

FY24-28 Financial Forecast

Board of Trustees: Administration & Finance Committee

December 14, 2022



University of Massachusetts

Amherst • Boston • Dartmouth • Lowell • Medical School • UMassOnline

Agenda

- Overview
- Forecasted FY24-28 Revenue
- Forecasted FY24-28 Expenses
- Next Steps
- Appendices
 - Key Financial Ratios
 - Campus Data

Overview



Key Take Aways of the FY24 – FY28 Forecast



Affordability:

- Tuition: modest increases (2.5% for in state undergraduates); forecasted tuition increases needs Board approval
- Financial Aid: continued University investment
- Sensitivity Analysis: estimates for 'swings' in major assumptions (examples: enrollment, occupancy)



Shared Services, Innovation & Collaboration:

- UPST: visibility on system-wide sourcing through adoption tracker will help identify savings areas
- EST: automation and service & quality improvements for more efficient operations
- ERM: mitigation of risks critical to financial sustainability; development of the forecast is a strategy



Transparency:

- Revenue & Expenses: grow on average 4% annually
- Strategies: to achieve forecasted enrollment, occupancy and 2% operating margin
- Enrollment: international category; 'New' undergrads by first time freshmen & transfers; Pell eligibility
- Deferred Maintenance: Targets compared to investment assumptions



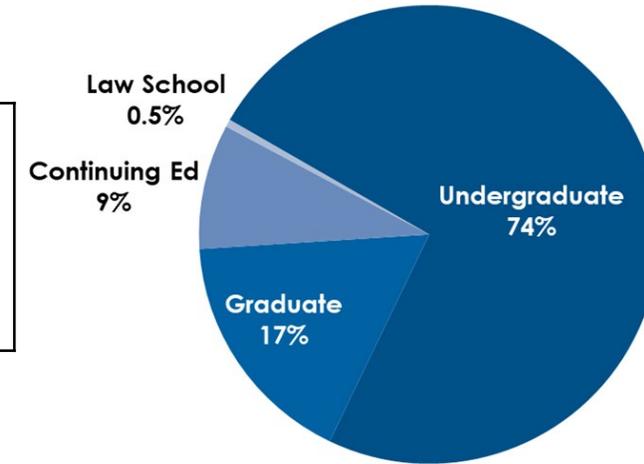
Alignment with State:

- State Appropriation: additional 1% aligns with typical inflationary increases provided
- Fringe: growth rate based on 5-year average; helps smooth years of unusual increases
- Collective Bargaining: new contract begins FY24; State parameters not yet provided; used 2.5% assumption

Enrollment

Validating near-term enrollment will be critical for FY24 budget planning.

AAGR	Total	Undergraduate	Graduate
FY24-28:	0.7	0.5	1.5
FY21-23:	-0.7	-1.8	3.9
FY18-20:	1.1	1.7	-0.4



Students FTEs	Actual		Forecast				
	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
University	64,789	64,603	64,682	65,644	66,457	66,678	66,935
% Change	-1.9%	-0.3%	0.1%	1.5%	1.2%	0.3%	0.4%

Note: excludes UMass Global

Operating Margin: required to achieve 2% by FY25

Challenging strategies embedded in each forecast year to achieve 2% margin by FY25.

	Actual	2023		Forecast				
	FY2022	Budget	Projected	FY2024	FY2025	FY2026	FY2027	FY2028
<i>\$ in Thousands</i>								
Amherst	6.9%	0.5%	4.2%	2.2%	2.0%	2.0%	2.0%	2.0%
	105,225	6,985	68,148	35,601	33,161	34,541	35,258	38,010
Boston	0.9%	0.0%	1.4%	2.0%	2.0%	2.0%	2.0%	2.0%
	4,359	-	6,597	9,818	10,276	10,627	10,963	11,304
Dartmouth	0.7%	0.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%
	1,869	-	2,681	2,594	5,500	5,663	5,834	6,020
Lowell	0.9%	0.0%	0.7%	1.5%	2.0%	2.0%	2.0%	2.0%
	4,790	-	3,933	8,414	11,748	12,227	12,711	13,182
President's Office	8.5%	2.0%	4.7%	2.0%	2.0%	2.0%	2.0%	2.0%
	8,980	2,007	4,790	2,041	2,079	2,114	2,156	2,191
Chan Medical	2.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	21,896	19,551	20,422	21,311	22,279	23,844	24,650	25,197
University	3.8%	0.7%	2.7%	2.0%	2.0%	2.0%	2.0%	2.0%
	147,120	28,543	106,570	79,779	85,044	89,016	91,573	95,904

Note: excludes UMass Global

Forecasted FY24-28 Revenue

Slide Format

- **Forecast Years** – the forecast includes 5 years of actuals (FY18-22), the current year (FY23 budget and Q1 projection) and 5 years of forecast (FY24-28)
- **Average Annual Growth Rate (AAGR)** – used to assess growth while isolating the unusual changes due to COVID:
 - FY24-28: forecast
 - FY21-23: during COVID
 - FY18-20: pre-COVID
- **Summary information** – boxes included to summarize information; details included in appendix

<u>FY23 Projection</u>	<u>Avg % Revenue</u>	<u>AAGR</u>
	FY24-28: %	FY24-28: %
Total: \$	FY21-23: %	FY21-23: %
% of Rev: %	FY18-20: %	FY18-20: %

Assumptions

Revenue Assumptions		FY24-28
Net Tuition & Fees		
Enrollment	Campus Specific	
Tuition Increase:		
In State	2.5% annually	
Out of State UG	Campus Specific	
Graduate	Campus Specific	
CE	Campus Specific	
Auxiliary Enterprises		
Occupancy	Campus Specific	
Rate Increase:		
Housing	Campus Specific	
Dining	Campus Specific	
Parking	Campus Specific	
State Appropriations		
Base	No earmarks, 1% annually	
Collective Bargaining	2.5% annually	

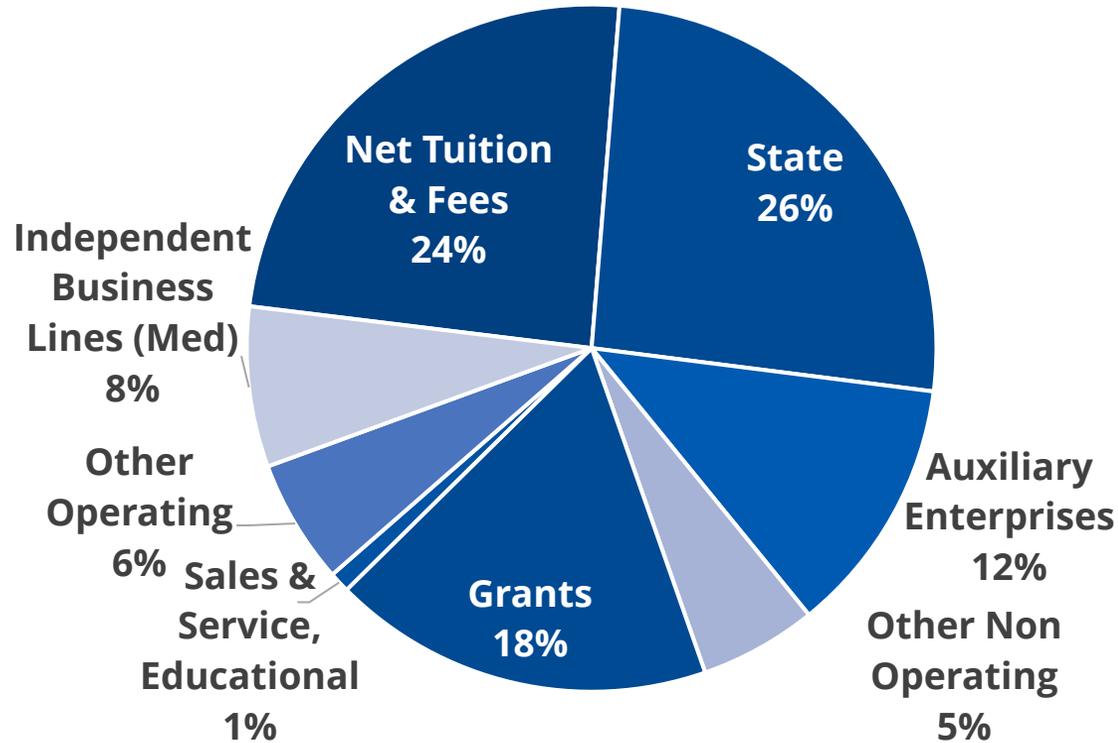
- **Starting Point:**
 - Utilize FY23 budget as starting point; adjustments made based on Q1 projection
 - Excludes UMass Global

- **Assumptions:**
 - Provided by UMPO for key drivers
 - Campus specific strategic plans drive underlying assumptions
 - Enrollment strategies vary by campus

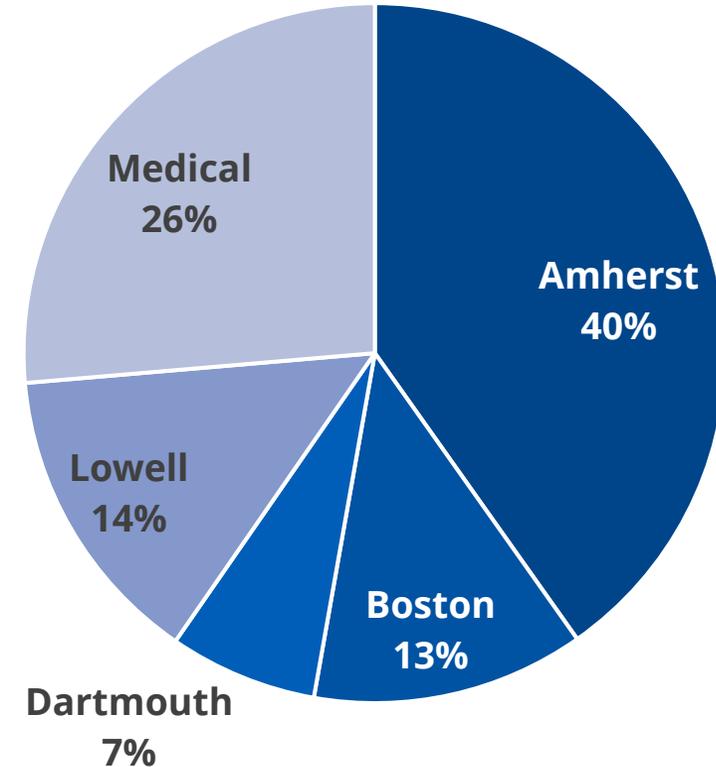
- **Operating margin:** Achieve 2% by FY25

University Revenue: by Category & Campus

FY23 Revenue Categories = \$3.8 billion

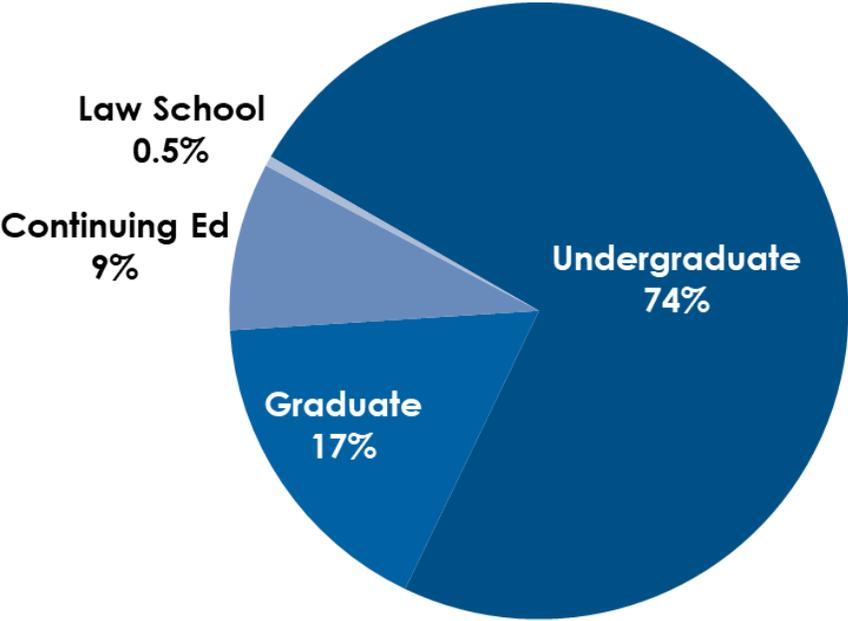


FY23 Campus Revenue



Note: excludes UMass Global

Enrollment by Career



Students (FTEs) FY2023	
Undergraduate	47,610
Graduate	11,099
Continuing Ed	5,552
Law School	341
University	64,602

University

AAGR	FY18-20	FY21-23	FY24-28
Undergraduate	1.7%	-1.8%	0.5%
Graduate	-0.4%	3.9%	1.5%
Continuing Ed	-1.6%	-0.1%	0.8%
Law School	16.0%	12.4%	1.3%
Total	1.1%	-0.7%	0.7%

Note: excludes UMass Global

Amherst

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
Undergraduate	23,722	2.3%	0.1%	0.1%
Graduate	3,840	0.4%	1.0%	0.0%
Continuing Ed	2,626	0.7%	3.4%	0.0%
Total	30,188	1.9%	0.4%	0.1%

Boston

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
Undergraduate	9,997	2.3%	-0.9%	0.5%
Graduate	1,829	-0.5%	1.6%	1.8%
Continuing Ed	1,050	-8.5%	0.1%	0.5%
Total	12,876	0.8%	-0.9%	0.7%

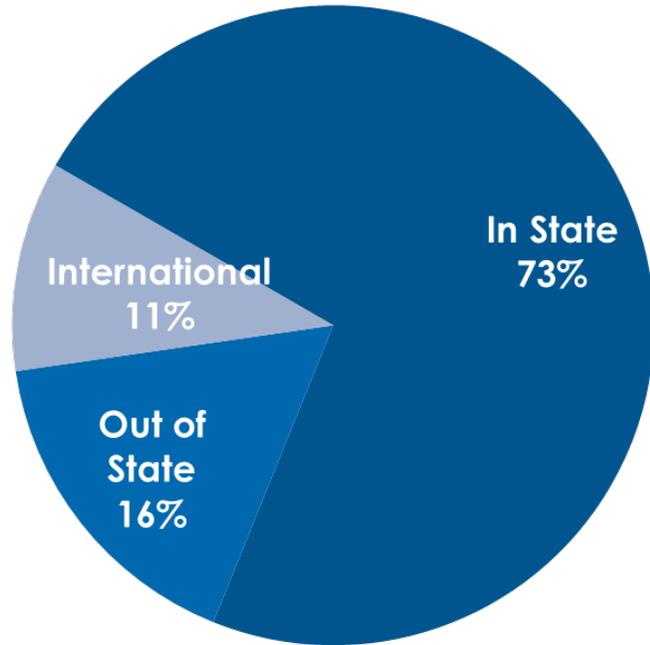
Dartmouth

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
Undergraduate	4,422	-2.9%	-5.6%	-0.0%
Graduate	697	-12.3%	9.6%	8.2%
Continuing Ed	853	6.5%	-2.0%	4.0%
Law School	341	16.0%	12.4%	1.3%
Total	6,313	-2.1%	-3.2%	1.6%

Lowell

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
Undergraduate	9,469	2.4%	-4.8%	1.8%
Graduate	3,432	-0.9%	9.2%	1.0%
Continuing Ed	1,024	-3.7%	-3.6%	0.0%
Total	13,925	1.3%	-2.0%	1.4%

Enrollment by Residency



Students (FTEs) FY2023	
In State	47,009
Out of State	10,726
International	6,866
University	64,602

University

AAGR	FY18-20	FY21-23	FY24-28
In State	1.6%	-2.0%	0.4%
Out of State	0.4%	3.5%	1.8%
International	-1.2%	1.7%	1.3%
Total	1.1%	-0.9%	0.7%

Note: excludes UMass Global

Amherst

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
In State	20,115	2.3%	-1.0%	-0.0%
Out of State	6,435	-1.9%	3.9%	0.8%
International	3,638	6.7%	3.3%	-0.4%
Total	30,188	1.9%	0.4%	0.1%

Boston

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
In State	10,056	1.9%	-1.8%	0.2%
Out of State	1,377	7.8%	17.2%	1.5%
International	1,443	-7.6%	-5.2%	3.2%
Total	12,876	0.8%	-0.9%	0.7%

Dartmouth*

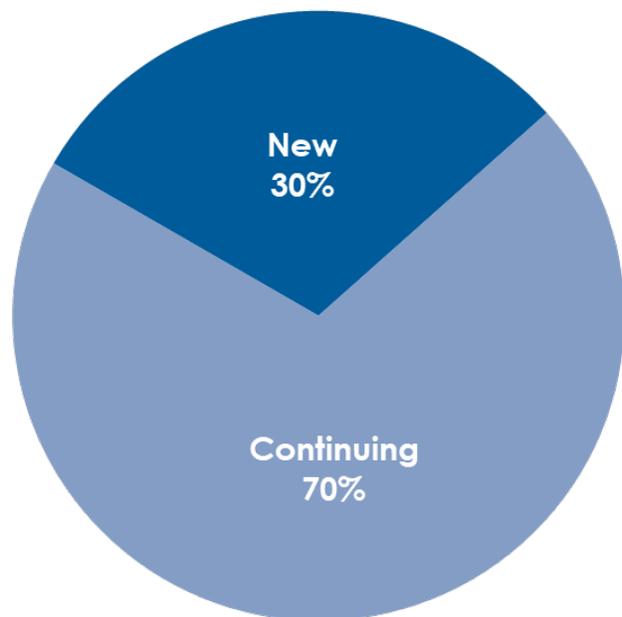
	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
In State	5,014	-3.2%	-4.8%	-0.2%
Out of State	911	5.4%	-3.6%	6.7%
International	389	-6.4%	166.3%	9.9%
Total	6,314	-2.1%	-3.2%	1.6%

Lowell

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
In State	11,004	2.7%	-3.2%	1.5%
Out of State	1,637	-1.2%	1.4%	1.2%
International	1,284	-8.9%	6.0%	1.1%
Total	13,925	1.3%	-2.0%	1.4%

*International enrollment grew by 330 FTEs in FY23, largely attributed to strategic growth in graduate programs.

Undergraduate Enrollment by New vs Continuing



UG (FTEs)	FY2023
New	14,245
<i>First-time Freshmen</i>	11,472
<i>Transfer</i>	2,773
Continuing	33,364
Undergrad Total	47,609

University

AAGR	FY18-20	FY21-23	FY24-28
New	5.4%	-3.7%	0.7%
<i>First-time Freshmen</i>			0.9%
<i>Transfer</i>			-0.2%
Continuing	0.3%	-0.7%	-0.0%
Total	1.7%	-1.8%	0.5%

Note: excludes UMass Global

Amherst

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
New	6,993	5.1%	-0.9%	-0.8%
<i>First-time Freshmen</i>				-0.9%
<i>Transfer</i>				-0.0%
Continuing	16,729	0.2%	0.7%	0.5%
UG Total	23,722	1.6%	0.1%	0.1%

Boston

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
New	3,244	7.8%	0.1%	0.5%
<i>First-time Freshmen</i>				0.6%
<i>Transfer</i>				0.2%
Continuing	6,753	0.7%	-1.3%	0.5%
UG Total	9,997	2.7%	-0.9%	0.5%

Dartmouth

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
New	1,506	1.4%	-4.2%	2.8%
<i>First-time Freshmen</i>				3.2%
<i>Transfer</i>				0.2%
Continuing	2,916	-5.5%	-4.7%	-1.6%
UG Total	4,422	-3.5%	-4.7%	-0.0%

Lowell

	FY23 FTEs	AAGR		
		FY18-20	FY21-23	FY24-28
New	2,502	6.4%	-7.9%	3.6%
<i>First-time Freshmen</i>				4.9%
<i>Transfer</i>				-1.1%
Continuing	6,966	3.3%	-3.5%	1.1%
UG Total	9,469	4.1%	-4.8%	1.8%

Tuition & Fees

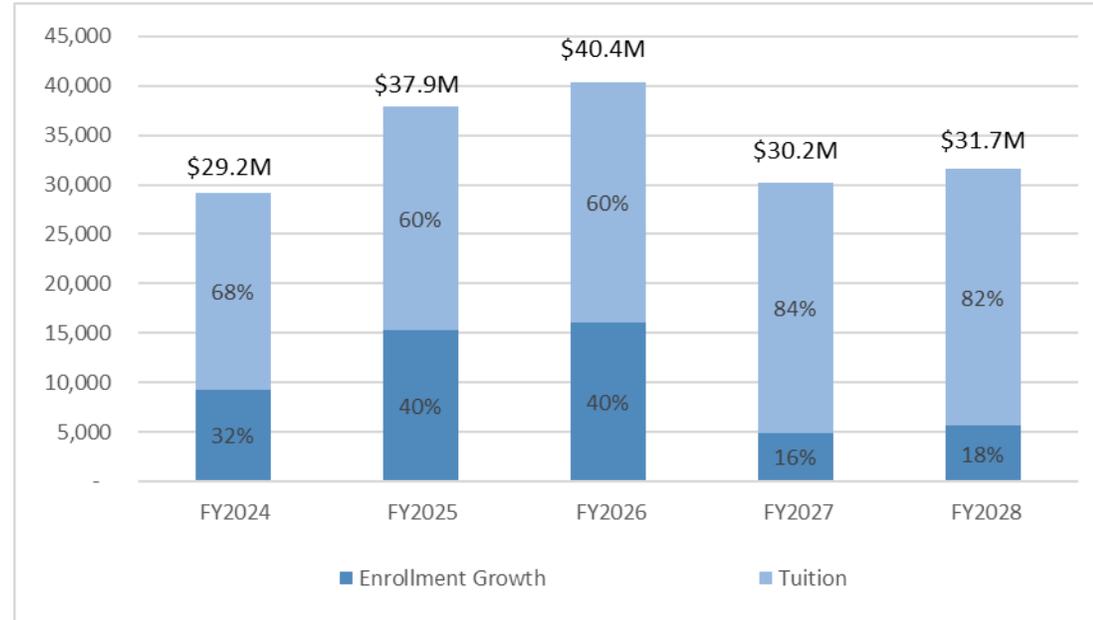
- **Key Takeaway:** on average 29% of growth driven by enrollment with remainder driven by tuition increases
- **Enrollment Strategies:** vary by campus, career, residency

FY23 Budget	Avg % Revenue	AAGR
Total: \$934M	FY24-28: 24	FY24-28: 3.8
% of Rev: 24	FY21-23: 25	FY21-23: 0.6
	FY18-20: 26	FY18-20: 2.6

	Forecast Increases							
	(Rates shown below reflect FY23 approved tuition rates)							
	Undergraduate				Graduate			
	In State		Out of State		In State		Out of State	
Amherst	16,186	2.5%	37,405	3.0%	15,148	2.5%	34,542	3.0%
Boston	14,542	2.5%	35,515	3.0%	18,894	3.0%	36,879	3.0%
Dartmouth	14,179	2.5%	30,317	2.5%	16,390	0-1%*	29,578	0-1%
Lowell	15,462	2.5%	33,830	2.5%	14,956	2.5%	27,030	2.5%
Medical	-	-	-	-	Varies	2.5%	Varies	2.5%

*Dartmouth graduate increases forecasted as 0% in FY24-25 and 1% in FY26-28

Growth in Tuition & Fee Revenue*:



*FY24 enrollment growth is less than other years because Amherst had a large entering class of Fall 2019 that will leave beginning in FY24

Sensitivity Analysis: Tuition Rate Impacts Over Time

- Tuition increases are recurring and impact base revenue
- Changes to proposed rates have base effects forever
- To a student, every 1% increase has an average impact of \$151 per year (before financial aid)

Gross Impact 2.5% In State Undergrad Tuition Increase					
	FY24	FY25	FY26	FY27	FY28
Year 1	14,343	14,343	14,343	14,343	14,343
Year 2		14,595	14,595	14,595	14,595
Year 3			15,011	15,011	15,011
Year 4				15,489	15,489
Year 5					15,920
Annual Total	14,343	28,938	43,948	59,437	75,357
Cumulative Total	14,343	43,280	87,229	146,666	222,024
% of Total Revenue	<i>0.4%</i>	<i>1.0%</i>	<i>2.0%</i>	<i>3.2%</i>	<i>4.7%</i>

Auxiliary

- Key Takeaway:** on average 64% of growth driven by rate increases with remainder driven by occupancy and other such as conferences, parking, etc.

