

University of Massachusetts

New Issue Summary

Sale Date: Week of March 7, 2022

Series: Series 2022-1, 2022-2 (taxable), 2022-3 (taxable)

Purpose: Series 2022-1 and 2022-2 bond proceeds will be used to fund \$423.8 million in capital plans, and the series 2022-3 bond proceeds will refinance existing series 2013-2, 2014-1, 2015-1 and 2015-2 bonds for savings and pay cost of issuance.

Security: University of Massachusetts (UMass; or the university) revenue bonds are secured by a pledge of the university's gross unrestricted revenue and other legally available funds.

The 'AA' Issuer Default Rating (IDR) and revenue bond rating reflect UMass' role as the Commonwealth of Massachusetts' flagship public research system of higher education and the strong operating and capital support provided by the Commonwealth (AA+/Stable). The rating further reflects UMass' rigorous attention to managing cash flow needs in support of its material capital improvement program and the tolerable increase in debt associated with the current transaction. The 'F1+' rating is consistent with the university's strong long-term credit profile and reflects its ample reserves in support of its very modest self-liquidity obligations. The Stable Outlook reflects Fitch Ratings' expectation that UMass' financial and operating profile will remain resilient, with steady enrollment and a commitment to preserving a structural operating balance at each campus and across the system.

Key Rating Drivers

Revenue Defensibility: 'aa'; Manageable Enrollment Pressure, Strong State Support: The 'aa' revenue defensibility assessment reflects UMass' steady enrollment trends over time, against somewhat mixed demand characteristics that are reflective of a statewide public system. Enrollment has remained within a narrow band through the pandemic thus far, most recently with a 2% decline in fall 2021 following a 0.1% increase in fall 2020. The 'aa' assessment also reflects the consistent and solid support provided by the Commonwealth of Massachusetts (equal to about 24% of fiscal 2021 revenues) and the sustainable operating support provided by UMass' sizable endowment.

Operating Risk: 'aa'; Resilient Operating Performance; Sizable Capital Plans: The 'aa' operating risk assessment is driven by very steady operating results, with cash flow expected to remain solid near current levels (13.6% in fiscal 2021) beyond remaining pandemic impacts in fiscal 2022. UMass' systemwide operating and efficiency efforts are expected to bolster cash flow resilience in support of its robust capital improvement plan, which will be funded by a combination of external (both debt and public) and internal resources.

Financial Profile: 'aa'; Solid Financial Profile with Adequate Liquidity: UMass is expected to maintain liquidity against its debt and expenses at a level consistent with the 'aa' assessment. It had approximately \$1.9 billion in available funds (AFs) at fiscal YE 2021, equal to about 54% of total expenses and 44% of adjusted debt. The series 2022 transaction will weaken leverage to about 41% from 44%. Leverage levels are expected to remain fairly consistent with the 'aa' assessment through Fitch's stress case scenario, inclusive of additional debt expectations over the longer-term capital plan timeframe.

Asymmetric Additional Risk Consideration: Neutral: No asymmetric additional risk considerations apply to UMass' ratings.



Ratings

Long Term Issuer Default Rating AA

New Issues

\$60,290,000 University of Massachusetts Building Authority Senior Project Revenue Bonds, Series 2022-1	AA
\$351,940,000 University of Massachusetts Building Authority Senior Project Revenue Bonds (Taxable), Series 2022-2	AA
\$207,615,000 University of Massachusetts Building Authority Senior Refunding Revenue Bonds (Taxable), Series 2022-3	AA

[Outstanding Debt Details on Page 3](#)

Rating Outlook

Stable

Applicable Criteria

[Public Sector, Revenue-Supported Entities Rating Criteria \(September 2021\)](#)

[U.S. Public Finance College and University Rating Criteria \(November 2021\)](#)

Related Research

[Fitch Rates University of Massachusetts Ser 2022 Revs 'AA'; Outlook Stable \(February 2022\)](#)

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Rating Sensitivities

Factors that could, individually or collectively, lead to positive rating action/upgrade:

- Continued favorable trend of revenue growth and prudent expense management, which translate into stronger cash flow and balance sheet strengthening, would prompt upward rating consideration, particularly as AF levels approach 80% of adjusted debt.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

- Failure to maintain steady leverage levels against expected increases in debt and capital needs may pressure the rating, should AF-to-total-adjusted debt fall persistently below 30%.
- A sustained decline in operating performance resulting in adjusted cash flow levels consistently below 12% could pressure the rating, particularly against UMass' sizable expected capital improvement plan.
- Material erosion in internal liquid resources and/or significant downward movement in the university's long-term rating, while highly unlikely, would influence the short-term rating.

