calendar year-end market values.

## Fundraising

Vanderbilt successfully concluded its Shape the Future campaign, the largest fundraising campaign in Vanderbilt's history, in June 2011 with gifts and commitments of \$1.94 billion, exceeding the \$1.75 billion goal by nearly \$200 million. In addition, Vanderbilt received \$173 million of new, documented bequest intentions during the campaign period. In the six fiscal years following the campaign, Vanderbilt reported a cumulative \$626 million of new private gifts and pledges for operating, plant, and endowment purposes. Vanderbilt is preparing for the public launch of its next fundraising campaign, which will focus on fundraising for Vanderbilt's strategic initiatives, including enhanced need-based financial aid for all students, furthering the residential college halls system and other discovery and learning initiatives.

## Property, Plant, and Equipment

The book value, net of accumulated depreciation, of Vanderbilt's land and improvements, buildings, furniture, and equipment as of the end of each of the past three fiscal years were as follows:

	<i>As of June 30,</i>		
	<b>2017</b>	<b>2016<sup>(1)</sup></b>	<b>2015<sup>(1)</sup></b>
	<i>(in thousands)</i>		
<i>Property, Plant, and Equipment</i>			
Land and improvements	\$ 155,237	\$ 131,787	\$ 125,535
Buildings and leasehold improvements	1,432,360	1,294,138	1,258,061
Furniture and equipment <sup>(2)</sup>	362,826	348,595	328,327
Construction in progress	87,530	121,831	65,360
Subtotal	<u>\$ 2,037,953</u>	<u>\$ 1,896,351</u>	<u>\$ 1,777,283</u>
Less: Accumulated depreciation	<u>1,018,060</u>	<u>952,367</u>	<u>895,796</u>
Total property, plant, and equipment, net <sup>(3)</sup>	<u>\$ 1,019,893</u>	<u>\$ 943,984</u>	<u>\$ 881,487</u>

- (1) Property, plant, and equipment presented in this table for fiscal years 2015 and 2016 exclude assets "held for sale" and transferred in the VUMC Transaction.
- (2) Includes fixed equipment. In Vanderbilt's most recent audited financial statements, fixed equipment is included in buildings and improvements.
- (3) Purchases for the library collection are expensed at the time of purchase and are not capitalized. As of June 30, 2017, the estimated replacement cost for library collections, including processing costs, totaled about \$406 million.





## Outstanding Debt

Vanderbilt had the following debt outstanding as of June 30, 2017:

	<b>Principal Balance</b>	<b>Subject to Repurchase Requirements</b>	<b>Final Maturity</b>
	<i>(in thousands)</i>		
<i>Commercial Paper</i>			
Taxable commercial paper <sup>(1)</sup>	\$ 114,180	Yes – at maturity, 270 days or less	Not applicable
Subtotal	<u>114,180</u>		
<i>Long-Term Fixed-Rate Debt</i>			
Series 2012D bonds (tax-exempt)	106,230	No	2037
Series 2009A bonds (tax-exempt)	7,080	No	2019
Series 2016 bonds (taxable)	<u>138,990</u>	No	2046
Subtotal	<u>252,300</u>		
Total Debt	<u>\$ 366,480</u>		

(1) The authorized aggregate principal amount of commercial paper is \$200.0 million.



### Estimated Annual Debt Service Requirements for Long-Term Debt

The following table sets forth the approximate annual debt service requirements by fiscal year for Vanderbilt's long-term debt following issuance of the Series 2016 bonds in November 2016. This table does not include debt service on commercial paper or payments and receipts under interest rate swap transactions.

Fiscal Year Ending June 30,	Fixed Rate Long-Term Debt		Total Debt Service
	Principal	Interest	
2018	\$ 7,830,000	\$ 8,389,559	\$ 16,219,559
2019	7,980,000	8,242,062	16,222,062
2020	8,140,000	8,079,507	16,219,507
2021	7,075,000	7,892,969	14,967,969
2022	7,285,000	7,683,590	14,968,590
2023	7,535,000	7,438,923	14,973,923
2024	7,850,000	7,155,998	15,005,998
2025	8,155,000	6,853,265	15,008,265
2026	8,505,000	6,530,564	15,035,564
2027	9,535,000	6,180,170	15,715,170
2028	9,925,000	5,800,400	15,725,400
2029	10,360,000	5,396,556	15,756,556
2030	11,545,000	4,989,502	16,534,502
2031	10,665,000	4,568,953	15,233,953
2032	9,970,000	4,164,956	14,134,956
2033	10,320,000	3,823,683	14,143,683
2034	10,655,000	3,491,833	14,146,833
2035	13,705,000	3,096,635	16,801,635
2036	10,615,000	2,702,055	13,317,055
2037	10,985,000	2,351,466	13,336,466
2038	11,350,000	1,985,618	13,335,618
2039	11,755,000	1,596,057	13,351,057
2040	16,130,000	1,116,853	17,246,853
2041	3,140,000	785,698	3,925,698
2042	3,250,000	675,886	3,925,886
2043	3,365,000	562,207	3,927,207
2044	3,480,000	444,576	3,924,576
2045	3,605,000	322,820	3,927,820
2046	3,730,000	196,768	3,926,768
2047	3,860,000	66,334	3,926,334
<b>Total</b>	<b>\$252,300,000</b>	<b>\$122,585,463</b>	<b>\$374,885,463</b>

Note: Totals may not foot due to rounding.