Occupancy: Forecast Average		FY23
Amherst	100%	104%
Dartmouth ⁺	80%	81%
Lowell	92%	87%

Fees	FY23 Housing	Housing Average	FY23 Dining	Dining Average
Amherst	7,840	3.0%	6,936	3.0%
Boston	-	-	6,000	2.0%
Dartmouth	10,543 [^]	2.5%	5,591	3.0%
Lowell	8,710	2.5%	5,220	3.0%

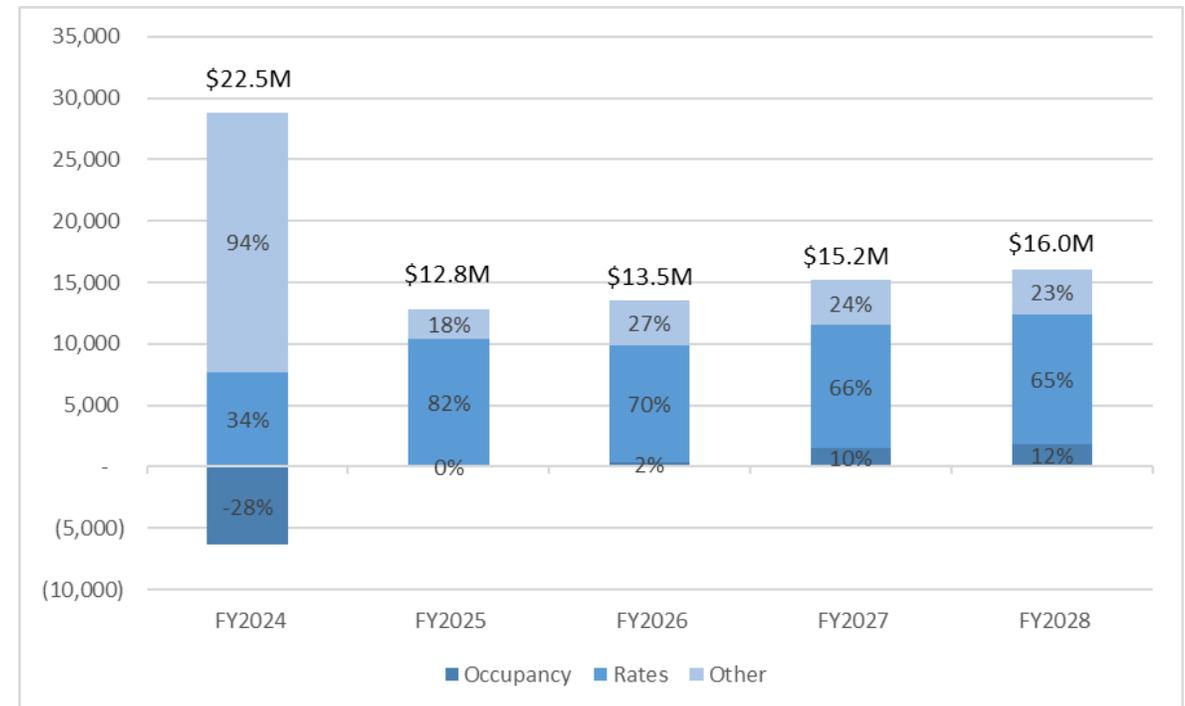
+800 beds from the Cedar Dells (campus-owned residence halls) have been removed as a housing option in FY23 due to deferred maintenance needs

[^]Campus owned housing rate

FY23 Budget	Avg % Revenue	AAGR*
Total: \$465M	FY24-28: 12	FY24-28: 3.2
% of Rev: 12	FY21-23: 9	FY20-23: 25.2
	FY18-20: 12	FY18-19: 4.9

*COVID year for Auxiliary began in FY20

Growth in Auxiliary Revenue:



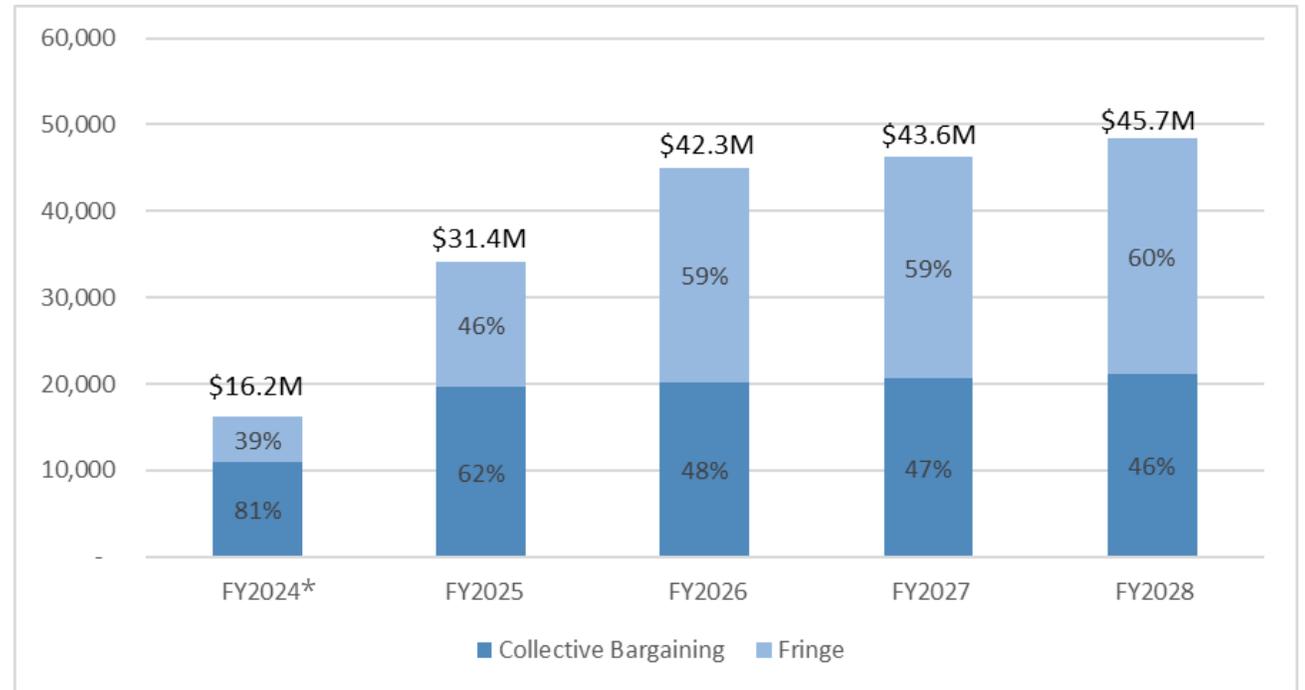
Other includes auxiliaries such as conferences, parking, retail dining, etc.
FY24 reflects decrease in occupancy due to beds coming offline at UMA.

State

- **Key Takeaway:** State revenue grows to support increased fixed costs of collective bargaining & fringe; earmarks eliminated, and a 1% increase assumed annually
- **Collective Bargaining:** 2.5% annual increases assumed; total annual cost of \$39M. State reimburses ~46% of total cost
- **Fringe Benefits Rate:** on average 44% applied to salaries; rate grows annually by historical average of 2.3%; larger historical growth driven by higher fringe rate

<u>FY23 Budget</u>	<u>Avg % Revenue</u>	<u>AAGR</u>
Total: \$987M	FY24-28: 25	FY24-28: 3.4
% of Rev: 26	FY21-23: 24	FY21-23: 6.8
	FY18-20: 22	FY18-20: 4.9

Growth in State Revenue:



*FY24 reflects the removal of FY23 earmarks

Grants

Key Takeaways:

- 77% of grant revenue is attributed to Amherst and Chan Medical School
- Grant revenue has corresponding expenses in salaries & fringe and non-personnel to support the work of the grant
- Annual growth reflects assumptions based on historical increases and campus specific plans to grow research

<u>FY23 Budget</u>	<u>Avg % Revenue</u>	<u>AAGR</u>
Total: \$688M	FY24-28: 20	FY24-28: 7.5
% of Rev: 18	FY21-23: 19	FY21-23: 6.0
	FY18-20: 17	FY18-20: 2.5

<i>\$ in Thousands</i>	FY24	FY25	FY26	FY27	FY28
Amherst	218,994	225,999	233,214	240,645	247,799
<i>% Change</i>	12%	3%	3%	3%	3%
<i>% of Total Revenue</i>	13%	13%	13%	13%	13%
Boston	68,818	70,731	74,703	77,946	81,488
<i>% Change</i>	11%	3%	6%	4%	5%
<i>% of Total Revenue</i>	14%	14%	14%	14%	14%
Dartmouth	21,858	23,661	24,636	24,267	24,021
<i>% Change</i>	1%	8%	4%	-1%	-1%
<i>% of Total Revenue</i>	8%	8%	8%	8%	8%
Lowell	92,861	100,737	106,935	113,204	118,767
<i>% Change</i>	13%	8%	6%	6%	5%
<i>% of Total Revenue</i>	17%	17%	18%	18%	18%
Chan Medical School	385,528	425,125	466,384	490,591	516,986
<i>% Change</i>	17%	10%	10%	5%	5%
<i>% of Total Revenue</i>	35%	37%	39%	39%	40%
University	784,996	842,874	902,426	943,138	985,475
<i>% Change</i>	14%	7%	7%	5%	4%
<i>% of Total Revenue</i>	19%	20%	20%	21%	21%



Other Revenue Categories

- **Sales & Service, Educational:** activities that provide instructional and lab experience for students and that incidentally create goods and services that may be sold to students, faculty, staff, and the general public

<u>FY23 Budget</u>	<u>Avg % Revenue</u>	<u>AAGR</u>
Total: \$37M	FY24-28: 1	FY24-28: 5.3
% of Rev: 1	FY21-23: 1	FY21-23: 7.6
	FY18-20: 1	FY18-20: 3.7

- **Other Operating:** all sources of revenues not included in other classifications such as miscellaneous rentals and sales, miscellaneous fees, and items not material enough for separate disclosure

<u>FY23 Budget</u>	<u>Avg % Revenue</u>	<u>AAGR</u>
Total: \$225M	FY24-28: 6	FY24-28: 2.9
% of Rev: 6	FY21-23: 6	FY21-23: 9.9
	FY18-20: 7	FY18-20: -9.7

- **Other Non Operating:** includes gifts, investment income, endowment distribution for operations and federal aid including Pell grants

<u>FY23 Budget</u>	<u>Avg % Revenue</u>	<u>AAGR</u>
Total: \$211M	FY24-28: 6	FY24-28: 4.3
% of Rev: 6	FY21-23: 7	FY21-23: 1.9
	FY18-20: 6	FY18-20: 8.6

- **Independent Business Lines:** Chan Medical School Mass Biologics and Commonwealth Medicine

<u>FY23 Budget</u>	<u>Avg % Revenue</u>	<u>AAGR</u>
Total: \$289M	FY24-28: 7	FY24-28: 1.8
% of Rev: 8	FY21-23: 8	FY21-23: -4.0
	FY18-20: 9	FY18-20: 2.5

Forecasted FY24-28 Expenses

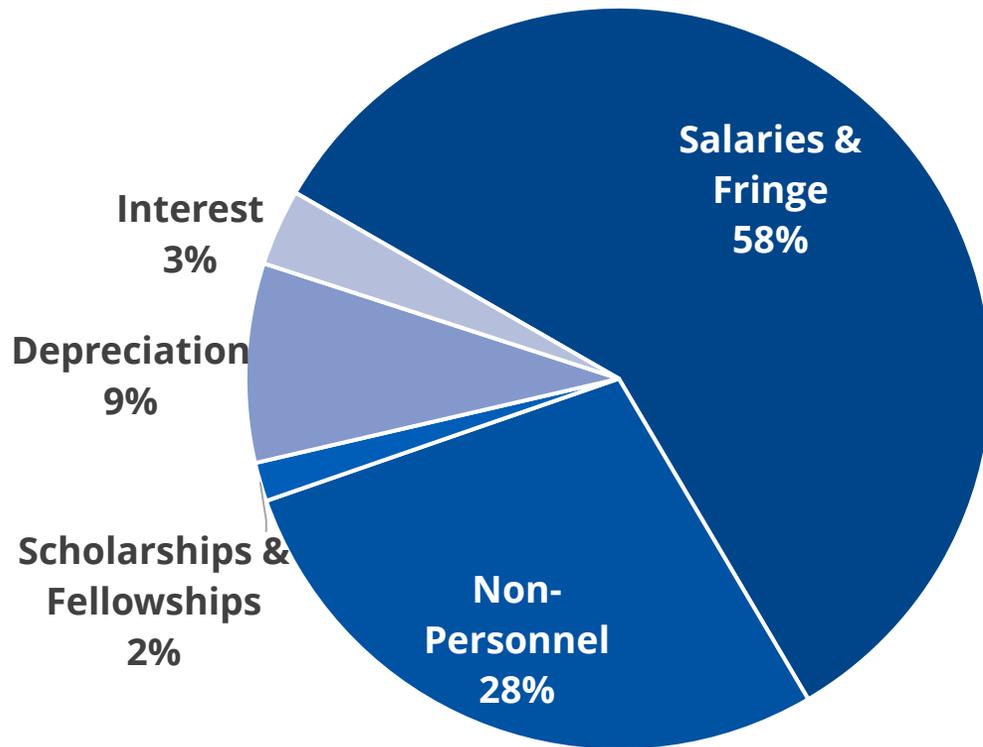
Assumptions

Expense Assumptions	FY24-28
Salaries & Fringe	
Fringe Rate	~2.3% annually
Collective Bargaining	2.5% annually
Depreciation	UMBA Schedule
Interest	UMBA Schedule + borrowing for approved capital plan

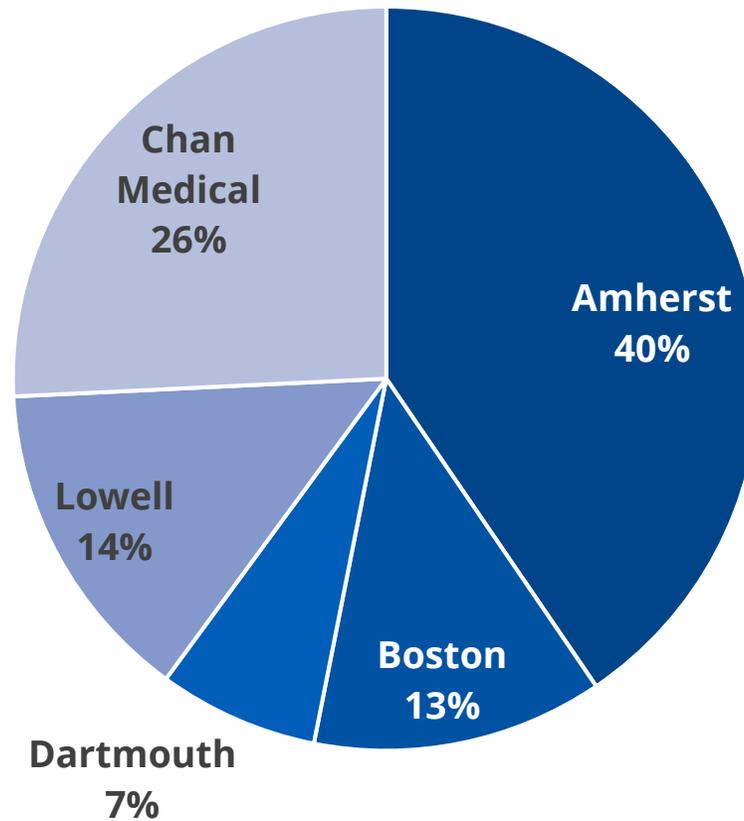
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 - Utilize FY23 budget as starting point; adjustments made based on Q1 projection
 - Excludes UMass Global
- **Assumptions:**
 - Provided by UMPO for key drivers
 - Campus specific strategic plans drive underlying assumptions
 - Continued impact of current inflation environment to be further reviewed during the FY24 budget process
- **Operating margin:** Achieve 2% by FY25

University Expenses: by Category & Campus

FY23 Expense Categories = \$3.8 billion



FY23 Campus Expenses



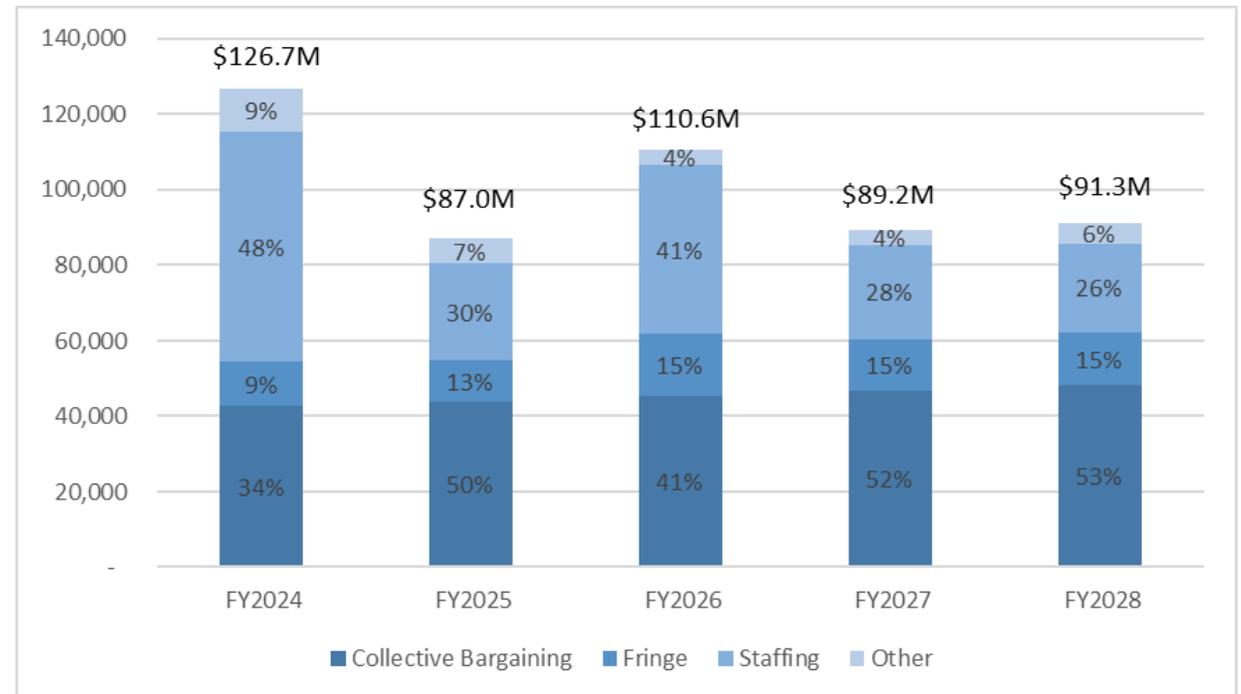
Note: excludes UMass Global

Salaries & Fringe

- **Key Takeaways:** 60% of growth driven by collective bargaining and fringe with remainder driven by staffing increases
- **Collective Bargaining:** 2.5% annual increases; total annual cost of a 2.5% increase is \$39M of which state reimburses 46%
- **Fringe Benefits Rate:** on average 44% applied to salaries; rate grows annually by historical average of 2.3%
- **Workforce:** staffing grows on average 1.3% over the forecast period