Credit Profile

UMass is the Commonwealth of Massachusetts' only public research university system. UMass was established in 1863 and encompasses five separate campuses at Amherst (its flagship campus), Boston, Dartmouth, Lowell and Worcester. The five campuses are geographically dispersed throughout the Commonwealth and possess distinct and complementary missions.

In fall 2021, the system enrolled 64,785 FTE students, 78% of whom were undergraduates. Of note, UMass' systemwide online platform (UMass Online) provided over 311,600 course credits across all five campuses in the 2020-2021 academic year, with over 300 degrees, certificates and continuing medical education programs, and UMass Online grew its revenue over 2% yoy.

The University of Massachusetts Building Authority (UMBA), the university's debt issuance arm (reported as a blended component unit of the university), is a public instrumentality of the Commonwealth of Massachusetts and is empowered to construct dormitory, auxiliary, academic and other facilities for the university's campuses. Fitch does not view the UMBA as having any distinct operating risk from that of UMass, and thus, no separate IDR is assigned.

Coronavirus Impact

The ongoing coronavirus pandemic has created an uncertain environment for the U.S. public finance higher education sector. Fitch's forward-looking analysis is informed by management's expectations and by Fitch's macroeconomic views. Fitch's scenarios will evolve as needed during this dynamic period. For the 2020-2021 academic year, remote learning was the predominant model with curtailed campus activity and residential occupancy. In the current 2021-2022 academic year, campuses have transitioned back to a predominantly on-campus mix of in person, hybrid, and some online instruction.

As a partial offset to the financial impacts of the Covid-19 pandemic, UMass was awarded \$145 million in Higher Education Emergency Relief Fund (HEERF) institutional federal stimulus aid, of which approximately \$14 million and \$58 million were recognized in fiscal years 2020 and 2021, respectively, with the remaining \$73 million to be used primarily in fiscal 2022. The Commonwealth is providing an additional allocation of \$47 million in American Rescue Plan Act (ARPA) funds in 2022 and 2023, in support of further pandemic mitigation and other targeted university efforts.

Revenue Defensibility

Enrollment has been somewhat pressured through the pandemic; total FTE enrollment fell by 2% in fall 2021 across the system, just short of a 1% budgeted decline. Management reports

Rating History (IDR)

Rating	Action	Outlook/ Watch	Date
AA	Affirmed	Stable	2/28/22
AA	Upgraded	Stable	10/13/10
AA-	Revised	Stable	4/30/10
A+	Affirmed	Stable	7/22/03
A+	Affirmed	—	2/18/03
A+	Affirmed	Stable	5/10/02
A+	Assigned	—	2/24/00

solid spring and application activity, and in particular, demand at the flagship Amherst campus has remained solid. Undergraduate retention and selectivity have remained largely steady, near 85% and 70% (acceptance rate), respectively, in fall 2021.

These enrollment datapoints exclude UMass Global, the system's online college, which primarily serves adult learners and came under UMass' sole corporate control in fall 2021. Amherst remains the largest campus by enrollment with nearly 30,000 FTE students (46% of total fall FTE enrollment) followed by Lowell and Boston at about 14,000 and 13,000 FTE students, respectively. Amherst's enrollment in fall 2021 was slightly ahead of both budget and prior-year levels.

Tuition remained flat for the second consecutive academic year in fall 2021, in a concerted effort to support access across the system. Increases are expected to remain modest going forward, at around 2% for undergraduates.

Solid Commonwealth support continues, with expectations of a modest increase in total support in fiscal years 2022 and 2023. Total Commonwealth appropriations (including for fringe benefits) were about \$845 million in fiscal 2021, and the budgeted base appropriation for fiscal 2022 is up slightly over the prior year. The fiscal 2023 proposed budget stipulates a 2.2% increase in the base appropriation. Separately, the Commonwealth is also providing an additional allocation of \$47 million in ARPA funds in 2022 and 2023 for relatively flexible use through 2027. The Commonwealth of Massachusetts' 'AA+' rating, with a Stable Outlook, reflects its considerable economic resources, adroit management of economic and revenue cyclicity and strong budget controls.