## Interest Rate Exchange Agreements

Vanderbilt has entered into various interest rate exchange agreements with respect to its debt portfolio in order to manage its interest rate risk and cost. The amortizations of notional amounts under existing interest rate exchange agreements do not correspond with actual maturities of Vanderbilt's debt. The assumed interest on Vanderbilt's long-term debt in the preceding table takes into account the effect of existing interest rate exchange agreements.

As of June 30, 2017, Vanderbilt had \$163.8 million of aggregate fixed-payer interest rate exchange agreements outstanding, the notional amounts of which amortize through 2040. Following scheduled reductions in notional amounts in October 2017 and the combined termination of \$50.0 million notional fixed-payer interest rate exchange agreements in July and October 2017, Vanderbilt has \$111.6 million of aggregate fixed-payer interest rate exchange agreements outstanding. Under the agreements, Vanderbilt receives payments calculated at 68.7% of one-month LIBOR and makes payments calculated at a weighted average fixed rate of 4.1% per annum.

To mitigate potential interest rate increases associated with its variable-rate debt, Vanderbilt had also entered into \$500 million notional amount of basis interest rate exchange agreements. In August 2016, Vanderbilt terminated all such agreements in order to reduce the negative mark-to-market and simplify its interest rate exchange agreement portfolio.

As of June 30, 2017, the mark-to-market valuation of Vanderbilt's interest rate exchange agreement portfolio was approximately \$(54.8) million, and Vanderbilt had no pledged collateral to secure the other parties' exposure.

Currently, the aggregate notional amounts of Vanderbilt's outstanding interest rate exchange agreements by counterparty are as follows:

	<b><u>Fixed-Payer Exchanges</u></b>
	<i>(in thousands)</i>
Bank of New York Mellon	\$ 41,600
JPMorgan Chase Bank, N.A.	20,000
Wells Fargo Bank, N.A.	<u>50,000</u>
Total interest rate exchange agreements	\$ 111,600

## Liquidity

In the normal course of managing its debt portfolio, Vanderbilt relies upon various sources of liquidity to meet its repurchase or retirement obligations for debt that is not remarketed or refunded as expected. These sources include the taxable commercial paper program, lines of credit from commercial banks, and Vanderbilt's own funds.

Vanderbilt currently has a dedicated hybrid line of credit with one bank totaling \$200 million, which is available to repurchase debt in the event of a failed remarketing. This line may be used for the sole purpose of paying the purchase price of obligations that are tendered, but not successfully remarketed. This dedicated line expires in April 2020. Another line, which Vanderbilt chose not to renew at the line of credit's March 2017 expiration, totaled \$100 million and included a general use provision. In order to optimize pricing, Vanderbilt drew one percent (\$1.0 million) at inception and maintained this amount outstanding during the commitment. This draw was returned in March 2017 when the line expired. No existing line of credit may be accessed by bondholders or noteholders or their respective indenture trustees. In addition, Vanderbilt is not obligated to maintain any line of credit, and if it elects to maintain a line of credit, the amount available to Vanderbilt may be increased or decreased by Vanderbilt from time to time in its discretion. Vanderbilt has never borrowed under its hybrid lines of credit to support repurchases of debt.



Vanderbilt also has a general use line of credit with a second bank. As of June 30, 2017, the line of credit was in the amount of \$150 million. This line's expiration date was subsequently extended to October 2018. No amount was drawn on any of Vanderbilt's lines of credit as of June 30, 2017.

Vanderbilt maintains a portion of its cash resources and endowment funds in short-term, marketable investments that may be liquidated if required to provide funds for its debt repurchase obligations or for retirement of debt. Although Vanderbilt's investment practices are a factor in Vanderbilt's short-term credit rating, Vanderbilt has no contractual obligation to maintain any specific amount of its investment portfolio in short-term investments.

As of June 30, 2017, Vanderbilt had \$114.2 million of outstanding debt subject to support from its debt portfolio self-liquidity program (taxable commercial paper). Vanderbilt redeemed the \$34.2 million Series 2012B floating rate notes and funded the redemption by issuance of \$30.0 million of taxable CP and \$4.2 million of operating cash. Vanderbilt schedules commercial paper maturities such that no more than \$50.0 million of maturities will occur on any one date and no more than \$100.0 million of maturities will occur during any rolling one-week period. The maximum amount of Vanderbilt debt that could become due for purchase or payment on the same day would be \$45.0 million. As of June 30, 2017, Vanderbilt estimates that it had \$1,908 million of assets providing liquidity within 30 days, including \$902 million of liquid assets available on a same-day basis. Vanderbilt's liquid assets fluctuate throughout a given fiscal year primarily due to operating cash cycles related to seasonal tuition collection in the fall and spring, normal operating expenditures, capital expenditures, and asset allocation decisions relating to how management invests working capital within the portfolio.