<u>FY23 Budget</u>	<u>Avg % Expense</u>	<u>AAGR</u>
Total: \$2.2B	FY24-28: 59	FY24-28: 4.4
Salaries 1.8B; Fringe 0.4B	FY21-23: 58	FY21-23: 1.8
% of Exp: 58	FY18-20: 59	FY18-20: 4.3

Growth in Salaries & Fringe Expense:



Collective Bargaining

- Upcoming contract period FY24-FY26; assumed 2.5% increases over the forecast (no state parameters released to date)
- Administration (through the Office of Employee Relations) establishes “parameters” – in the form of salary increase percentages
- Salaries are recurring, the cumulative impact must be funded in future budgets
- State reimburses ~46% of total costs

(\$ in Millions)

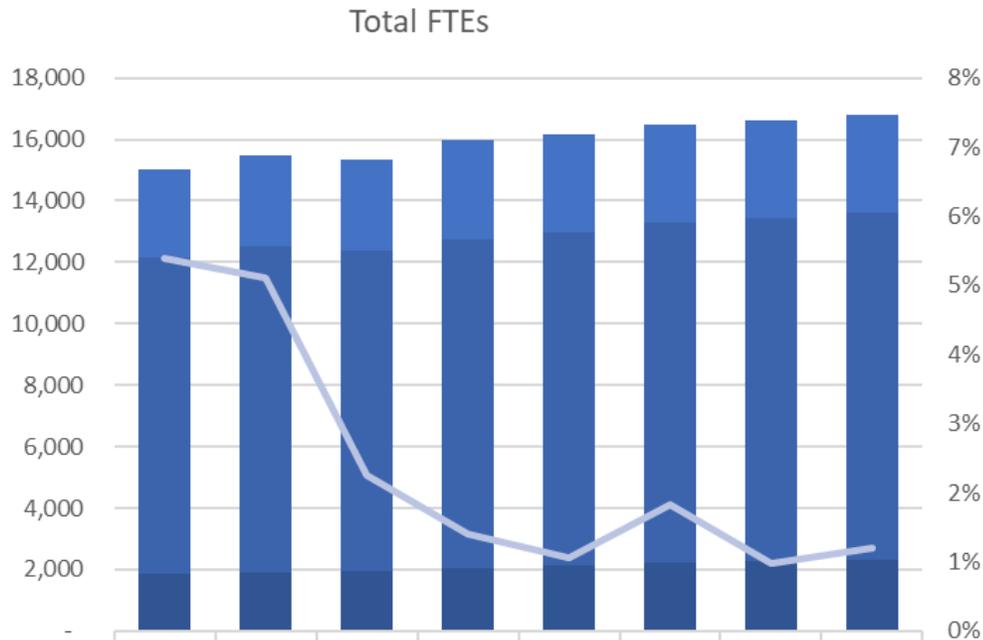
Total Cost (Estimate)	FY24 (2.5%)	FY25 (2.5%)	FY26 (2.5%)	FY27 (2.5%)	FY28 (2.5%)	Total
Base increase	39.4	39.4	39.4	39.4	39.4	196.8
Base increase		38.1	38.1	38.1	38.1	152.5
Base increase			39.2	39.2	39.2	117.6
Base increase				40.2	40.2	80.3
Base increase					41.7	41.7
Total	39.4	77.5	116.7	156.8	198.5	588.9

State Funding (Estimate)						
Base increase	17.7	17.7	17.7	17.7	17.7	88.4
Base increase		18.1	18.1	18.1	18.1	72.4
Base increase			18.5	18.5	18.5	55.6
Base increase				19.0	19.0	37.9
Base increase					19.4	19.4
Total	17.7	35.8	54.3	73.3	92.7	273.8
<i>% of Total Cost</i>	<i>45%</i>	<i>46%</i>	<i>47%</i>	<i>47%</i>	<i>47%</i>	<i>46%</i>

Net University Cost	21.7	41.7	62.3	83.5	105.8	315.1
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Staffing

Faculty & staff grows on average 1.3% over the forecast period.



Auxiliary / IBL	2,841	2,971	2,965	3,237	3,188	3,186	3,187	3,188
Unrestricted	10,308	10,608	10,442	10,731	10,858	11,065	11,175	11,325
Restricted	1,858	1,895	1,940	2,025	2,117	2,208	2,256	2,305
Total	15,008	15,773	15,347	15,993	16,163	16,459	16,618	16,818
% Change	5.4%	5.1%	2.3%	1.4%	1.1%	1.8%	1.0%	1.2%

Unrestricted: faculty & staff that support general university operations

Auxiliary / Independent Business Lines: Housing & dining along with Mass Biologics & Commonwealth Medicine

Restricted: faculty & staff funded by grant & endowed funds

FTEs:	10,608
% of Total FTEs:	67%
Faculty % / Staff %:	37% / 63%
Forecast AAGR:	1.3%

FTEs:	2,971
% of Total FTEs:	19%
Faculty % / Staff %:	0% / 100%
Forecast AAGR:	1.5%

FTEs:	1,895
% of Total FTEs:	13%
Faculty % / Staff %:	17% / 83%
Forecast AAGR:	4.0%

Other Expense Categories

- Non-Personnel:** utilities, supplies, contracted services, travel and other business-related expenses
- Depreciation:** depreciation of plant, property, and equipment, depletion, and amortization of assets acquired by capital lease
- Interest:** related to debt issued through the UMass Building Authority and other sources

<u>FY23 Budget</u>	<u>Avg % Expense</u>	<u>AAGR</u>
Total: \$1.1B	FY24-28: 28	FY24-28: 4.0
% of Exp: 28	FY21-23: 27	FY21-23: 3.1
	FY18-20: 30	FY18-20: -0.6

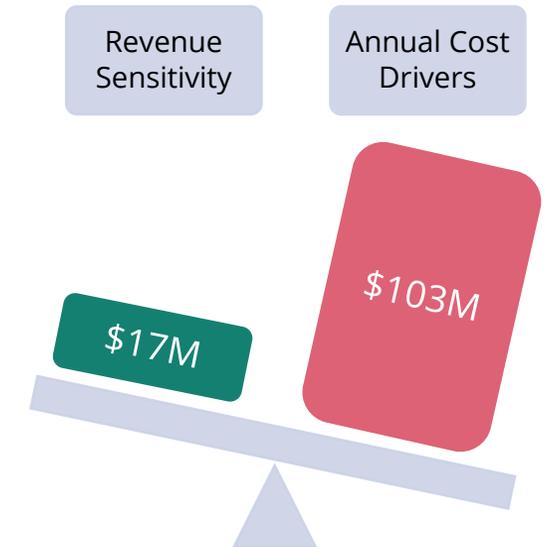
<u>FY23 Budget</u>	<u>Avg % Expense</u>	<u>AAGR</u>
Total: \$328M	FY24-28: 8	FY24-28: 2.4
% of Exp: 9	FY21-23: 9	FY21-23: 4.4
	FY18-20: 8	FY18-20: 5.0

<u>FY23 Budget</u>	<u>Avg % Expense</u>	<u>AAGR</u>
Total: \$126M	FY24-28: 3	FY24-28: 0.3
% of Exp: 3	FY21-23: 3	FY21-23: 5.1
	FY18-20: 3	FY18-20: -0.2

Sensitivity Analysis: Impact of Key Revenue/Expense Drivers

- Revenue growth is limited and driven by enrollment, occupancy, tuition rates and state funds
- Overall expenses increase on average by 4.0% with the majority of increases related to fixed costs
- Modest revenue growth only covers a fraction of fixed cost increases

Revenue Sensitivity	University Total	% Revenue	Annual Cost Drivers	University Total	% Expenses
Enrollment (+/-100 students)	4,428	0.1%	Collective Bargaining (2.5%)	39,400	1.0%
Occupancy (+/-100 students)	3,133	0.1%	Fringe (2% growth)	11,571	0.3%
Tuition (each 1%)	4,165	0.1%	Non-Personnel (4.1% growth)	43,364	1.1%
State (each 1%)	5,712	0.1%	Depreciation & Interest	8,902	0.2%



Forecast Borrowing Plan

- Capital Plan approved in September 2021
- Typically issue debt every 2 years; timing & structuring developed by UMBA in consultation with the President's Office and the campuses
- Borrowing needed to fully implement capital plan is expected in FY24, FY26, & FY28
- UMBA uses Commercial Paper (CP) to support project spending in advance of debt issuance

\$ in thousands

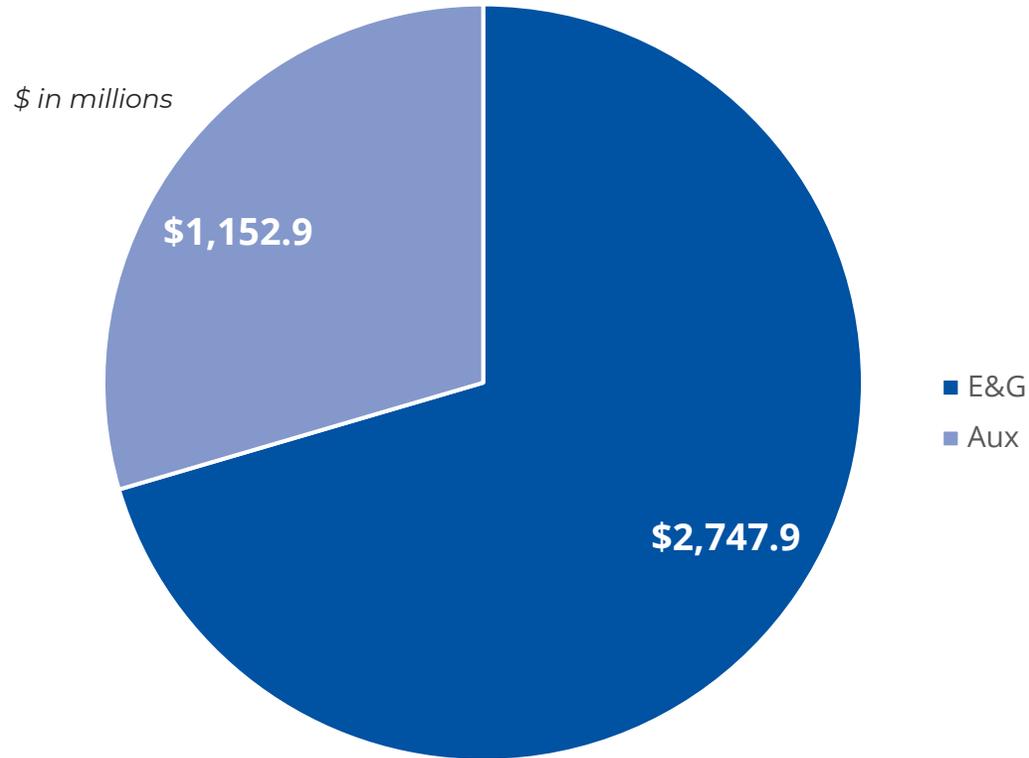
Campus	Planned Issuance FY24 - FY28
UMA	310,000
UMB*	-
UMD	-
UML	72,000
UMCMS	-
Total	382,000

*Forecast borrowing contingent upon outcome of
Dorchester Bay City transaction

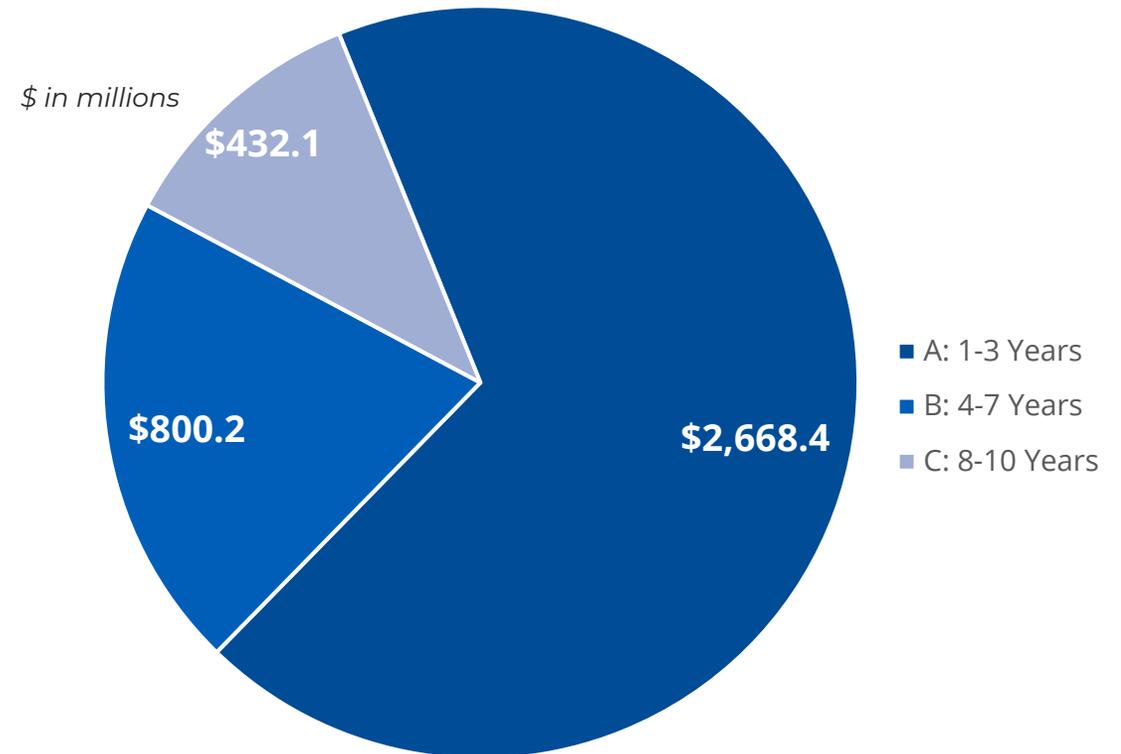
Deferred Maintenance

\$3.9 Billion Backlog Coming Due in the Next 10 Years

\$3.9B: E&G vs. AUX



\$3.9B: By Timeframe



Deferred Maintenance - Annual Investment

FY22 Keep Up

\$42 M

FY22 Keep Up

\$189 M

FY22 % Target

22%

FY22 Catch Up

\$154 M

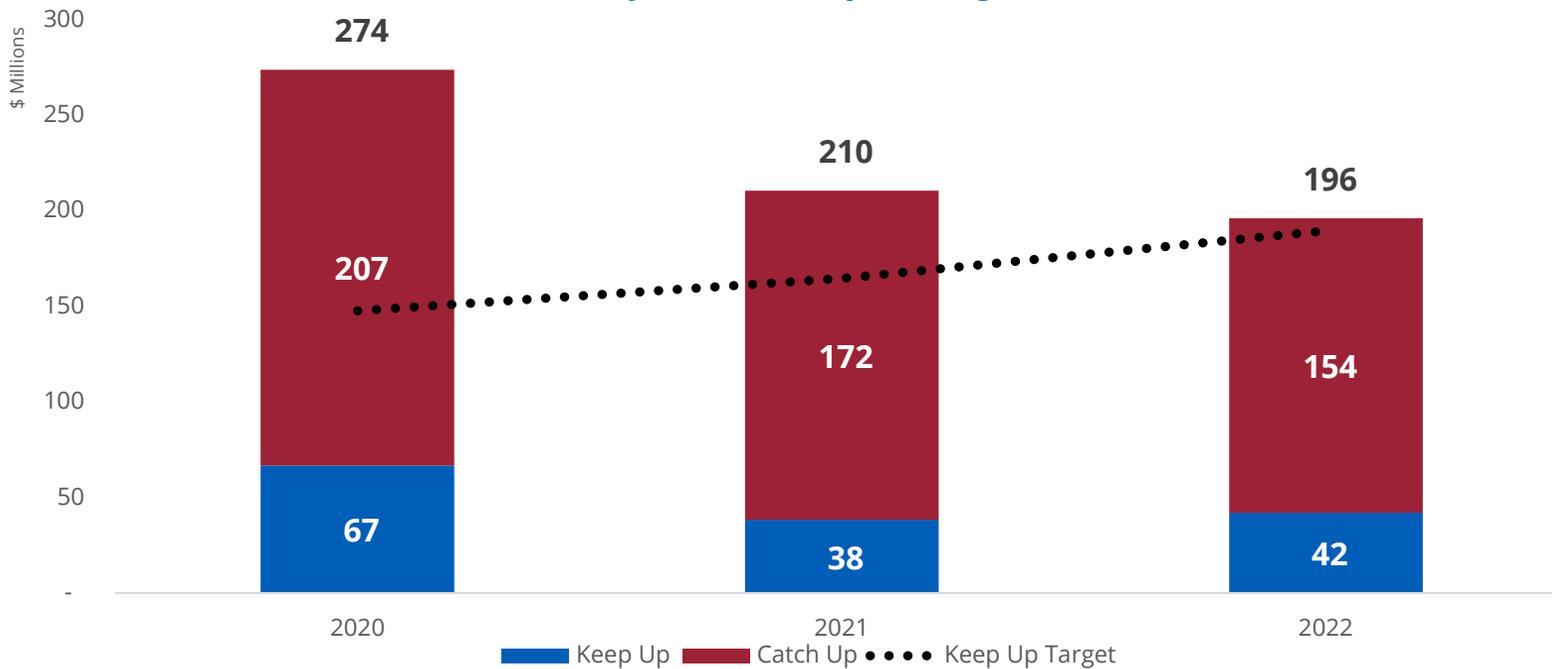
FY22 Catch Up

TBD

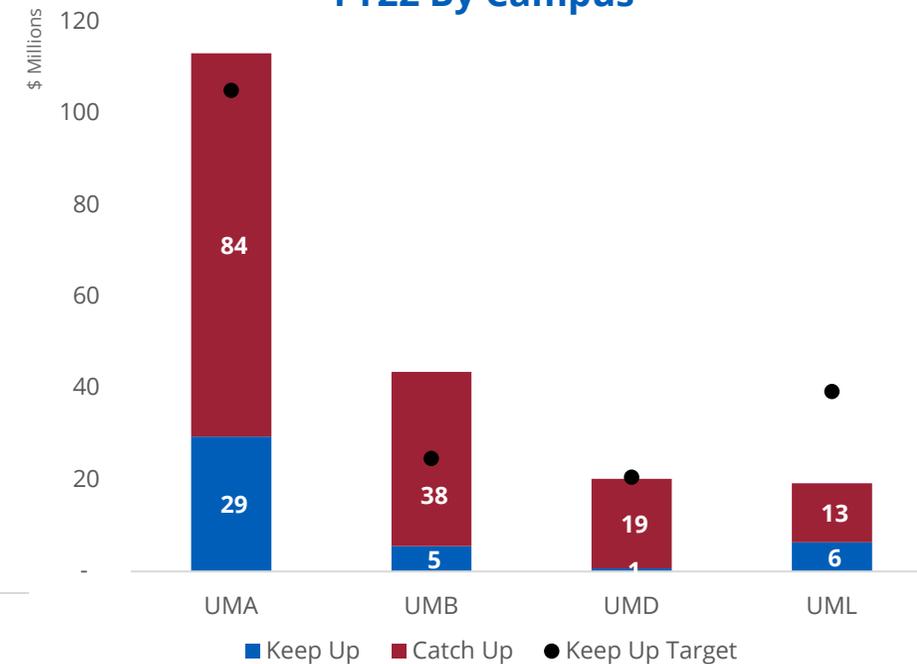
FY22 % Target

N/A

System DM Spending



FY22 By Campus



Deferred Maintenance – Annual Investment

<i>\$ in thousands</i>	FY24	FY25	FY26	FY27	FY28
Keep Up					
Target	273,000	280,000	287,500	294,500	301,000
Depreciation	343,293	360,479	367,510	371,829	369,968
- Principal Payment	125,578	122,944	119,074	122,151	126,923
= Available Keep Up	217,715	237,535	248,436	249,678	243,045
Forecast Spend	115,000	106,000	111,000	112,500	115,000
% of Target	42%	38%	39%	38%	38%
Catch Up					
Target (15 yrs)	260,000	260,000	260,000	260,000	260,000
Forecast Spend	181,000	196,500	232,000	167,000	140,500
% of Target	70%	75%	89%	64%	54%
Debt Service Burden	6.3%	6.1%	5.8%	5.6%	5.4%

- **Keep-Up:** targets established by Gordian meant to ensure investments sufficient to prevent backlog from growing
- **Depreciation:** (non-cash expenses) budgeted as a proxy to cover debt service; additional amount beyond debt payment available for keep up
- **Catch Up:** estimated 15 years to address backlog through major capital projects and one-time sources like State grants and borrowing

UMass Global



Global: Overview

Background:

- Transfer of control effective September 2021 (FY22)
- Separate 501(c)3 in California with a separate independent Board
- For the first time in FY22, included in the University's Annual Financial Report
- Proforma approved by the Board (April 2020) anticipated shortfalls in the 3-4 year ramp up period
- Self funded initiative - no upfront costs to the University or the Commonwealth

FY23 Update:

- Enrollment: focused on new student growth.
- Operations: staff and faculty headcounts are being managed consistent with enrollment projections; other savings anticipated including capital
- Operating Margin (projection): FY23 Q1 reflects actual performance thru 9/30/22 and a projection thru 6/30/23; includes goodwill expense

Forecast:

- Embrace remote learning & work, expand access to meet student needs & capacity, expand workforce relevant credentials through employer partnerships, establish national & international reach

Operating Margin <i>\$ in Thousands</i>	Actual	2023		Forecast				
	FY2022	Budget	Projected	FY2024	FY2025	FY2026	FY2027	FY2028
Global	-18.3%	-15.3%	-23.1%	-7.4%	4.2%	9.1%	9.8%	10.4%
	(18,620)	(16,842)	(23,825)	(8,798)	5,951	14,172	16,678	19,116

Next Steps



FY24 Budget Planning Begins

Detailed budget planning and tracking of enrollment begins now.