UMass' pooled endowment equaled about \$1.3 billion through December 2021 (unaudited), with a reported 16.5% fund return as of Dec. 31, 2021. The university utilized a 4% spending distribution in fiscal 2021 as it did in prior years, providing a \$35 million distribution to the university for operations.

Operating Risk

UMass' operating risk profile is assessed at 'aa', characterized by diverse revenues, a stable trend of breakeven operations and consistent cash flow margin averaging near 12% over the last three fiscal years. Fiscal 2021 results reflected a 13.6% cash flow margin, despite the coronavirus pandemic having an \$123 million net impact on performance (predominantly lost revenue in auxiliaries).

UMass successfully adjusted its operations by \$69 million to achieve operating balance and was further aided by \$88 million in federal and state stimulus funding. For fiscal 2022, UMass is committed to achieving balanced operations via expense reductions as an offset to below-budget enrollment and lingering pandemic-related costs.

UMass leadership continues to focus on sufficient and sustainable operations at each of its campuses and as a system overall. Solid cash flow remains an important offset to UMass' sizable capital plans, and management plans to closely monitor its capital and debt levels at the campus and system levels. UMass' policy is to sustain debt service-to-total expenditures at no more than 8% by campus, which it has been largely successful at maintaining in recent years.

UMass generates consistent annual and solid campaign giving results in support of its strategic needs, including efforts driven campus-by-campus. Annual giving has been above \$115 million since fiscal 2014, including \$116.7 million in 2021, and UMass also benefits from fairly stable state capital appropriation support (equal to nearly \$63 million in fiscal 2021).

UMass' robust \$2 billion five-year capital plan through 2026 will be funded from a combination of additional debt, fundraising, state support and internal resources. Approximately 26% of the \$2 billion is already under construction, and UMass has issued 25% (\$328 million) of the debt in support of the plan.

Financial Profile

UMass is expected to maintain liquidity against its debt and expenses at a level consistent with the 'aa' assessment. UMass had approximately \$1.75 billion in AFs at fiscal 2020, equal to nearly 50% of total expenses and 43% of adjusted debt, and its leverage levels are expected to remain steady through Fitch's stress case scenario, inclusive of additional debt expectations.

Outstanding Debt

Massachusetts Development Finance Agency (University of Massachusetts Issue) Revenue Refunding Bonds	AA
Massachusetts Development Finance Agency (Worcester City Campus Corporation Issue - University of Massachusetts Project) Revenue Refunding Bonds	AA
Massachusetts Health & Educational Facilities Authority (MA) (University of Massachusetts Issue) Variable Rate Demand Revenue Bonds*	AA/F1+
Massachusetts Health & Educational Facilities Authority (MA) (Worcester City Campus Corp. (WCCC) Issue - University of Massachusetts (UMass) Project) Fixed Rate Revenue Bonds	AA
University of Massachusetts Building Authority CP Notes	AA
University of Massachusetts Building Authority CP Notes (Taxable)	AA
University of Massachusetts Building Authority Senior Project & Refunding Revenue Bonds	AA
University of Massachusetts Building Authority Senior Project Revenue Bonds	AA
University of Massachusetts Building Authority Senior Project Revenue Bonds (Federally Taxable)	AA
University of Massachusetts Building Authority Senior Project Revenue Bonds (Federally Taxable-Build America Bonds-Direct Pay to Issuer)	AA
University of Massachusetts Building Authority Senior Project Revenue Bonds (Taxable)	AA
University of Massachusetts Building Authority Senior Refunding Revenue Bonds	AA
University of Massachusetts Building Authority Senior Refunding Revenue Bonds (Taxable)	AA

UMass' financial profile is also assessed at 'aa'. Its debt burden remains manageable incorporating the series 2022-1, 2022-2, and 2022-3 transaction. Current debt service coverage (as Fitch calculates) was over 2.0x in fiscal 2021, and debt service is slightly front-loaded, with over half of the principal amortizing within 15 years.