- Advisory Working Group on Financial Planning: utilize SPARC to support campus budget planning
 - Review of program enrollment
 - Enhanced review of auxiliary budgets and tuition discounting
- Track enrollment assumptions using real time admissions / enrollment data
- Maximize additional opportunities through UPST and other shared services
- Adopt Fall 2023 tuition & fees in April

Appendices

Ratios



Key Financial Ratios Defined

Operating cash flow margin – Measures net income (before non-cash expenses) relative to operating revenue to support investments

$$\frac{(\text{Total revenues} - \text{total expenses}) + \text{depreciation} + \text{interest}}{\text{Total revenues}}$$

Operating margin – Indicates the excess margin (or deficit) by which annual revenues cover annual expenses (excluding unrealized gains or losses)

$$\frac{\text{Total revenues} - \text{total expenses}}{\text{Total revenues}}$$

Debt burden – Compares the relative cost of borrowing to overall expenditures

$$\frac{\text{Debt service (P\&I)}}{\text{Total expenses}}$$

Debt service coverage – Measures the ability to make debt service payments from annual operations

$$\frac{(\text{Total revenues} - \text{total expenses}) + \text{depreciation} + \text{interest}}{\text{Debt service (P\&I)}}$$

Total Cash & Investments to expenses – Indicates the university's financial flexibility and resilience, and its ability to generate investment income.

$$\frac{(\text{Cash \& investments} - \text{debt service reserve funds})}{\text{Total expenses}}$$

Financial Leverage Ratio – Measures the ability to repay bondholders from wealth that can be accessed over time or for a specific purpose

$$\frac{\text{Total Cash \& Investments}}{\text{Total Adjusted Debt}}$$

Operating Cash Flow Margin

FY22 Actual

16.3%



FY23 Budget

13.6%



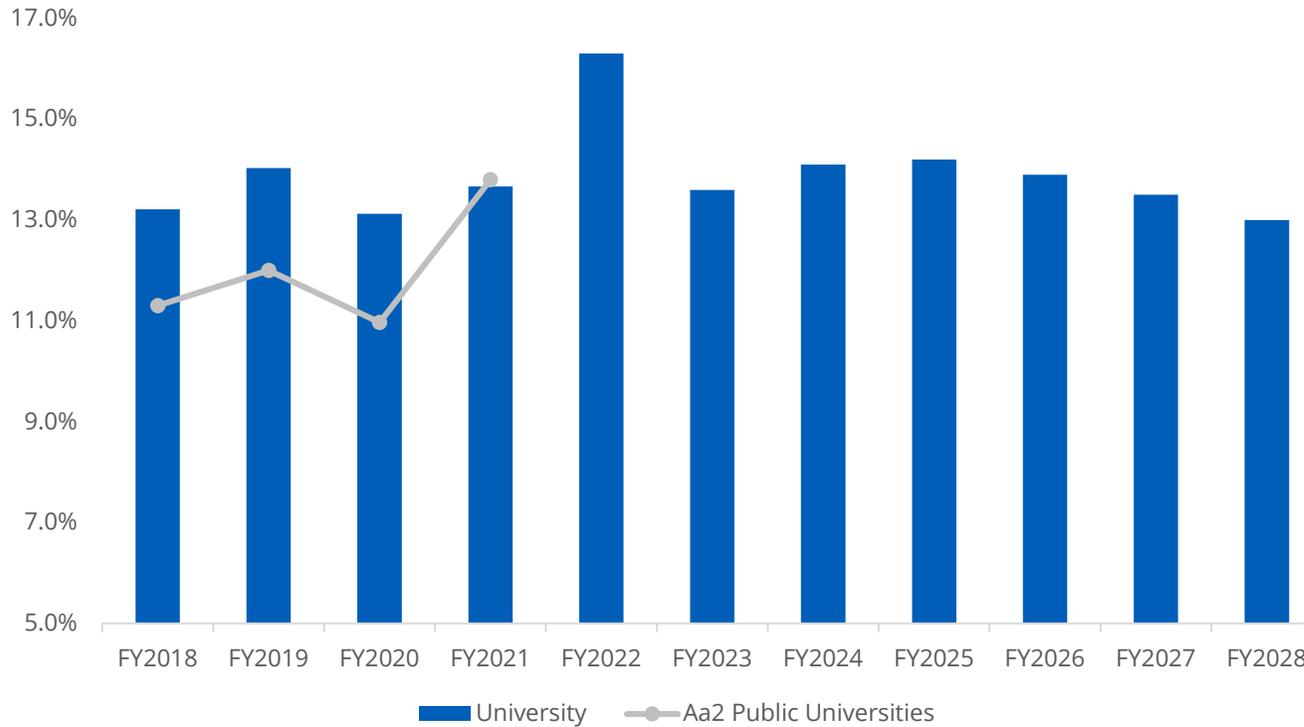
Aa2 Median (FY21)

15.0%

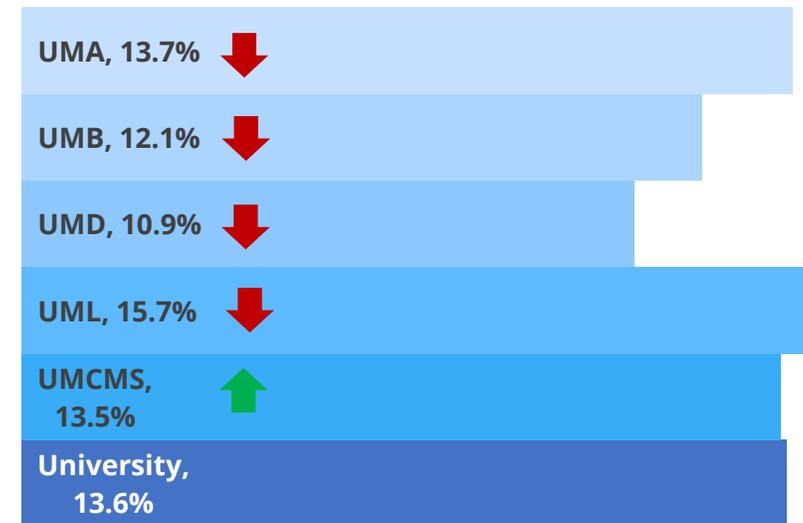
Stronger



Weaker



**FY23 Budget
by Campus***

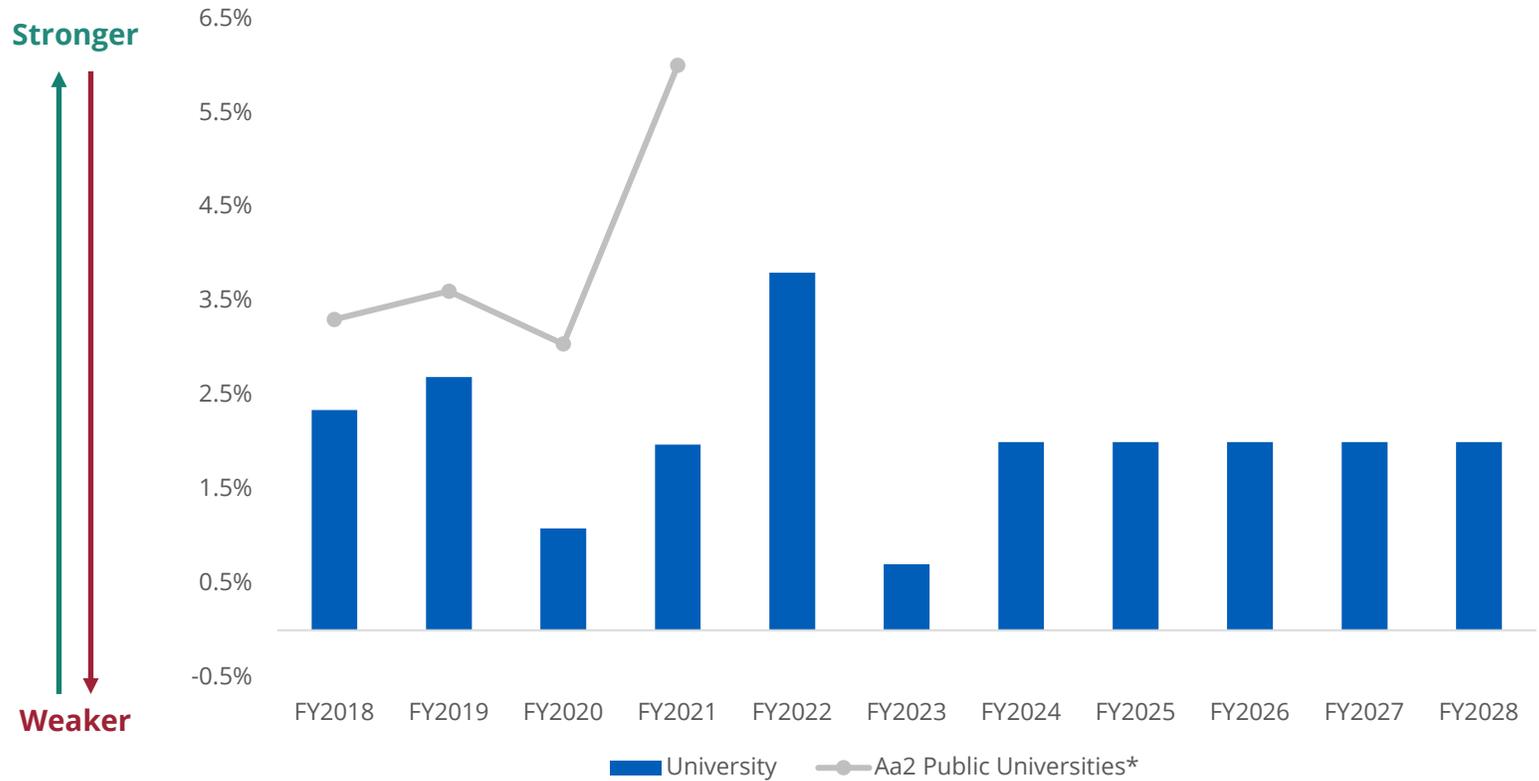


*Excludes UMass Global

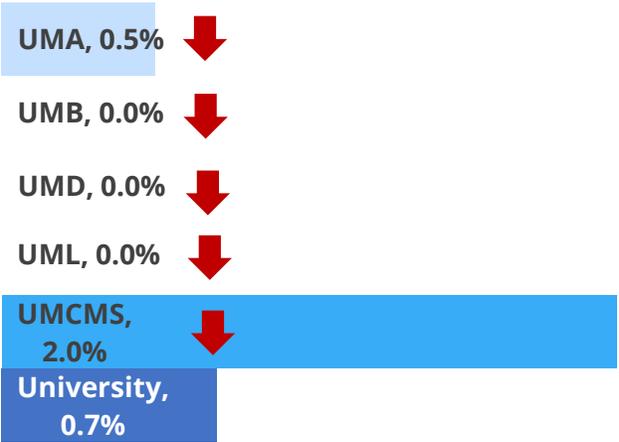


Operating Margin

FY22 Actual 3.8% ↑	FY23 Budget 0.7% ↓	Aa2 Median (FY21) 6.0%
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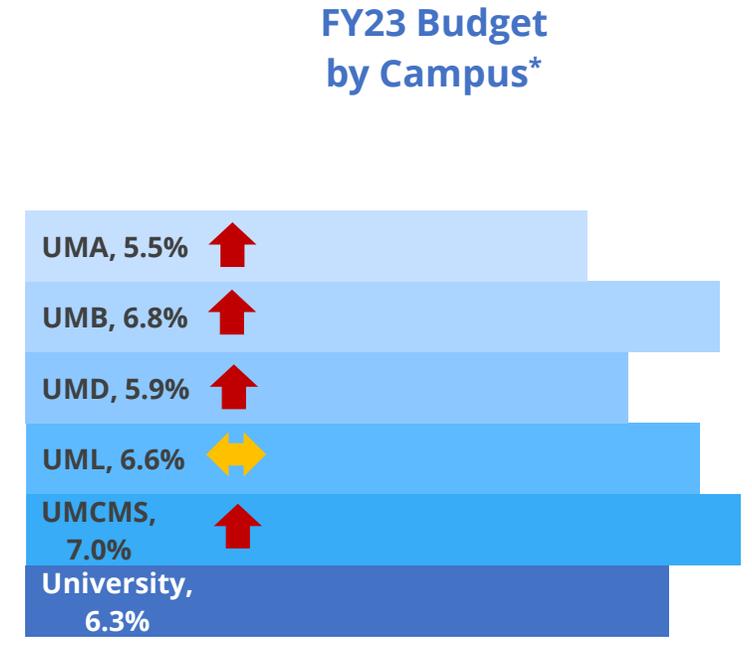
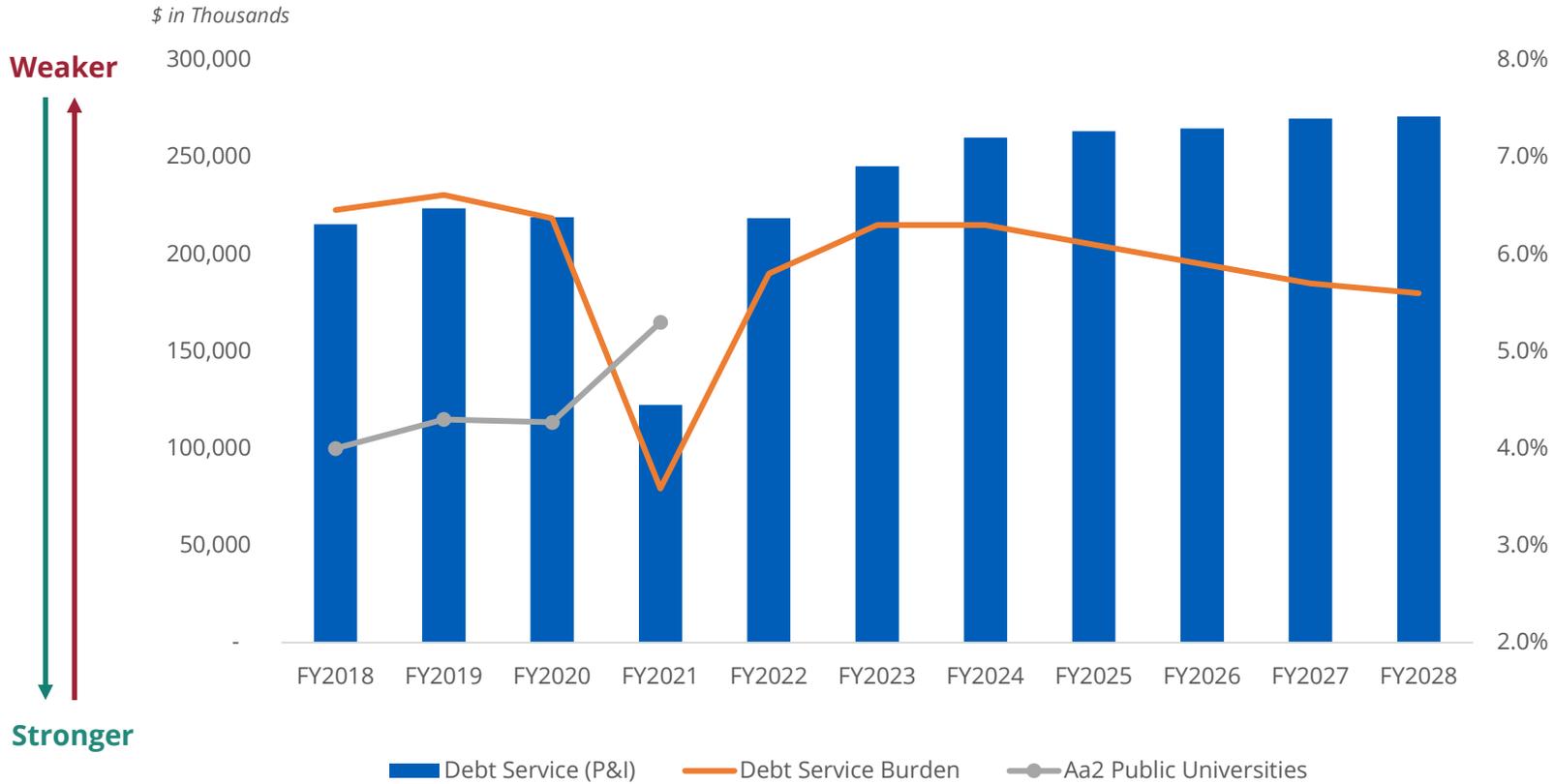
FY23 Budget By Campus*



*Excludes UMass Global

Debt Service Burden

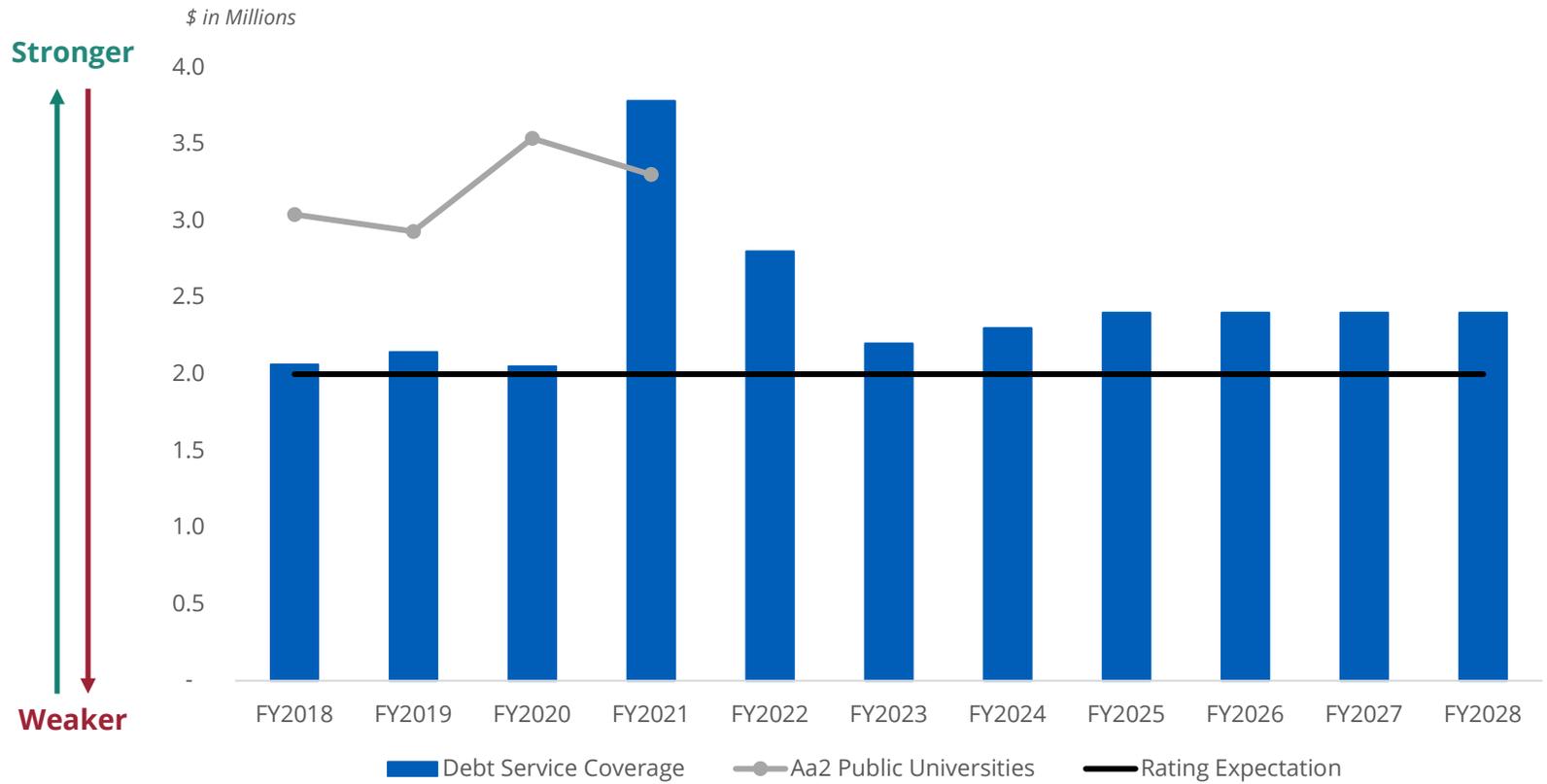
FY22 Actual 5.8% ↑	FY23 Budget 6.3% ↑	Aa2 Median (FY21) 5.4%
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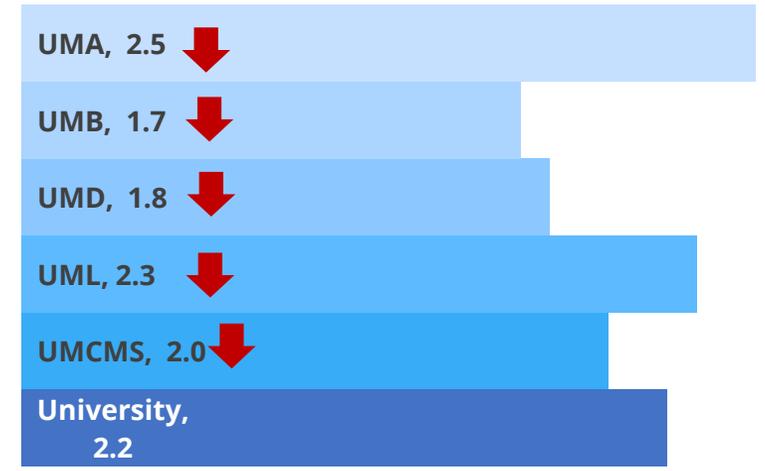
*Excludes UMass Global