Pro forma maximum annual debt service on the authority bonds is approximately \$234 million, with final maturity in 2052. Some additional debt is likely and can be absorbed at the current rating as principal amortization will provide some additional capacity over the next few years. In addition, Fitch expects any future debt issuance will be accompanied by growth or maintenance of resources sufficient to cover debt service.

Total long-term debt equaled approximately \$3.2 billion at fiscal 2021, including CP (\$200 million maximum authorization, \$77 million drawn as of November 2021) and \$20 million in debt supported by self-liquidity that Fitch rates 'F1+' given the university's long-term credit quality and coverage from ample highly liquid resources.

Overall, UMass maintains adequate balance-sheet resources, with steady AFs against expenses of 54%. However, AFs are weaker against adjusted debt at just under 44%. Total adjusted debt, including debt equivalents, is closer to \$4.1 billion. Debt equivalents totaled about \$1.04 billion in fiscal 2021, in the form of noncancellable operating leases and the Massachusetts State Employees Retirement System cost-sharing, multi-employer defined benefit pension plan liability.

The pension obligation is the largest component of adjusted debt, reflecting UMass' \$644 million in reported net pension liability adjusted using a 6% discount rate (down from the 7.15% disclosed discount rate) to a total \$884 million net liability. The state provides support for a portion of UMass' fringe benefit costs that equaled \$277 million net of the university's contribution of its portion in fiscal 2021.

Asymmetric Additional Risk Considerations

No asymmetric additional risk considerations apply to UMass' ratings.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Demand Summary

(Fall Semester of Fiscal Years Ended June 30)	2019	2020	2021	2022
Headcount				
Total Undergraduate Enrollment	57,069	57,364	56,945	55,218
Total Graduate Enrollment	17,636	17,701	18,486	19,336
Total Headcount Enrollment	74,705	75,065	75,431	74,554
Total Undergraduate / Total Headcount Enrollment (%)	76.4	76.4	75.5	74.1
Full-Time Equivalent (FTE)				
Total FTE Undergraduate Enrollment	52,646	53,095	52,633	50,721
Total FTE Graduate Enrollment	12,664	12,908	13,437	14,064
Total FTE Enrollment	65,310	66,003	66,070	64,785
5-Year FTE Enrollment CAGR (%)	1.3	1.2	0.8	0.3
Admissions				
Freshman Applications	74,333	78,615	77,299	80,611
Freshman Admissions	49,584	52,895	53,787	58,619
Acceptance Rate (%)	66.7	67.3	69.6	72.7
Freshman Matriculants	10,832	11,530	10,577	10,226
Matriculation Rate (%)	21.9	21.8	19.7	17.4
Transfer Applications	10,900	10,302	9,823	9,846
Transfer Admissions	7,815	7,229	6,886	6,816
Acceptance Rate (%)	71.7	70.2	70.1	69.2
Transfer Matriculants	4,538	4,199	3,917	3,777
Matriculation Rate (%)	58.1	58.1	56.9	55.4
Student Demand Data				
In-State Undergraduate Student (%)	83.5	83.2	82.5	82.3
Out-of-State Undergraduate Student (%)	16.5	16.8	17.5	17.7
Average Freshmen SAT	1183	1182	1184	1231
Freshmen to Sophomore Year Retention Rate (%)	84.3	83.4	82.9	82.9
Six Year Graduation Rate (%)	68.8	70.7	70.9	70.9
Annual Undergraduate Cost of Attendance (\$)				
Tuition	15,406	15,791	15,791	15,791
Mandatory Fees	481	598	648	648
Room & Board	12,626	13,004	13,329	13,595
Total	28,513	29,393	29,768	30,034

Sources: Fitch Ratings, Fitch Solutions, University of Massachusetts.

Financial Ratios

(Audited Fiscal Years Ended June 30)	2018	2019	2020	2021
Revenue Diversity (% Operating Revenues)				
Tuition	25.6	26.0	26.5	26.9
Student Fees (Tuition & Auxiliary Revenues)	37.9	38.8	37.4	31.6
Total Grants & Contracts	19.0	19.9	20.3	24.5
State Appropriations	22.0	22.7	23.4	24.4
Healthcare Operations	0.0	0.0	0.0	0.0
Gifts & Contributions	1.1	1.3	1.2	1.2
Total Investment Return	1.9	2.2	1.8	2.6
Expense Ratios (% Operating Expenses)				
Instruction	25.7	26.7	27.1	26.8
Research	13.8	14.4	13.7	15.9
Healthcare Operations	0.0	0.0	0.0	0.0
Operation & Maintenance of Plant	7.5	7.3	6.8	6.5
Depreciation	7.7	8.1	8.1	8.6
Interest	3.4	3.4	3.1	3.0
Financial Aid Ratios				
Tuition Discounting (%)	26.2	26.9	27.2	27.1
Net Tuition & Fees (\$)	874,826	894,904	917,876	930,613
Change in Net Tuition & Fees (%)	3.2	2.3	2.6	1.4
Net Tuition Revenue / FTE (\$)	13,557	13,702	13,907	14,085
Change in Net Tuition Revenue / FTE (%)	2.3	1.1	1.5	1.3
5-Year Net Tuition Revenue per FTE Enrollment CAGR (%)	2.9	2.6	2.5	1.5
Operating Performance Ratios (%)				
Adjusted Operating Margin	(0.1)	0.8	(2.5)	(0.7)
Cash Flow Margin - Adjusted	13.3	14.4	13.0	13.6
Capital Expenditures as % of Depreciation	186.6	138.1	118.2	107.4
Average Age of Plant (Years)	11.8	12.0	12.3	12.6
Balance Sheet Ratios (%)				
Available Funds / Total Operating Expense	52.3	48.9	49.4	60.8
Available Funds / Total Long Term Debt	57.9	54.9	54.9	65.0
Available Funds / Adjusted Debt	46.4	43.7	42.6	49.3
Available Funds / MADS (x)	8.2	7.1	7.5	9.0
Debt Ratios				
Current Debt Service Coverage (x)	2.0	2.0	2.0	4.0
Current Debt Burden (%)	6.5	7.0	6.3	3.4
Pro Forma MADS Coverage (x)	2.1	2.1	1.9	2.0
Pro Forma MADS Burden (%)	6.4	6.8	6.7	6.8
Variable Rate Bonds as % of Total Bonds	14.7	15.0	13.3	0.7
Hedged Variable Rate Bonds as % of Total Bonds	14.0	14.3	12.6	0.0

Note: Fitch may have reclassified certain financial statement items for analytical purposes.
 Sources: Fitch Ratings, Fitch Solutions, University of Massachusetts.

Financial Summary

(\$000, Audited Fiscal Years Ended June 30)	2018	2019	2020	2021
Operating Revenues				
Gross Tuition & Fees	1,184,932	1,223,749	1,260,907	1,275,741
Less: Student Aid	310,106	328,845	343,031	345,128
Net Tuition & Fees (\$000)	874,826	894,904	917,876	930,613
Sales & Services of Auxiliary Enterprises	416,733	441,795	378,314	163,812
Federal Grants & Contracts	88,278	91,458	122,375	179,545
Other Grants & Contracts	560,990	593,086	581,850	667,149
State Appropriations	751,894	780,221	810,518	845,481
Gifts & Contributions	39,022	43,705	41,996	41,262
Dividend & Interest Income	37,622	48,943	32,762	58,383
All Other Operating Revenues	616,265	523,569	547,990	541,367
Total Operating Revenue	3,385,630	3,417,681	3,433,681	3,427,612
Unrealized / Realized Gains Portion of Endowment Payout	26,742	27,741	28,113	31,965
Adjusted Total Operating Revenue	3,412,372	3,445,422	3,461,794	3,459,577
Operating Expenses				
Instruction	876,235	912,415	960,548	934,793
Academic Support	187,495	186,502	200,928	199,897
Institutional Support	271,535	274,326	303,100	314,676
Student Services	156,934	160,751	157,842	141,160
Public Service	403,454	313,072	340,496	351,060
Research	471,135	490,887	485,759	552,472
Auxiliary Enterprises	313,741	340,346	336,497	218,370
Student Aid	50,410	49,511	65,469	85,500
Operation & Maintenance of Plant	255,825	248,581	241,880	226,965
Depreciation	261,417	276,638	288,667	300,201
Interest Expense	115,851	116,217	109,186	105,469
All Other Operating Expenses	52,211	48,282	56,256	53,485
Total Operating Expense	3,416,243	3,417,528	3,546,628	3,484,048
Change in Net Assets from Operations	(30,613)	153	(112,947)	(56,436)
Adjusted Change in Net Assets from Operations	(3,871)	27,894	(84,834)	(24,471)
Non-Operating Revenues/(Expenses)				
Realized & Unrealized Gain /(Loss) on Investments	13,724	31,549	(6,331)	125,537
Capital Appropriations	67,437	25,500	51,525	62,592
Capital Grants & Gifts	8,732	13,165	7,516	8,528
Other Non-Operating Revenues/(Expenses)	(8,436)	(14,610)	(7,491)	(15,885)
Total Non-Operating Revenue (Expense)	81,457	55,604	45,219	180,772
Change in Net Assets	77,586	83,498	(39,615)	156,301
Adjusted Change in Net Assets from Operations	(3,871)	27,894	(84,834)	(24,471)
Add: Interest Expense	115,851	116,217	109,186	105,469
Add: Pension Expense	58,500	52,200	93,200	100,900
Add: Depreciation Expense	261,417	276,638	288,667	300,201
Less: Pension Contributions	28,292	35,843	40,617	31,495
Add: Non-Cash OPEB Expenses	48,579	48,963	75,860	23,961
Cash Flow	452,184	486,069	441,462	474,565
Adjusted Change in Net Assets from Operations	(3,871)	27,894	(84,834)	(24,471)
Add: Interest Expense	115,851	116,217	109,186	105,469
Add: Pension Expense	58,500	52,200	93,200	100,900