Debt Service Coverage

FY22 Actual 2.8x ↓	FY23 Budget 2.2x ↓	Aa2 Median (FY21) 3.0x
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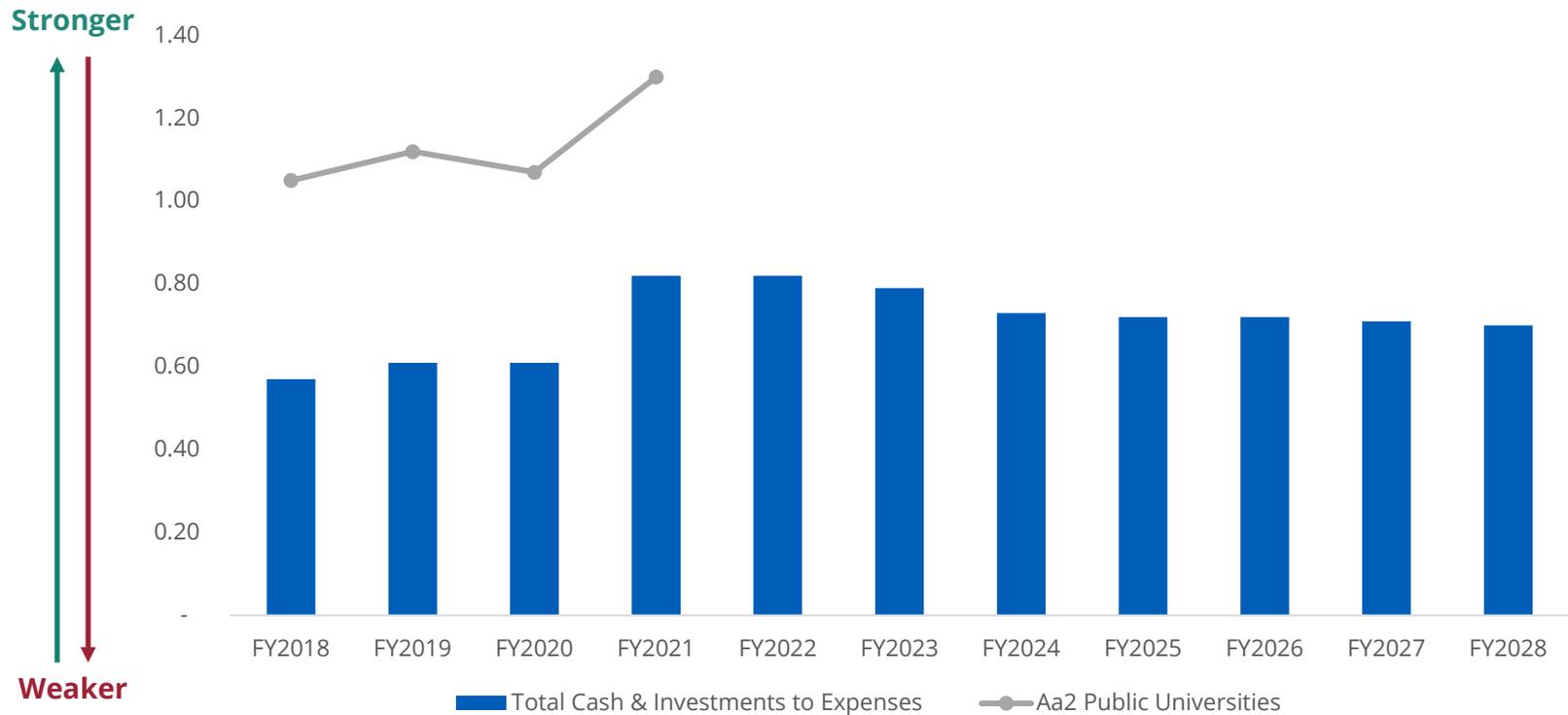
FY23 Budget By Campus*



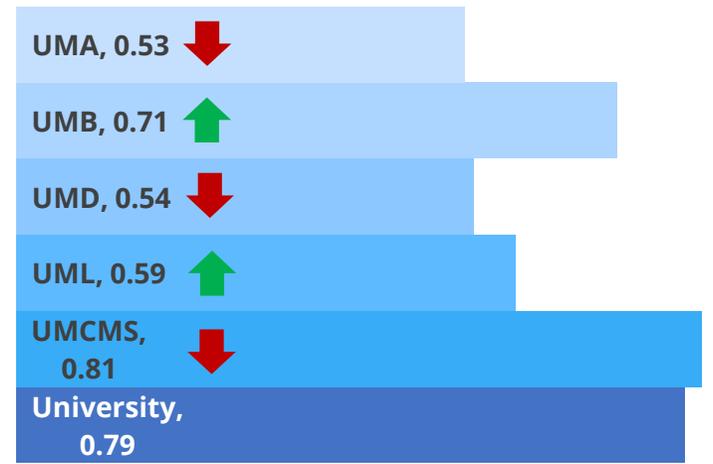
*Excludes UMass Global

Total Cash & Investments to Expenses

<p><u>FY22 Actual</u></p> <p>0.82x ↔</p>	<p><u>FY23 Budget</u></p> <p>0.79x ↓</p>	<p><u>Aa2 Median (FY21)</u></p> <p>1.3x</p>
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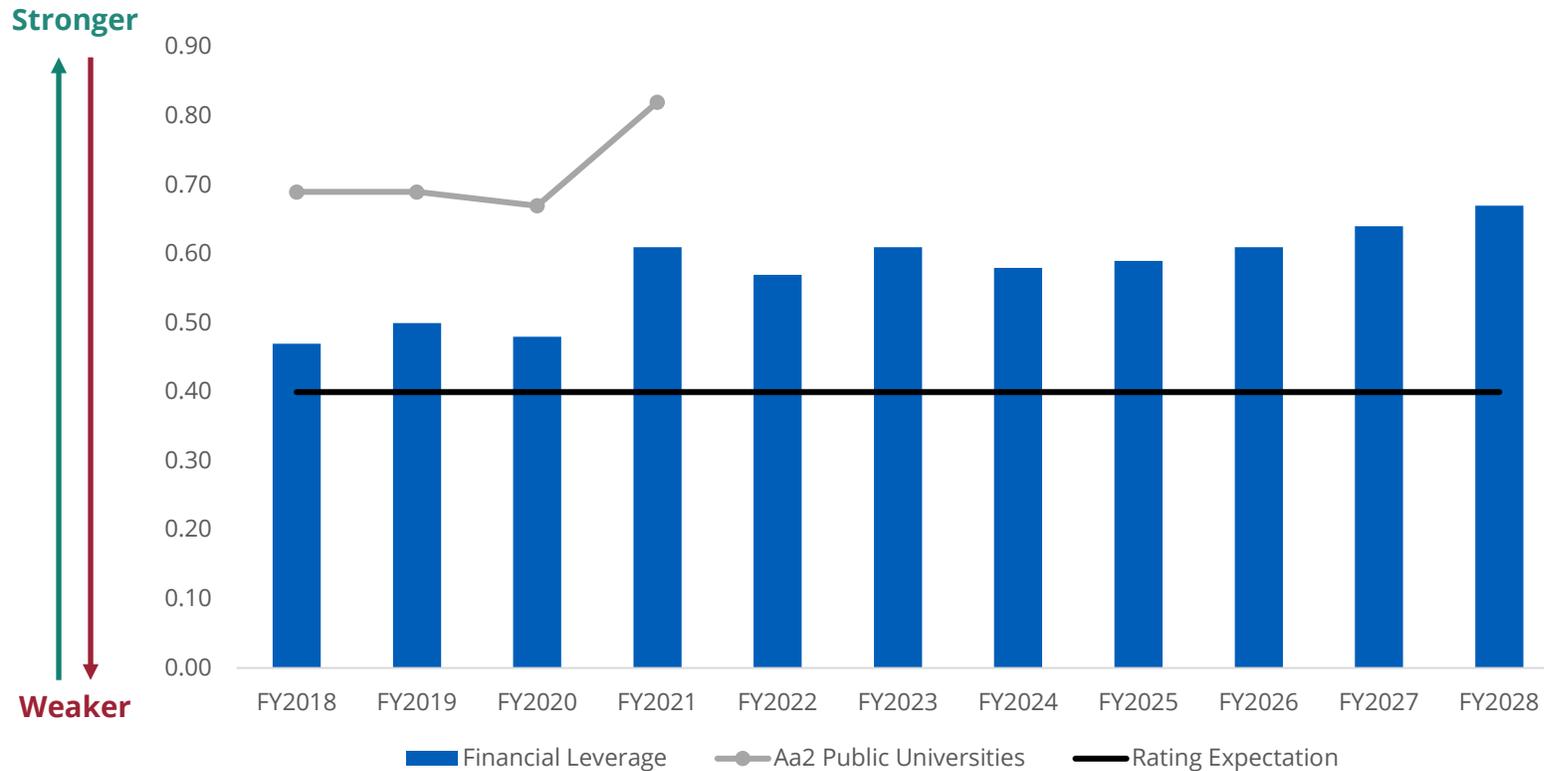
FY23 Budget By Campus*



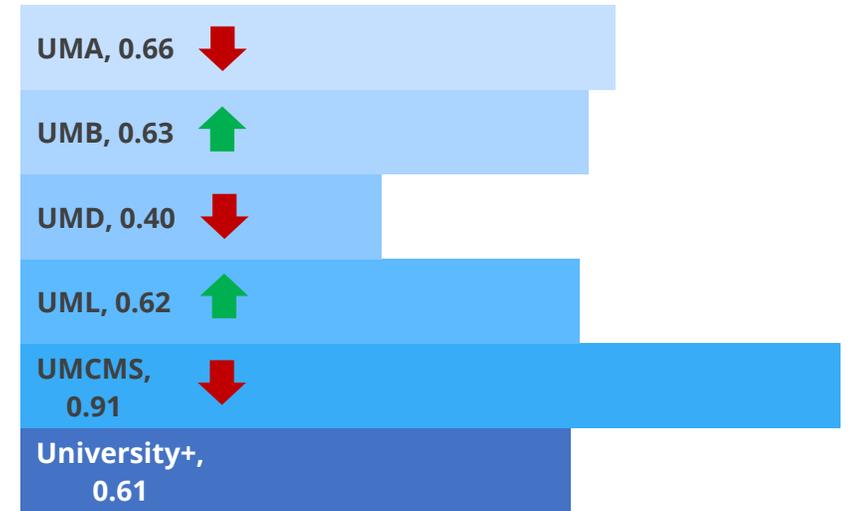
*Excludes UMass Global

Leverage: Total Cash & Investments to Adjusted Debt

FY22 Actual 0.57x ↓ FY22 C&I: \$2.93B	FY23 Budget 0.61x ↑ FY23 C&I: \$2.94B	Aa2 Median (FY21) 0.8x Aa2 C&I: \$2.59B
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FY23 Budget By Campus*



*Excludes UMass Global
+Net Pension Liability included at system-level only

Campus Data

University



University: Revenue & Expenses

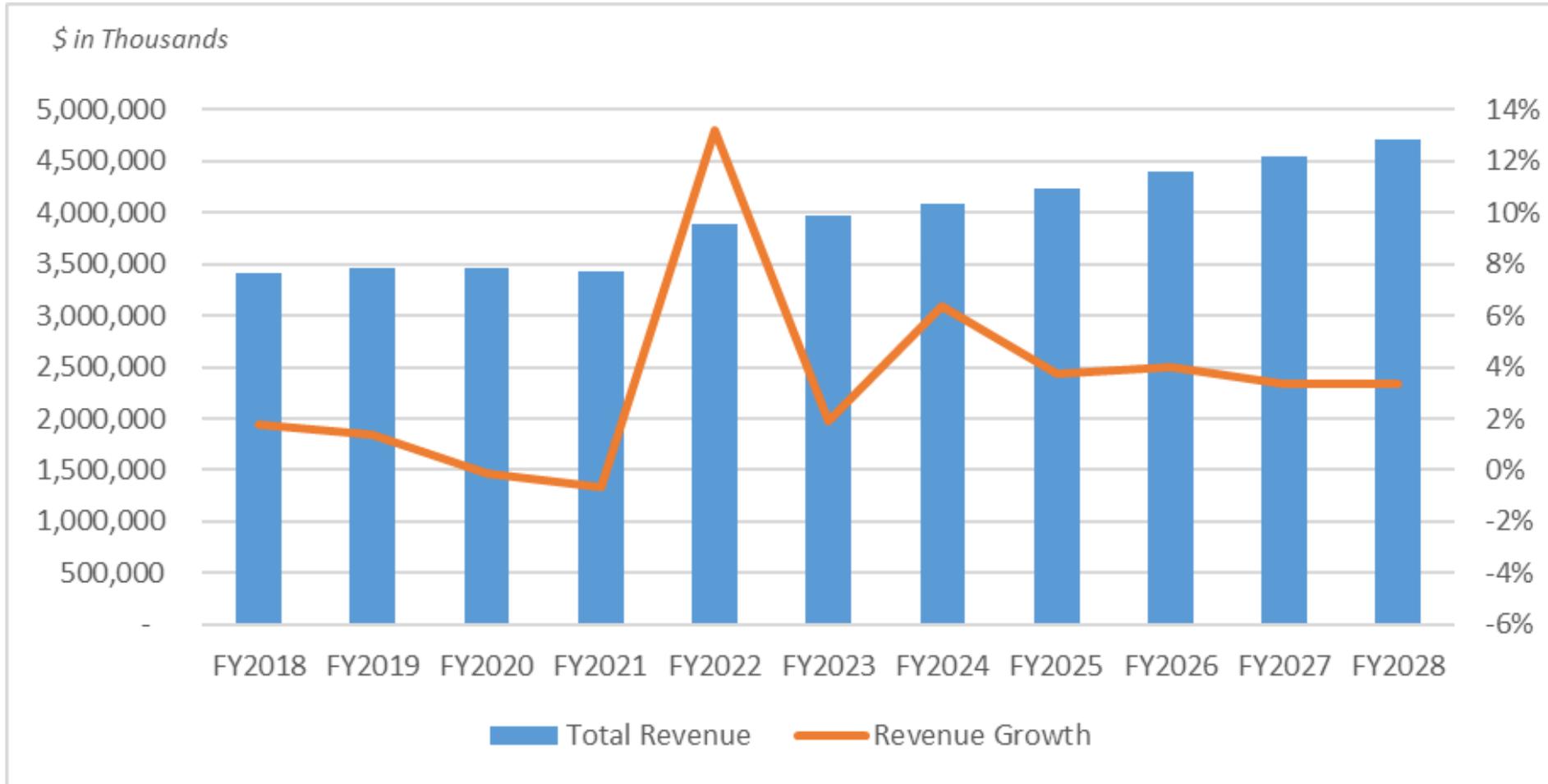
(\$ in Thousands)

Revenues	Actual					Budget	Q1 Projection	Forecast					% Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Gross Tuition & Fees	1,186,773	1,223,734	1,260,327	1,275,742	1,268,347	1,306,872	1,331,922	1,376,891	1,430,727	1,485,097	1,523,282	1,565,233	13.7%	3.7%
Tuition Discounts	(311,947)	(328,830)	(343,030)	(345,128)	(364,746)	(372,754)	(379,317)	(391,224)	(407,281)	(421,441)	(429,539)	(439,984)	12.5%	3.4%
Discount Rate	26.3%	26.9%	27.2%	27.1%	28.8%	28.5%	28.5%	28.4%	28.5%	28.4%	28.2%	28.1%	-1.1%	-0.3%
Net Tuition & Fees	874,826	894,904	917,297	930,614	903,601	934,119	952,605	985,667	1,023,446	1,063,656	1,093,743	1,125,249	14.2%	3.8%
Grants	560,990	593,086	581,372	667,148	716,333	687,541	714,435	784,996	842,874	902,426	943,138	985,475	25.5%	7.5%
Sales & Service, Educational	30,591	34,985	31,248	30,253	40,906	37,094	40,901	42,392	43,654	44,972	46,350	47,794	12.7%	5.3%
Auxiliary Enterprises	416,733	441,795	378,314	163,811	432,970	465,347	474,315	487,829	500,597	514,129	529,300	545,354	11.8%	3.2%
Other Operating	311,119	222,074	238,188	199,854	267,881	224,835	254,243	247,028	253,295	255,273	257,117	258,336	4.6%	2.9%
State Appropriations	751,894	780,222	810,518	845,482	880,002	986,826	1,018,814	1,002,995	1,034,430	1,076,764	1,120,392	1,166,064	16.3%	3.4%
Other NonOperating	197,142	231,504	222,129	288,591	311,393	211,409	222,343	229,579	240,300	245,252	253,205	260,957	13.7%	4.3%
Independent Business	274,555	266,509	280,620	311,262	251,782	289,220	288,067	299,164	294,007	300,298	307,838	315,533	5.5%	1.8%
Total Revenues	3,417,850	3,465,079	3,459,686	3,437,015	3,804,868	3,836,389	3,965,724	4,079,650	4,232,605	4,402,769	4,551,082	4,704,762	15.3%	4.2%
% Growth	1.8%	1.4%	-0.2%	-0.7%	10.7%	0.8%	4.2%	6.3%	3.7%	4.0%	3.4%	3.4%		
Expenses													Cumulative	Avg. Annual
Salaries & Fringe	1,901,896	1,970,869	2,012,669	2,008,909	2,119,274	2,208,061	2,274,277	2,360,318	2,447,326	2,557,965	2,647,185	2,738,532	16.0%	4.4%
Non-Personnel	1,007,943	943,685	949,638	897,115	1,030,011	1,067,663	1,068,790	1,112,027	1,145,665	1,188,417	1,240,045	1,300,794	17.0%	4.0%
Scholarships & Fellowships	50,402	49,507	65,464	80,024	118,302	64,129	61,566	62,162	64,976	67,423	69,253	70,425	13.3%	1.9%
Depreciation	261,417	276,638	288,667	300,201	323,702	328,366	328,182	343,293	360,479	367,510	371,829	369,968	7.8%	2.4%
Interest	115,851	116,217	109,186	105,468	114,541	125,947	126,339	119,922	127,190	130,613	129,357	127,259	6.1%	0.3%
Total Expenses	3,336,260	3,356,916	3,424,616	3,391,718	3,705,830	3,794,166	3,859,154	3,997,722	4,145,636	4,311,929	4,457,669	4,606,978	15.2%	4.0%
% Growth	3.1%	0.6%	2.0%	-1.0%	9.3%	2.4%	4.1%	5.4%	3.7%	4.0%	3.4%	3.3%		
UMass OM Calc Revenues	3,416,188	3,449,697	3,462,090	3,459,992	3,852,950	3,824,341	3,965,724	4,077,501	4,230,680	4,400,945	4,549,242	4,702,882		
Total Expenses	3,336,260	3,356,916	3,424,616	3,391,716	3,705,830	3,795,798	3,859,154	3,997,722	4,145,636	4,311,929	4,457,669	4,606,978		
Surplus / (Deficit)	79,928	92,781	37,474	68,276	147,120	28,543	106,570	79,779	85,044	89,016	91,573	95,904		
UMass OM Calc	2.3%	2.7%	1.1%	2.0%	3.8%	0.7%	2.7%	2.0%	2.0%	2.0%	2.0%	2.0%		

Note: excludes UMass Global

University Revenue: Trend

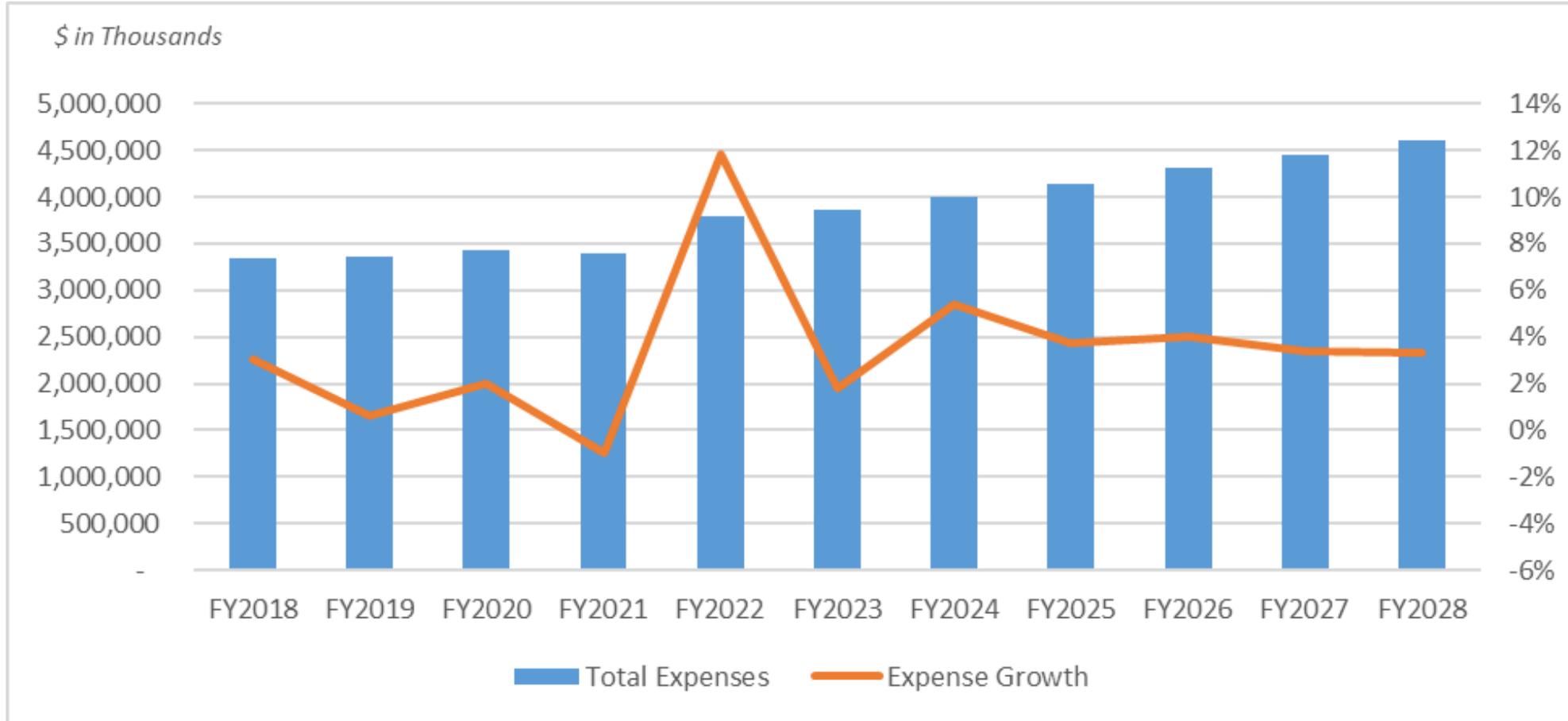
Revenue grows on average 4.2% over the forecast period.



Note: excludes UMass Global

University Expenses: Annual Changes

Expenses grow on average 4.0% over the forecast period.



Excludes impact of GASB 68 & 75

University Revenue: by Revenue Category

\$ in Thousands	Actual					Budget	Q1 Projection	Forecast					Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Gross Tuition & Fees	1,185,826	1,223,734	1,260,906	1,275,742	1,268,347	1,306,872	1,331,922	1,376,891	1,430,727	1,485,097	1,523,282	1,565,233	188,342	
Gross Tuition & Fees Growth	4.3%	3.2%	3.0%	1.2%	-0.6%	3.0%	5.0%	5.4%	3.9%	3.8%	2.6%	2.8%	13.7%	3.7%
Tuition Discounts	(311,000)	(328,830)	(343,030)	(345,128)	(364,746)	(372,754)	(379,317)	(391,224)	(407,281)	(421,441)	(429,539)	(439,984)	(48,759)	
Tuition Discounts Growth	7.7%	5.7%	4.3%	0.6%	5.7%	2.2%	4.0%	5.0%	4.1%	3.5%	1.9%	2.4%	12.5%	3.4%
Net Tuition & Fees	874,825	894,904	917,876	930,614	903,601	934,119	952,605	985,667	1,023,446	1,063,656	1,093,743	1,125,249	139,582	
Net Tuition & Fees Growth	3.2%	2.3%	2.6%	1.4%	-2.9%	3.4%	5.4%	5.5%	3.8%	3.9%	2.8%	2.9%	14.2%	3.8%
Grants	560,990	593,086	581,849	667,148	716,333	687,541	714,435	784,996	842,874	902,426	943,138	985,475	200,479	
Grants Growth	0.2%	5.7%	-1.9%	14.7%	7.4%	-4.0%	-0.3%	14.2%	7.4%	7.1%	4.5%	4.5%	25.5%	7.5%
Sales & Service, Educational	30,591	34,984	31,248	30,253	40,906	37,094	40,901	42,392	43,654	44,972	46,350	47,794	5,402	
Sales & Service, Educational Growth	5.8%	14.4%	-10.7%	-3.2%	35.2%	-9.3%	-0.0%	14.3%	3.0%	3.0%	3.1%	3.1%	12.7%	5.3%
Auxiliary Enterprises	416,733	441,795	378,314	163,811	432,970	465,347	474,315	487,829	500,597	514,129	529,300	545,354	57,525	
Auxiliary Growth	4.0%	6.0%	-14.4%	-56.7%	164.3%	7.5%	9.5%	4.8%	2.6%	2.7%	3.0%	3.0%	11.8%	3.2%
Other Operating	311,119	222,076	179,034	199,854	267,881	224,835	254,243	247,028	253,295	255,273	257,117	258,336	11,308	
Other Operating Growth	33.1%	-28.6%	-19.4%	11.6%	34.0%	-16.1%	-5.1%	9.9%	2.5%	0.8%	0.7%	0.5%	4.6%	2.9%
State	751,894	780,222	810,518	845,482	880,002	986,826	1,018,814	1,002,995	1,034,430	1,076,764	1,120,392	1,166,064	163,069	
State Growth	4.3%	3.8%	3.9%	4.3%	4.1%	12.1%	15.8%	1.6%	3.1%	4.1%	4.1%	4.1%	16.3%	3.4%
Other Non Operating	197,142	231,504	222,128	288,591	311,393	211,409	222,343	229,579	240,300	245,252	253,205	260,957	31,378	
Other Non-Operating Growth	1.1%	17.4%	-4.1%	29.9%	7.9%	-32.1%	-28.6%	8.6%	4.7%	2.1%	3.2%	3.1%	13.7%	4.3%
Independent Business Lines (Med)	274,555	266,509	337,709	311,262	251,782	289,220	288,067	299,164	294,007	300,298	307,838	315,533	16,369	
Independent Business Lines Growth	-26.1%	-2.9%	26.7%	-7.8%	-19.1%	14.9%	14.4%	3.4%	-1.7%	2.1%	2.5%	2.5%	5.5%	1.8%
University	3,417,849	3,465,080	3,458,676	3,437,015	3,804,868	3,836,389	3,965,724	4,079,650	4,232,605	4,402,769	4,551,082	4,704,762	625,112	
University Growth	1.8%	1.4%	-0.2%	-0.6%	10.7%	0.8%	4.2%	6.3%	3.7%	4.0%	3.4%	3.4%	15.3%	4.2%

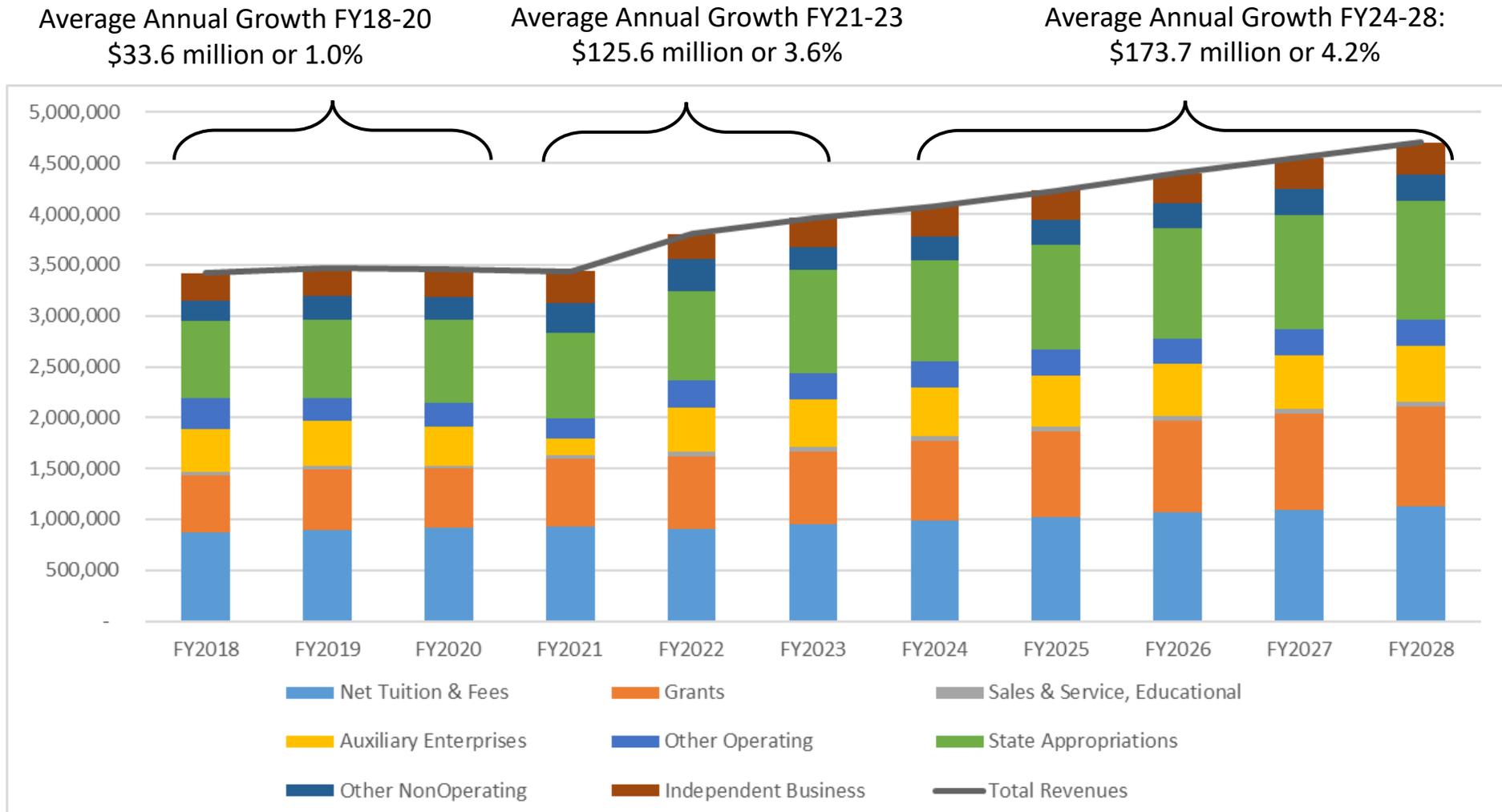
Note: excludes UMass Global; includes unrealized gains

Revenue: by Campus

\$ in Thousands	Actual					Budget	Q1 Projection	Forecast					Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Amherst	1,276,643	1,341,052	1,328,911	1,242,326	1,495,879	1,522,969	1,615,270	1,638,338	1,688,165	1,751,200	1,806,333	1,866,000	227,662	
Amherst Growth	5.0%	5.0%	-0.9%	-6.5%	20.4%	1.8%	8.0%	7.6%	3.0%	3.7%	3.1%	3.3%	13.9%	4.2%
Boston	426,589	436,467	443,615	468,123	482,363	470,496	488,005	497,122	513,800	531,388	548,127	565,218	68,095	
Boston Growth	0.8%	2.3%	1.6%	5.5%	3.0%	-2.5%	1.2%	5.7%	3.4%	3.4%	3.1%	3.1%	13.7%	3.7%
Dartmouth	250,628	256,592	251,446	241,240	262,177	258,762	270,589	270,611	281,075	290,278	298,953	308,361	37,750	
Dartmouth Growth	0.9%	2.4%	-2.0%	-4.1%	8.7%	-1.3%	3.2%	4.6%	3.9%	3.3%	3.0%	3.1%	13.9%	3.6%
Lowell	459,042	484,770	480,120	474,927	533,690	529,157	541,612	560,949	587,506	610,993	635,353	658,989	98,040	
Lowell Growth	4.4%	5.6%	-1.0%	-1.1%	12.4%	-0.8%	1.5%	6.0%	4.7%	4.0%	4.0%	3.7%	17.5%	4.5%
President's Office	119,219	124,478	115,679	99,273	100,136	99,837	101,121	102,035	103,914	105,722	107,750	109,591	7,556	
President's Office Growth	1.3%	4.4%	-7.1%	-14.2%	0.9%	-0.3%	1.0%	2.2%	1.8%	1.7%	1.9%	1.7%	7.4%	1.9%
Subtotal	2,532,121	2,643,359	2,619,771	2,525,889	2,874,245	2,881,221	3,016,597	3,069,055	3,174,460	3,289,581	3,396,516	3,508,158	439,103	
Subtotal Growth	3.4%	4.2%	-0.9%	-3.7%	13.8%	0.2%	5.0%	6.5%	3.3%	3.5%	3.1%	3.2%	14.3%	3.9%
Chan Medical School	965,654	903,377	921,572	991,322	1,017,143	986,824	1,030,784	1,093,885	1,143,101	1,199,843	1,242,954	1,286,760	192,875	
Medical School Growth	-2.7%	-6.4%	2.0%	7.6%	2.6%	-3.0%	1.3%	10.8%	4.5%	5.0%	3.6%	3.5%	17.6%	5.5%
University	3,417,850	3,465,079	3,459,686	3,437,015	3,804,868	3,836,388	3,965,724	4,079,650	4,232,605	4,402,769	4,551,082	4,704,762	631,978	
University Growth	-0.6%	1.4%	-0.2%	-0.7%	10.7%	0.8%	4.2%	6.3%	3.7%	4.0%	3.4%	3.4%	15.3%	4.2%

Note: excludes UMass Global; includes unrealized gains

University Revenue: Diverse Sources



Note: excludes UMass Global; includes unrealized gains

University Expenses: by Expense Category

\$ in Thousands	Actual						Budget	Q1 Projection	Forecast					Change FY24-28	
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Salaries & Fringe	1,847,346	1,901,896	1,970,869	2,096,087	2,008,909	2,119,274	2,208,061	2,274,277	2,360,318	2,447,326	2,557,965	2,647,185	2,738,532	378,214	
Salaries & Fringe Growth	3.3%	3.0%	3.6%	6.4%	-4.2%	5.5%	4.2%	7.3%	6.9%	3.7%	4.5%	3.5%	3.5%	16.0%	4.4%
Non-Personnel	1,018,600	1,088,019	943,685	987,219	897,115	1,030,011	1,067,663	1,068,790	1,112,027	1,145,665	1,188,417	1,240,045	1,300,794	188,767	
Non-personnel Growth	-4.6%	6.8%	-13.3%	4.6%	-9.1%	14.8%	3.7%	3.8%	4.2%	3.0%	3.7%	4.3%	4.9%	17.0%	4.0%
Scholarships & Fellowships	47,706	50,402	49,507	65,469	80,024	118,302	64,129	61,566	62,162	64,976	67,423	69,253	70,425	8,264	
Scholarships & fellowships Growth	6.9%	5.7%	-1.8%	32.2%	22.2%	47.8%	-45.8%	-48.0%	-3.1%	4.5%	3.8%	2.7%	1.7%	13.3%	1.9%
Depreciation	249,669	261,417	276,638	288,667	300,201	323,702	328,366	328,182	343,293	360,479	367,510	371,829	369,968	26,675	
Depreciation Growth	3.7%	4.7%	5.8%	4.3%	4.0%	7.8%	1.4%	1.4%	4.5%	5.0%	2.0%	1.2%	-0.5%	7.8%	2.4%
Interest	110,069	115,851	116,217	109,186	105,468	114,541	125,947	126,339	119,922	127,190	130,613	129,357	127,259	7,337	
Interest Growth	4.6%	5.3%	0.3%	-6.0%	-3.4%	8.6%	10.0%	10.3%	-4.8%	6.1%	2.7%	-1.0%	-1.6%	6.1%	0.3%
University	3,237,351	3,336,260	3,356,916	3,424,616	3,391,718	3,705,830	3,794,166	3,859,154	3,997,722	4,145,636	4,311,929	4,457,669	4,606,978	609,256	
University Growth	0.8%	3.1%	0.6%	2.0%	-1.0%	9.3%	2.4%	4.1%	5.4%	3.7%	4.0%	3.4%	3.3%	15.2%	4.0%

Note: excludes UMass Global; excludes impact of GASB 68 & 75

Expenses: by Campus

\$ in Thousands	Actual					Budget	Q1 Projection	Forecast					Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Amherst	1,241,490	1,296,841	1,329,105	1,265,323	1,409,590	1,510,333	1,547,122	1,602,737	1,655,004	1,716,659	1,771,075	1,827,990	225,253	
Amherst Growth	5.8%	4.5%	2.5%	-4.8%	11.4%	7.1%	9.8%	6.1%	3.3%	3.7%	3.2%	3.2%	14.1%	3.9%
Boston	424,202	430,967	438,957	442,992	481,706	470,497	481,408	487,304	503,524	520,761	537,164	553,913	66,609	
Boston Growth	-0.1%	1.6%	1.9%	0.9%	8.7%	-2.3%	-0.1%	3.6%	3.3%	3.4%	3.1%	3.1%	13.7%	3.3%
Dartmouth	250,270	255,118	251,450	240,186	262,950	258,762	267,908	268,018	275,575	284,616	293,119	302,341	34,324	
Dartmouth Growth	4.8%	1.9%	-1.4%	-4.5%	9.5%	-1.6%	1.9%	3.6%	2.8%	3.3%	3.0%	3.1%	12.8%	3.2%
Lowell	451,552	476,652	483,244	463,883	533,458	529,157	537,680	552,534	575,758	598,766	622,641	645,806	93,272	
Lowell Growth	5.4%	5.6%	1.4%	-4.0%	15.0%	-0.8%	0.8%	4.4%	4.2%	4.0%	4.0%	3.7%	16.9%	4.1%
President's Office	106,776	111,963	112,583	91,806	96,969	97,830	96,331	99,994	101,835	103,608	105,594	107,400	7,406	
President's Office Growth	-2.0%	4.9%	0.6%	-18.5%	5.6%	0.9%	-0.7%	2.2%	1.8%	1.7%	1.9%	1.7%	7.4%	1.9%
Chan Medical School	943,144	867,033	891,942	967,724	1,007,677	960,876	1,010,362	1,070,425	1,118,897	1,174,175	1,216,464	1,259,683	189,258	
Medical School Growth	0.1%	-8.1%	2.9%	8.5%	4.1%	-4.6%	0.3%	11.4%	4.5%	4.9%	3.6%	3.6%	17.7%	5.6%
University	3,336,260	3,356,916	3,424,616	3,391,718	3,705,830	3,794,166	3,859,154	3,997,722	4,145,636	4,311,929	4,457,669	4,606,978	609,256	
University Growth	3.1%	0.6%	2.0%	-1.0%	9.3%	2.4%	4.1%	5.4%	3.7%	4.0%	3.4%	3.3%	15.2%	4.0%

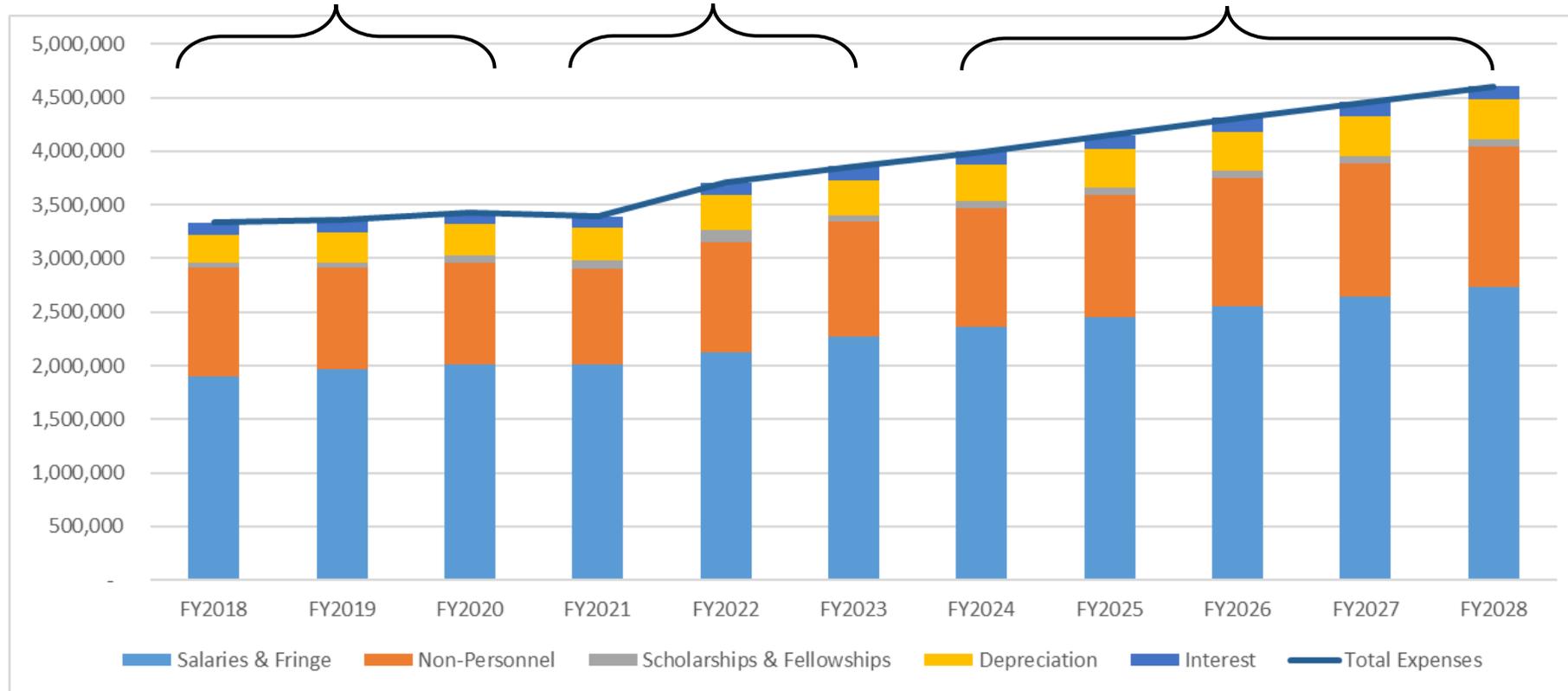
Note: excludes UMass Global; excludes impact of GASB 68 & 75