Financial Summary

(\$000, Audited Fiscal Years Ended June 30)	2018	2019	2020	2021
Add: Depreciation Expense	261,417	276,638	288,667	300,201
Financial Summary				
(\$000, Audited Fiscal Years Ended June 30)	2018	2019	2020	2021
Total Pension Service Cost	28,031	26,490	32,308	36,226
Add: Non-Cash OPEB Expenses	48,579	48,963	75,860	23,961
Cash Flow - Adjusted	452,445	495,422	449,771	469,834
Current Debt Service	222,150	240,687	218,309	118,485
Pro Forma Maximum Annual Debt Service (MADS)	218,913	234,344	233,075	234,490
MADS Fiscal Year	2020	2031	2024	2024
Balance Sheet - Assets				
Cash & Cash Equivalents	430,389	317,892	386,045	306,859
Investments	1,245,433	1,359,570	1,369,460	1,803,050
Total Cash & Investments	1,675,822	1,677,462	1,755,505	2,109,909
Property, Plant & Equipment, Gross	8,152,372	8,468,937	8,754,330	9,029,561
Less: Accumulated Depreciation	3,076,896	3,304,737	3,547,761	3,785,592
Property, Plant & Equipment, Net	5,075,476	5,164,200	5,206,569	5,243,969
Balance Sheet - Liabilities & Net Assets				
Fixed Rate Bonds Payable	2,447,485	2,313,245	2,591,064	2,964,032
Unhedged Variable Rate Bonds Payable	20,000	20,000	20,000	20,000
Hedged Variable Rate Bonds Payable	401,310	389,095	376,375	0
Total Bonds Payable	2,868,795	2,722,340	2,987,439	2,984,032
Capitalized Leases	2,262	1,836	2,189	2,193
Commercial Paper	65,969	132,810	1,486	31,000
Total Other Obligations	457,105	565,637	434,541	464,414
Total Long Term Debt	3,089,068	3,042,378	3,196,178	3,259,675
Operating Lease Expense	20,600	34,600	34,900	30,600
Fitch Adjusted Net Pension Liability (NPL, UAAL)	659,892	607,027	748,557	883,787
Debt Equivalents	762,892	780,027	923,057	1,036,787
Adjusted Debt	3,851,960	3,822,405	4,119,235	4,296,462
Unfunded Capital Commitments	35,151	55,696	34,457	28,043
Unrestricted Net Assets	(150,080)	(106,130)	(189,621)	27,708
Invested in Capital	2,288,599	2,343,872	2,376,333	2,306,226
Restricted Net Assets - Non-Expendable (Fitch-Adjusted)	28,022	28,617	22,252	22,378
Restricted Net Assets - Expendable (Fitch-Adjusted)	222,343	206,023	223,803	232,756
Total Net Assets	2,388,884	2,472,382	2,432,767	2,589,068
Balance Sheet - Resources & Liquidity				
Available Funds (AF)	1,647,800	1,648,845	1,733,253	2,087,531
Foundation Available Funds	140,015	22,585	20,462	31,890
Total Available Funds (University & Foundation)	1,787,815	1,671,430	1,753,715	2,119,421
Statement of Cash Flows				
Depreciation	261,417	276,638	288,667	300,201
Net Cash Generated/ (Used) in Operating Activities	(342,853)	(508,876)	(626,986)	(586,043)
Additions of PP&E/Capital Assets	487,912	382,048	341,247	322,341
Payments on Bonds Payable	96,325	103,170	549,788	708,067
Cash Paid for Interest	125,825	137,517	132,468	153,367
Pension Plans				
Total Pension Liability (TPL, AAL)	1,281,592	1,275,534	1,562,097	1,718,761

Financial Summary

(\$000, Audited Fiscal Years Ended June 30)	2018	2019	2020	2021
Fiduciary Net Position (FNP, AVA)	861,358	866,215	1,035,358	1,073,882
Fitch Adjusted Total Pension Liability (TPL, AAL)	1,521,250	1,473,242	1,783,914	1,957,668
Fitch Adjusted Net Pension Liability (NPL, UAAL)	659,892	607,027	748,557	883,787
Fitch Adjusted Ratio of Assets to Liabilities (FNP/TPL, AVA/AAL) (%)	56.6	58.8	58.0	54.9
Pension Expense	58,500	52,200	93,200	100,900
Pension Contributions	28,292	35,843	40,617	31,495
Total Pension Service Cost	28,031	26,490	32,308	36,226

Note: Fitch may have reclassified certain financial statement items for analytical purposes.
 Sources: Fitch Ratings, Fitch Solutions, University of Massachusetts.

Key Definitions

Term	Definition	Significance
Issuer Default Rating (IDR)	An expression of overall enterprise risk and relative vulnerability to default.	Provides an opinion on the relative ability of an entity to meet financial commitments, expressed as an ordinal measure of credit risk.
Base Case	The expected forward-looking case in the current macroeconomic environment.	Provides the analytical starting point in the forward-looking analysis, and also informs the stress case.
Stress Case	Forward-looking performance under a common set of assumptions.	Illustrates how cycles affect individual institutions differently, and informs the level of rating stability and credit resiliency.
Adjusted Debt	Total long-term debt + unfunded pension liability + an operating lease expense multiple	Provides an inclusive evaluation of total long-term liabilities.
Available Funds	Cash + investments - permanently restricted net assets (including those of closely related foundations and endowments)	Provides an absolute measure of total balance sheet resources. Excludes bond proceeds.
Adjusted Operating Margin (%)	(Total adjusted operating revenue - total operating expense)/total adjusted operating revenue	Provides an operating performance measure inclusive of the endowment income available in operations.
Cash Flow	Adjusted change in unrestricted net assets from operations + depreciation + amortization + interest expense + pension expense - pension contribution + non-cash OPEB expense + other non-cash expenses	Indicates the absolute level of resources available to service debt obligations after the payment of cash-based operating expenses. Adjusted for non-recurring/extraordinary items.
Cash Flow - Adjusted	Adjusted change in unrestricted net assets from operations + depreciation + amortization + interest expense + non-cash OPEB expense + other non-cash expenses + pension expense - proportionate pension service cost	Indicates the level of operating efficiency, using the level of an institution's operating surplus (or deficit) available to cover all of its annual outlays.
Debt Service Coverage	Cash flow/current debt service	Indicates the net income available to meet annual debt service requirements.
Average Age of Plant	Accumulated depreciation/depreciation expense	Provides an indication of the condition of the physical operating plant, and the level of needed reinvestment.
Capital Expenditures as % of Depreciation	Net acquisitions of property plant and equipment/depreciation expense	Indicates the level of investment in physical plant over time, which informs the need for future investment.

Source: Fitch Ratings.

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