University Expenses: Expense Drivers

Average Annual Growth FY18-20:
\$62.4 million or 1.9%

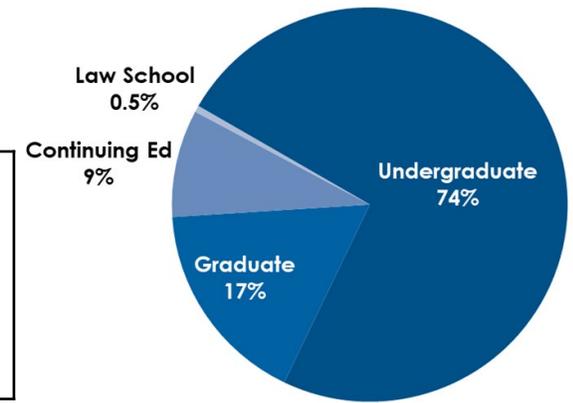
Average Annual Growth FY21-23:
\$123.2 million or 3.6%

Average Annual Growth FY24-28:
\$162.6 million or 4.0%



Note: excludes UMass Global; excludes impact of GASB 68 & 75

Enrollment



AAGR	Total	Undergraduate	Graduate
FY24-28:	0.7	0.5	1.5
FY21-23:	-0.7	-1.8	3.9
FY18-20:	1.1	1.7	-0.4

Students FTEs	Actual		Forecast					Average Growth		
	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY18-20	FY21-23	FY24-28
Amherst	29,804	30,188	29,882	30,086	30,443	30,355	30,355			
% Change	0.4%	1.3%	-1.0%	0.7%	1.2%	-0.3%	0.0%	1.9%	0.4%	0.1%
Boston	12,959	12,876	13,000	13,185	13,245	13,302	13,307			
% Change	-4.5%	-0.6%	1.0%	1.4%	0.5%	0.4%	0.0%	0.8%	-0.9%	0.7%
Dartmouth	6,459	6,314	6,411	6,599	6,642	6,724	6,829			
% Change	-3.7%	-2.3%	1.5%	2.9%	0.7%	1.2%	1.6%	-2.1%	-3.2%	1.6%
Lowell	14,321	13,925	14,063	14,412	14,714	14,834	14,956			
% Change	-3.6%	-2.8%	1.0%	2.5%	2.1%	0.8%	0.8%	1.3%	-2.0%	1.4%
Chan Medical School	1,246	1,301	1,325	1,363	1,413	1,463	1,488			
% Change	0.3%	4.4%	1.8%	2.9%	3.7%	3.5%	1.7%	5.5%	2.9%	2.7%
University	64,789	64,603	64,682	65,644	66,457	66,678	66,935			
% Change	-1.9%	-0.3%	0.1%	1.5%	1.2%	0.3%	0.4%	1.1%	-0.7%	0.7%

Note: excludes UMass Global

Undergraduate

AAGR
 FY24-28: 0.5
 FY21-23: -1.8
 FY18-20: 1.7

Students <i>FTEs</i>	Actual		Forecast					Average Growth		
	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY18-20	FY21-23	FY24-28
Amherst	23,292	23,722	23,416	23,620	23,977	23,889	23,889			
% Change	-0.6%	1.8%	-1.3%	0.9%	1.5%	-0.4%	0.0%	1.6%	0.1%	0.1%
Boston	9,810	9,997	10,064	10,123	10,176	10,231	10,236			
% Change	-5.4%	1.9%	0.7%	0.6%	0.5%	0.5%	0.0%	2.7%	-0.9%	0.5%
Dartmouth	4,635	4,422	4,374	4,321	4,322	4,360	4,418			
% Change	-7.2%	-4.6%	-1.1%	-1.2%	0.0%	0.9%	1.3%	-3.5%	-5.6%	-0.0%
Lowell	10,010	9,469	9,573	9,887	10,154	10,239	10,325			
% Change	-6.8%	-5.4%	1.1%	3.3%	2.7%	0.8%	0.8%	4.1%	-4.8%	1.8%
University	47,746	47,610	47,427	47,951	48,628	48,719	48,867			
	-3.6%	-0.3%	-0.4%	1.1%	1.4%	0.2%	0.3%	1.7%	-1.8%	0.5%

Note: excludes UMass Global

Graduate

AAGR

FY24-28: 1.5

FY21-23: 3.9

FY18-20: -0.4

Students <i>FTEs</i>	Actual		Forecast					Average Growth		
	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY18-20	FY21-23	FY24-28
Amherst	3,735	3,840	3,840	3,840	3,840	3,840	3,840			
<i>% Change</i>	2.5%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	1.0%	0.0%
Boston	1,556	1,829	1,872	1,992	1,996	1,996	1,996			
<i>% Change</i>	-13.2%	17.5%	2.3%	6.4%	0.2%	0.0%	0.0%	-0.5%	1.6%	1.8%
Dartmouth	566	697	809	1,009	1,009	1,009	1,009			
<i>% Change</i>	-2.4%	23.1%	16.1%	24.7%	0.0%	0.0%	0.0%	-12.3%	9.6%	8.2%
Lowell	3,292	3,432	3,466	3,501	3,536	3,571	3,607			
<i>% Change</i>	11.9%	4.2%	1.0%	1.0%	1.0%	1.0%	1.0%	-0.9%	9.2%	1.0%
Chan Medical School	1,246	1,301	1,325	1,363	1,413	1,463	1,488			
<i>% Change</i>	0.3%	4.4%	1.8%	2.9%	3.7%	3.5%	1.7%	5.5%	2.9%	2.7%
University	10,395	11,099	11,312	11,704	11,794	11,879	11,940			
	1.9%	6.8%	1.9%	3.5%	0.8%	0.7%	0.5%	-0.4%	3.9%	1.5%

Note: excludes UMass Global

Online Only Student FTEs

- **Campus Online Only:** reflects students taking exclusively online courses through our campuses
- **UMass Global:** reflects students taking courses through UMass Global

Students FTEs	Actual		Forecast					Average Growth		
	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY18-20	FY21-23	FY24-28
Amherst	2,190	2,005	2,005	2,005	2,005	2,005	2,005			
% Change	10.8%	-8.4%	0.0%	0.0%	0.0%	0.0%	0.0%	-2.3%	7.2%	0.0%
Boston	1,310	999	1,002	1,008	1,012	1,014	1,014			
% Change	54.7%	-23.7%	0.3%	0.6%	0.4%	0.2%	0.0%	5.6%	13.6%	0.3%
Dartmouth	804	675	709	745	782	821	863			
% Change	16.5%	-16.0%	5.0%	5.1%	5.0%	5.0%	5.1%	46.1%	2.3%	5.0%
Lowell	2,846	2,811	2,830	2,856	2,880	2,899	2,918			
% Change	20.8%	-1.2%	0.7%	0.9%	0.9%	0.7%	0.7%	1.4%	13.6%	0.8%
University	7,150	6,490	6,546	6,614	6,679	6,739	6,801			
	21.8%	-9.2%	0.9%	1.0%	1.0%	0.9%	0.9%	3.9%	9.8%	0.9%
Global	6,617	5,352	5,887	6,902	7,602	8,152	8,638			
% Change		-19.1%	10.0%	17.2%	10.1%	7.2%	6.0%			10.1%

University: Enrollment Trend

University Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Undergraduate	48,557	49,571	50,241	49,532	47,746	47,574	47,610	47,427	47,951	48,628	48,719	48,867
% Change		2.1%	1.4%	-1.4%	-3.6%	-0.4%	-0.3%	-0.4%	1.1%	1.4%	0.2%	0.3%
Graduate	9,976	9,920	9,893	10,199	10,395	10,760	11,099	11,312	11,704	11,794	11,879	11,940
% Change		-0.6%	-0.3%	3.1%	1.9%	3.5%	6.8%	1.9%	3.5%	0.8%	0.7%	0.5%
Continuing Ed	5,814	5,658	5,634	6,012	6,321	6,431	5,552	5,600	5,641	5,682	5,722	5,765
% Change		-2.7%	-0.4%	6.7%	5.1%	1.7%	-12.2%	0.9%	0.7%	0.7%	0.7%	0.7%
Law	184	199	246	328	326	325	341	343	348	353	358	363
% Change		8.4%	23.6%	33.2%	-0.5%	-0.3%	4.6%	0.6%	1.5%	1.4%	1.4%	1.4%
Total	64,530	65,348	66,013	66,071	64,789	65,090	64,602	64,682	65,644	66,457	66,678	66,935
% Change		1.3%	1.0%	0.1%	-1.9%	0.5%	-0.3%	0.1%	1.5%	1.2%	0.3%	0.4%

Source: Actuals from student profile; excludes UMass Global.

University: Enrollment by Residency

University Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	48,556	49,461	50,117	50,476	48,752	48,676	47,009	46,605	46,949	47,489	47,718	47,858
% Change		1.9%	1.3%	0.7%	-3.4%	-0.2%	-3.4%	-0.9%	0.7%	1.2%	0.5%	0.3%
Out of State	9,415	9,451	9,491	9,668	10,178	10,382	10,726	11,017	11,337	11,615	11,640	11,744
% Change		0.4%	0.4%	1.9%	5.3%	2.0%	3.3%	2.7%	2.9%	2.5%	0.2%	0.9%
International	6,559	6,436	6,405	5,928	5,858	6,032	6,866	7,060	7,358	7,352	7,320	7,333
% Change		-1.9%	-0.5%	-7.5%	-1.2%	3.0%	13.8%	2.8%	4.2%	-0.1%	-0.4%	0.2%
Total	64,530	65,348	66,013	66,071	64,789	65,090	64,602	64,682	65,644	66,457	66,678	66,935
% Change		1.3%	1.0%	0.1%	-1.9%	0.5%	-0.8%	0.1%	1.5%	1.2%	0.3%	0.4%

Source: Actuals from student profile; excludes UMass Global.

University: Enrollment by New v Continuing

University Enrollment (FTEs)	Actual						Budget	Actual	Forecast				
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
New	13,230	13,793	14,876	15,479	13,881	13,373	13,849	14,245	14,168	14,383	14,537	14,683	14,753
First-time Freshman							10,757	11,472	11,424	11,636	11,786	11,932	12,002
Transfer							3,092	2,773	2,744	2,747	2,751	2,751	2,751
% Change	645.8%	4.2%	7.9%	4.1%	-10.3%	-3.7%	3.6%	2.9%	-0.5%	1.5%	1.1%	1.0%	0.5%
Continuing	34,490	34,763	34,694	34,760	35,651	34,373	33,725	33,364	33,258	33,568	34,092	34,036	34,115
% Change	688.4%	0.8%	-0.2%	0.2%	2.6%	-3.6%	-1.9%	-1.1%	-0.3%	0.1%	0.1%	0.0%	0.0%
Undergraduate Total	47,720	48,555	49,570	50,239	49,531	47,746	47,574	47,609	47,426	47,951	48,629	48,718	48,868
% Change	676.1%	1.7%	2.1%	1.3%	-1.4%	-3.6%	-0.4%	0.1%	-0.4%	0.9%	1.6%	-0.2%	0.2%

Source: Actuals from student profile; excludes UMass Global.

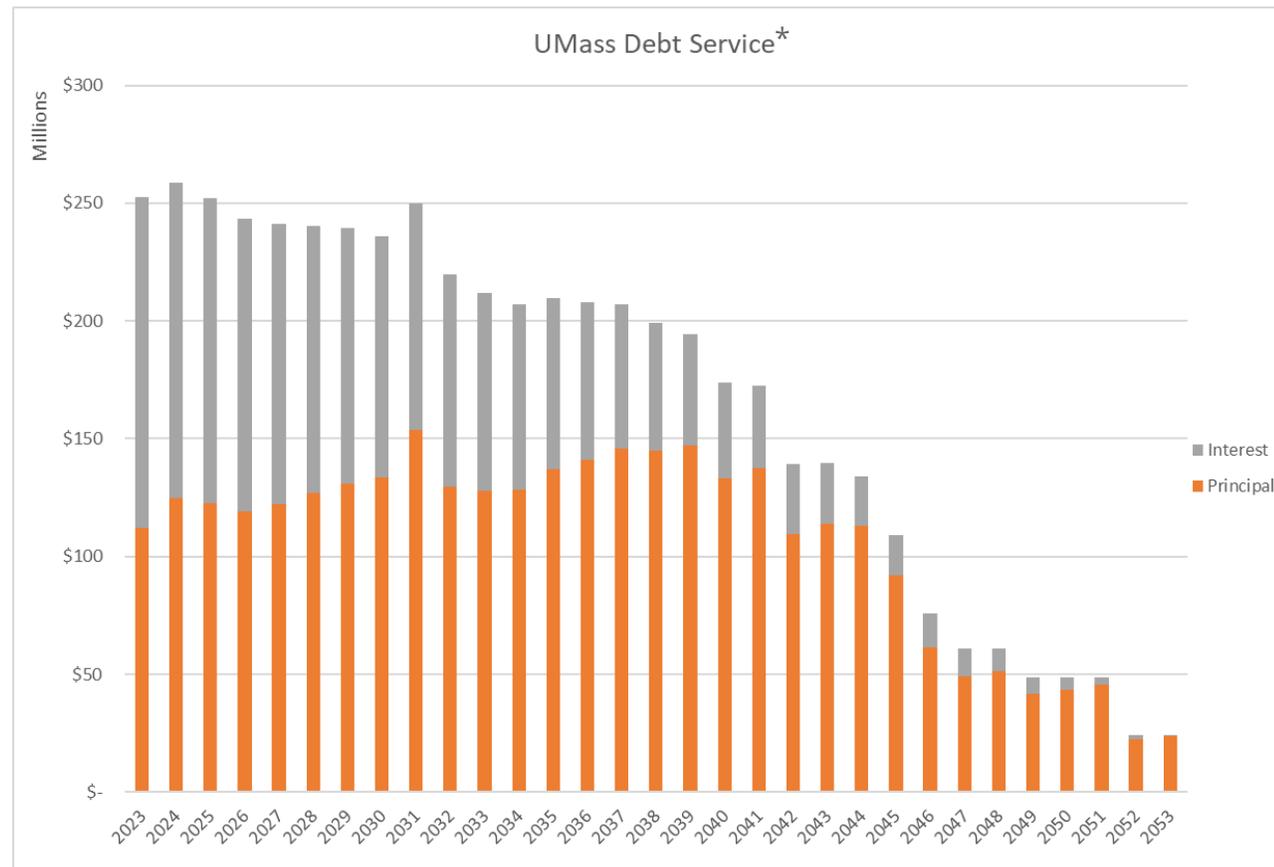
University: Staffing

Employee FTEs	Actual					UNIVERSITY		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	Budget FY2023	Actual FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Restricted												
Faculty	313	318	315	312	325	324	322	341	360	380	390	399
Staff	1,553	1,537	1,597	1,543	1,532	1,571	1,618	1,684	1,757	1,828	1,866	1,906
Total Restricted	1,866	1,854	1,911	1,854	1,858	1,895	1,940	2,025	2,117	2,208	2,256	2,305
# Change	245	(12)	57	(57)	(54)	37	82	130	92	91	48	49
% Change	15.1%	-0.7%	3.1%	-3.0%	-2.8%	2.0%	4.4%	6.9%	4.5%	4.3%	2.2%	2.2%
Unrestricted General University Ops												
Faculty	3,878	3,961	3,990	3,874	3,928	3,975	3,970	4,024	4,064	4,137	4,174	4,207
Staff	6,566	6,539	6,588	6,209	6,380	6,633	6,472	6,707	6,794	6,928	7,001	7,118
Executive/Admin/Managerial	458	469	483	490	-	-	317	-	-	-	-	-
Professional Nonfaculty	3,581	3,630	3,718	3,609	-	-	1,298	-	-	-	-	-
Secretarial/Clerical	1,119	1,087	1,050	923	-	-	228	-	-	-	-	-
Technical/Paraprofessional	619	614	600	567	-	-	155	-	-	-	-	-
Skilled Crafts	268	261	257	218	-	-	51	-	-	-	-	-
Service Maintenance Workers	521	479	479	402	-	-	66	-	-	-	-	-
Unspecified			1				-					
Total General University Ops	10,444	10,500	10,578	10,083	10,308	10,608	10,442	10,731	10,858	11,065	11,175	11,325
# Change	198	56	77	(495)	(269)	300	134	123	127	207	110	150
% Change	1.9%	0.5%	0.7%	-4.7%	-2.5%	2.9%	1.3%	1.2%	1.2%	1.9%	1.0%	1.3%
Unrestricted Aux./Independent Business												
Faculty	15	13	10	11	12	12	10	14	14	14	14	14
Staff	2,466	2,751	3,020	2,291	2,830	2,959	2,955	3,223	3,174	3,172	3,173	3,174
Total Aux./Independent Business	2,481	2,764	3,030	2,302	2,841	2,971	2,965	3,237	3,188	3,186	3,187	3,188
# Change	(86)	283	266	(728)	539	129	124	272	(49)	(2)	1	1
% Change	-3.4%	11.4%	9.6%	-24.0%	23.4%	4.6%	4.4%	9.2%	-1.5%	-0.1%	0.0%	0.0%
Total Faculty & Staff	14,792	15,118	15,519	14,239	15,008	15,773	15,347	15,993	16,163	16,459	16,618	16,818
# Change	357	327	401	(1,280)	(512)	765	339	220	170	296	159	200
% Change	2.5%	2.2%	2.7%	-8.2%	-3.3%	5.1%	2.3%	1.4%	1.1%	1.8%	1.0%	1.2%

Note: excludes UMass Global

University: Key Ratios

Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Operating Margin (%)	2.3%	2.7%	1.1%	2.0%	3.8%	0.7%	2.7%	2.0%	2.0%	2.0%	2.0%	2.0%
Operating Margin (\$)	79,928	92,781	37,474	68,276	147,120	28,543	106,570	79,779	85,044	89,016	91,573	95,904
Operating Cash Flow Margin (%)	13.2%	14.0%	13.1%	13.7%	16.3%	13.6%	15.3%	14.1%	14.2%	13.9%	13.5%	13.0%
Operating Cash Flow Margin (\$)	443,102	553,001	523,405	459,974	614,706	517,583	605,118	570,198	593,785	603,703	605,877	603,767
Debt Service Burden (%)	6.5%	6.6%	6.4%	3.6%	5.8%	6.3%	6.7%	6.3%	6.1%	5.9%	5.7%	5.6%
Debt Service Coverage (x)	2.1	2.1	2.0	3.8	2.8	2.2	2.3	2.3	2.4	2.4	2.4	2.4
Financial Leverage (x)	0.46	0.46	0.46	0.61	0.57	0.61	0.54	0.58	0.59	0.61	0.64	0.67
Total Debt (\$ in thousands)	4,111,154	4,382,824	4,446,124	4,459,378	5,153,157	4,781,114	5,028,451	4,936,807	5,027,664	4,958,220	4,866,168	4,716,922
Total Cash & Investments to Op Expenses (x)	0.57	0.61	0.61	0.82	0.82	0.79	0.72	0.73	0.72	0.72	0.71	0.70
Enrollment	64,530	65,348	66,013	66,071	64,789	65,090	64,602	64,682	65,644	66,457	66,678	66,935
Enrollment (% Change)	0.9%	1.3%	1.0%	0.1%	-1.9%	-1.5%	-0.3%	0.1%	1.5%	1.2%	0.3%	0.4%



Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service Burden (%)	6.5%	6.6%	6.4%	3.6%	5.8%	6.3%	6.7%	6.3%	6.1%	5.9%	5.7%	5.6%
Debt Service Coverage (x)	2.1	2.1	2.0	3.8	2.8	2.2	2.3	2.3	2.4	2.4	2.4	2.4
Financial Leverage (x)	0.46	0.46	0.46	0.61	0.57	0.61	0.54	0.58	0.59	0.61	0.64	0.67
Total Adjusted Debt (\$ in thousands)	4,111,154	4,382,824	4,446,124	4,459,378	5,153,157	4,781,114	5,028,451	4,936,807	5,027,664	4,958,220	4,866,168	4,716,922

Amherst



FY24-28 Forecast: By the Numbers

Revenue & Expenses:

<u>FY23 Budget:</u>	<u>AAGR:</u>	<u>Rev</u>	<u>Exp</u>
Total: \$1.523B	FY24-28: 4.2%	3.9%	
	FY21-23: 5.2%	4.6%	
	FY18-20: 3.0%	4.3%	



Tuition Annual Increases:

- Undergraduate & Graduate:
 - In-State: 2.5%
 - Out-of-State: 3.0%

Auxiliary Annual Increases:

- Housing: 3.0%
- Dining: 3.0%



100% campus owned occupancy

- 13,500 beds



Deferred Maintenance:

\$800 million FY22-26 capital plan

\$1.5 billion deferred maintenance

- (25% of replacement value FY21 (24% University))

Capital:

- \$310 million new borrowing planned
- \$250 million local funding



Operating Margin:

<u>FY23 Budget:</u>	<u>Average:</u>
0.50%	FY24-28: 2.0%
	FY21-23: 2.2%
	FY18-20: 1.8%



Enrollment:

<u>FY23 Actual:</u>	<u>AAGR:</u>
FTEs: 30,188	FY24-28: 0.1%
	FY21-23: 0.4%
	FY18-20: 1.9%



Employees:

<u>FY23 Budget:</u>	<u>AAGR:</u>
Total: 6,377	FY24-28: 0.7%
	FY21-23: 1.0%
	FY18-20: 6.0%

Amherst: Revenue & Expenses Trend

(\$ in Thousands)

Revenues	Actual					Budget	Q1 Projection	Forecast					% Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Gross Tuition & Fees	541,665	562,859	586,915	596,559	616,480	637,712	658,523	673,228	697,390	725,024	738,836	758,193	12.6%	3.5%
Tuition Discounts	(150,824)	(151,628)	(160,429)	(170,555)	(178,509)	(180,490)	(179,940)	(190,922)	(200,418)	(208,586)	(211,081)	(216,233)	13.3%	3.7%
Discount Rate	27.8%	26.9%	27.3%	28.6%	29.0%	28.3%	27.3%	28.4%	28.7%	28.8%	28.6%	28.5%	0.6%	0.2%
Net Tuition & Fees	390,841	411,231	426,486	426,004	437,970	457,221	478,583	482,306	496,972	516,438	527,755	541,960	12.4%	3.5%
Grants	153,007	163,645	151,629	170,184	198,406	195,940	212,679	218,994	225,999	233,214	240,645	247,799	13.2%	4.9%
Sales & Service, Educational	9,321	10,795	10,653	9,153	9,077	11,452	12,683	13,000	13,326	13,659	14,000	14,350	10.4%	4.7%
Auxiliary Enterprises	268,041	279,545	243,865	104,578	292,531	311,209	324,346	327,137	336,565	346,171	356,054	366,221	11.9%	3.3%
Other Operating	16,768	16,439	19,644	15,998	15,110	15,174	14,957	17,345	17,710	18,081	18,461	18,850	8.7%	4.5%
State Appropriations	360,161	371,781	386,057	404,852	421,771	448,412	483,225	488,553	499,161	520,851	542,317	565,110	15.7%	4.8%
Other NonOperating	78,504	87,616	90,577	111,557	121,014	83,560	88,797	91,003	98,432	102,786	107,101	111,710	22.8%	6.0%
Total Revenues	1,276,643	1,341,052	1,328,911	1,242,326	1,495,879	1,522,969	1,615,270	1,638,338	1,688,165	1,751,200	1,806,333	1,866,000	13.9%	4.2%
% Growth	5.0%	5.0%	-0.9%	-6.5%	20.4%	1.8%	8.0%	7.6%	3.0%	3.7%	3.1%	3.3%		
Expenses														
Salaries & Fringe	744,102	780,545	802,927	831,627	840,857	904,020	903,230	928,379	963,627	996,004	1,026,183	1,056,872	13.8%	3.2%
Non-Personnel	326,076	341,923	337,418	241,417	349,461	399,055	444,379	468,038	471,572	491,445	515,111	543,310	16.1%	6.5%
Scholarships & Fellowships	18,216	16,581	27,613	24,416	43,385	23,269	20,000	21,483	22,613	23,540	23,783	24,366	13.4%	1.0%
Depreciation	109,965	117,086	121,494	128,454	136,903	141,605	137,948	143,292	149,750	152,451	151,664	148,749	3.8%	1.0%
Interest	43,131	40,706	39,653	39,409	38,983	42,384	41,565	41,545	47,442	53,219	54,334	54,693	31.6%	5.4%
Total Expenses	1,241,490	1,296,841	1,329,105	1,265,323	1,409,590	1,510,333	1,547,122	1,602,737	1,655,004	1,716,659	1,771,075	1,827,990	14.1%	3.9%
% Growth	5.8%	4.5%	2.5%	-4.8%	11.4%	7.1%	9.8%	6.1%	3.3%	3.7%	3.2%	3.2%		
Operating Margin														
UMass OM Calc Revenues	1,274,604	1,333,206	1,331,644	1,253,428	1,514,815	1,517,319	1,615,270	1,638,338	1,688,165	1,751,200	1,806,333	1,866,000		
Total Expenses	1,241,490	1,296,841	1,329,105	1,265,323	1,409,590	1,510,333	1,547,122	1,602,737	1,655,004	1,716,659	1,771,075	1,827,990		
Surplus / (Deficit)	33,114	36,365	2,539	(11,895)	105,225	6,985	68,148	35,601	33,161	34,541	35,258	38,010		
UMass OM Calc	2.6%	2.7%	0.2%	-0.9%	6.9%	0.5%	4.2%	2.2%	2.0%	2.0%	2.0%	2.0%		

Amherst: Enrollment Trend

<u>AAGR:</u>	<u>Total:</u>	<u>Undergraduate:</u>	<u>Graduate:</u>	<u>Continuing Ed:</u>
FY24-28:	0.1	0.1	0.0	0.0
FY21-23:	0.4	0.1	1.0	3.4
FY18-20:	1.9	2.3	0.4	0.7

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Undergraduate	22,644	22,945	23,681	23,429	23,292	23,712	23,722	23,416	23,620	23,977	23,889	23,889
% Change		1.3%	3.2%	-1.1%	-0.6%	1.8%	1.8%	-1.3%	0.9%	1.5%	-0.4%	0.0%
Graduate	3,708	3,772	3,735	3,643	3,735	3,801	3,840	3,840	3,840	3,840	3,840	3,840
% Change		1.7%	-1.0%	-2.5%	2.5%	1.8%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Continuing Ed	2,360	2,334	2,392	2,621	2,778	2,777	2,626	2,626	2,626	2,626	2,626	2,626
% Change		-1.1%	2.5%	9.6%	6.0%	-0.0%	-5.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	28,712	29,051	29,808	29,693	29,804	30,290	30,188	29,882	30,086	30,443	30,355	30,355
% Change		1.2%	2.6%	-0.4%	0.4%	1.6%	1.3%	-1.0%	0.7%	1.2%	-0.3%	0.0%

Source: Actuals from student profile.

Amherst: Enrollment by Residency

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	19,828	20,015	20,738	20,845	20,486	20,981	20,115	19,684	19,707	19,992	20,075	20,085
% Change		0.9%	3.6%	0.5%	-1.7%	2.4%	-1.8%	-2.1%	0.1%	1.4%	0.4%	0.0%
Out of State	5,958	5,824	5,739	5,774	6,049	6,044	6,435	6,560	6,741	6,838	6,712	6,702
% Change		-2.2%	-1.5%	0.6%	4.8%	-0.1%	6.4%	1.9%	2.8%	1.4%	-1.8%	-0.1%
International	2,926	3,212	3,332	3,074	3,270	3,265	3,638	3,638	3,638	3,613	3,568	3,568
% Change		9.8%	3.7%	-7.7%	6.4%	-0.1%	11.3%	0.0%	0.0%	-0.7%	-1.2%	0.0%
Total	28,712	29,051	29,808	29,693	29,804	30,290	30,188	29,882	30,086	30,443	30,355	30,355
% Change		1.2%	2.6%	-0.4%	0.4%	1.6%	1.3%	-1.0%	0.7%	1.2%	-0.3%	0.0%

Source: Actuals from student profile.

Amherst: Enrollment by New v Continuing

<i>Undergraduate</i> Enrollment (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
New	6,263	6,669	7,284	6,419	6,361	6,850	6,993	6,725	6,725	6,725	6,725	6,725
First-time Freshmen	5,119	5,582	6,196	6,343	5,179	5,700	5,991	5,725	5,725	5,725	5,725	5,725
Transfer	1,144	1,087	1,088	1,076	1,182	1,150	1,002	1,000	1,000	1,000	1,000	1,000
% Change	-0.3%	6.5%	9.2%	-11.9%	-0.9%	7.7%	9.9%	-3.8%	0.0%	0.0%	0.0%	0.0%
Continuing	16,380	16,276	16,396	17,010	16,930	16,862	16,729	16,691	16,895	17,252	17,164	17,164
% Change	0.5%	-0.6%	0.7%	3.7%	-0.5%	-0.4%	-1.2%	-0.2%	1.2%	2.1%	-0.5%	0.0%
Undergraduate Total	22,643	22,945	23,680	23,429	23,291	23,712	23,722	23,416	23,620	23,977	23,889	23,889
% Change	0.2%	1.3%	3.2%	-1.1%	-0.6%	1.8%	1.8%	-1.3%	0.9%	1.5%	-0.4%	0.0%

Source: Actuals from student profile.

Amherst: Online Only

Career

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Undergraduate	23	27	27	20	75	26	61	61	61	61	61	61
% Change		19.4%	-0.7%	-25.7%	269.7%	-65.3%	-18.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Graduate	16	18	14	19	61	20	45	45	45	45	45	45
% Change		12.5%	-21.6%	37.8%	212.0%	-67.0%	-25.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Continuing Ed	1,699	1,631	1,617	1,936	2,054	2,102	1,899	1,899	1,899	1,899	1,899	1,899
% Change		-4.0%	-0.9%	19.8%	6.1%	2.3%	-7.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	1,738	1,676	1,658	1,976	2,190	2,148	2,005	2,005	2,005	2,005	2,005	2,005
% Change		-3.6%	-1.1%	19.2%	10.8%	-1.9%	-8.4%	0.0%	0.0%	0.0%	0.0%	0.0%

Residency

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	830	793	803	1,004	1,120	1,089	1,014	1,014	1,014	1,014	1,014	1,014
% Change		-4.4%	1.3%	25.0%	11.5%	-2.7%	-9.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Out of State	851	811	775	822	971	963	895	895	895	895	895	895
% Change		-4.7%	-4.4%	6.0%	18.1%	-0.8%	-7.8%	0.0%	0.0%	0.0%	0.0%	0.0%
International	57	72	79	150	99	96	96	96	96	96	96	96
% Change		26.0%	10.5%	88.6%	-33.6%	-3.3%	-3.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	1,738	1,676	1,658	1,976	2,190	2,148	2,005	2,005	2,005	2,005	2,005	2,005
% Change		-3.6%	-1.1%	19.2%	10.8%	-1.9%	-8.4%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Actuals from student profile.

Amherst: Staffing

Employee FTEs	Actual					Budget	Actual	Forecast					
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028	
Restricted													
Faculty	49	43	42	41	45	45	47	47	48	49	50	50	
Staff	374	361	382	432	432	432	445	448	451	454	457	460	
Total Restricted	423	404	425	474	477	477	492	495	499	503	507	510	
# Change		(19)	21	49	3	0	15	18	4	4	4	3	
% Change		-4%	5%	11%	1%	0%	3%	4%	1%	1%	1%	1%	
Unrestricted General University Ops													
Faculty	1,508	1,569	1,620	1,605	1,604	1,619	1,612	1,641	1,671	1,687	1,695	1,700	
Staff	2,676	2,712	2,762	2,678	2,695	2,841	2,701	2,794	2,851	2,865	2,894	2,969	
Executive/Admin/Managerial	125	135	143	159	163	-	-	-	-	-	-	-	
Professional Nonfaculty	1,179	1,215	1,257	1,329	1,314	-	-	-	-	-	-	-	
Secretarial/Clerical	588	583	581	519	486	-	-	-	-	-	-	-	
Technical/Paraprofessional	294	300	293	284	287	-	-	-	-	-	-	-	
Skilled Crafts	173	177	179	146	161	-	-	-	-	-	-	-	
Service Maintenance Workers	317	302	308	240	284	-	-	-	-	-	-	-	
Unspecified													
Total General University Ops	4,183	4,280	4,382	4,283	4,299	4,460	4,313	4,435	4,522	4,552	4,589	4,669	
# Change		97	102	(99)	16	161	14	(25)	87	30	37	80	
% Change		2%	2%	-2%	0%	4%	0%	-1%	2%	1%	1%	2%	
Unrestricted Aux./Independent Business													
Faculty	-	-	-	-	-	-	-	-	-	-	-	-	
Staff	1,023	1,228	1,516	816	1,319	1,440	1,372	1,440	1,440	1,440	1,440	1,440	
Total Aux./Independent Business	1,023	1,228	1,516	816	1,319	1,440	1,372	1,440	1,440	1,440	1,440	1,440	
# Change		205	288	(700)	503	121	53	-	-	-	-	-	
% Change		20%	23%	-46%	62%	9%	4%	0%	0%	0%	0%	0%	
Total Faculty & Staff	5,629	5,912	6,323	5,572	6,094	6,377	6,177	6,370	6,461	6,495	6,536	6,619	
# Change		283	411	(750)	522	283	83	(7)	91	34	41	83	
% Change		5%	7%	-12%	9%	5%	1%	0%	1%	1%	1%	1%	

Note: Historical actuals are as of 9/30; FY23 staffing includes return to normal operations specifically in housing and dining and filling of some vacant positions.

Amherst: Staffing

Faculty & staff of 6,177 grows on average 1% over the forecast period.



Auxiliary / Independent

Business Lines: staff including housing & dining

Unrestricted: faculty & staff that support general university operations

Restricted: faculty & staff funded by grant & endowed funds

FTEs:	1,372
% of Total FTEs:	22%
Faculty % / Staff %:	0% / 100%
Forecast AAGR:	0.0%

FTEs:	4,313
% of Total FTEs:	70%
Faculty % / Staff %:	37% / 63%
Forecast AAGR:	0.9%

FTEs:	492
% of Total FTEs:	8%
Faculty % / Staff %:	10% / 90%
Forecast AAGR:	1.4%

Amherst: Staffing Ratios

	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
<i>Student - Faculty</i>												
Student (FTE)	28,712	29,051	29,808	29,693	29,804	30,290	30,188	29,882	30,086	30,443	30,355	30,355
Faculty (FTE)	1,556	1,611	1,663	1,647	1,649	1,664	1,659	1,688	1,719	1,736	1,745	1,750
Student-Faculty Ratio	18.4	18.0	17.9	18.0	18.1	18.2	18.2	17.7	17.5	17.5	17.4	17.3
<i>Staff - Faculty (All)</i>												
Staff (FTE)	4,072	4,301	4,660	3,926	4,445	4,713	4,518	4,664	4,724	4,741	4,773	4,851
Faculty (FTE)	1,556	1,611	1,663	1,647	1,649	1,664	1,659	1,688	1,719	1,736	1,745	1,750
Staff-Faculty Ratio	2.6	2.7	2.8	2.4	2.7	2.8	2.7	2.8	2.7	2.7	2.7	2.8
<i>Staff - Faculty (E&G)</i>												
Staff (FTE)	2,676	2,712	2,762	2,678	2,695	2,841	2,701	2,794	2,851	2,865	2,894	2,969
Faculty (FTE)	1,508	1,569	1,620	1,605	1,604	1,619	1,612	1,641	1,671	1,687	1,695	1,700
Staff-Faculty Ratio (E&G)	1.8	1.7	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.7

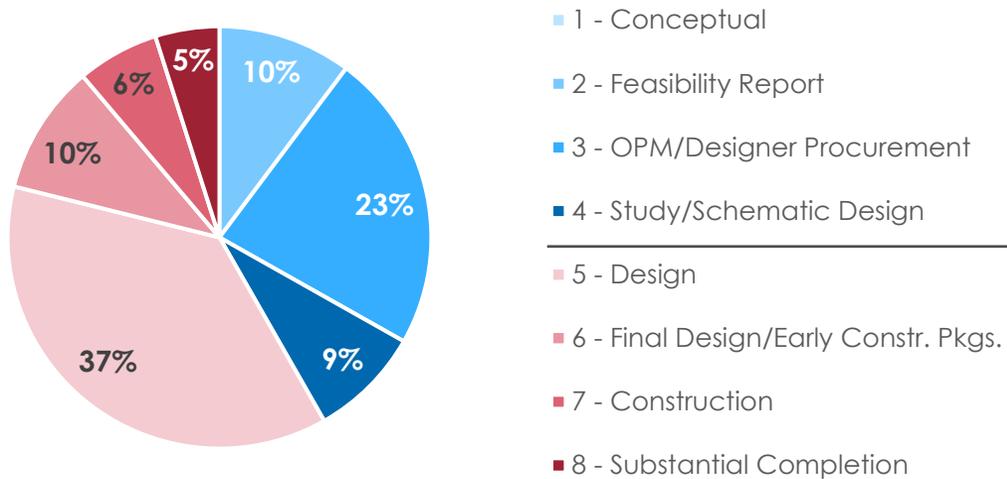
Amherst: Key Ratios

Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Operating Margin (%)	2.6%	2.7%	0.2%	-0.9%	6.9%	0.5%	4.2%	2.2%	2.0%	2.0%	2.0%	2.0%
Operating Margin (\$)	33,114	36,365	2,539	(11,895)	105,226	6,985	68,148	35,601	33,161	34,541	35,258	38,010
Operating Cash Flow Margin (%)	14.8%	14.6%	12.9%	12.2%	19.7%	13.7%	16.2%	14.4%	14.1%	14.1%	13.7%	13.2%
Operating Cash Flow Margin (\$)	186,268	192,282	168,787	148,424	291,265	207,048	260,379	235,023	236,112	244,694	244,253	242,756
Debt Service Burden (%)	6.8%	6.5%	6.4%	3.7%	5.4%	5.5%	5.5%	5.3%	5.2%	5.4%	5.4%	5.3%
Debt Service Coverage (x)	2.2	2.3	2.0	3.2	3.8	2.5	3.1	2.8	2.7	2.6	2.6	2.5
Financial Leverage (x)	0.71	0.71	0.65	0.80	0.92	0.66	0.83	0.86	0.79	0.80	0.82	0.87
Total Debt (\$ in thousands)	1,044,216	1,089,240	1,203,126	1,222,295	1,151,358	1,203,126	1,320,088	1,303,697	1,439,256	1,436,275	1,429,649	1,369,339
Total Cash & Investments to Op Expenses (x)	0.61	0.60	0.60	0.79	0.78	0.53	0.72	0.71	0.69	0.68	0.67	0.66
Enrollment	28,712	29,051	29,808	29,693	29,804	30,290	30,188	29,882	30,086	30,443	30,355	30,355
Enrollment (% Change)	1.3%	1.2%	2.6%	-0.4%	0.4%	2.0%	1.7%	-1.0%	0.7%	1.2%	-0.3%	0.0%

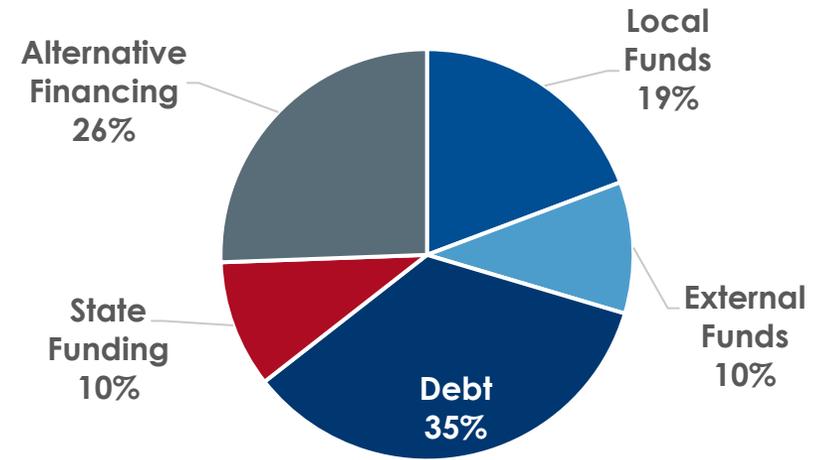
Amherst: 39 Projects; \$859M; 45% of Capital Plan

11% of Projects in Construction or Substantial Completion

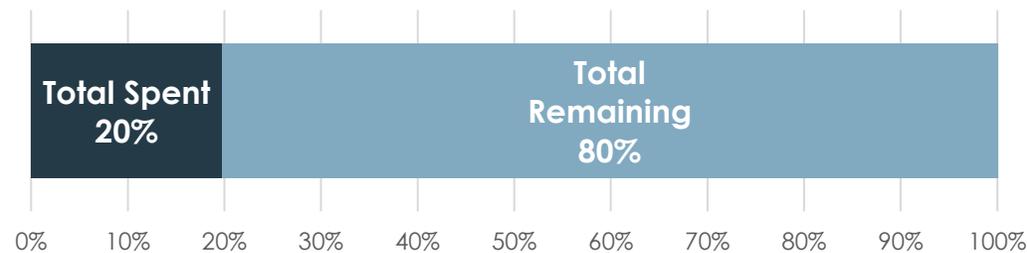
Projects by Phase



Funding Sources



Project Spending



Amherst Projects: Board

Traditional Projects			
Project	Adjusted Cost (\$)	Project Phase	Status
PVTA Bus Garage Expansion	11,000,000	2 - Feasibility Report	Authorized
Thompson Deferred Maintenance	2,250,000	2 - Feasibility Report	Authorized
Engineering Building	100,000,000	3 - Owner's Project Manager/Designer Procurement	Authorized
School of Public Health and Health Sciences Renovations	30,000,000	3 - Owner's Project Manager/Designer Procurement	Authorized
Computer and Information Sciences Building	130,000,000	5 - Design	Approved
Goodell Renovation	50,000,000	5 - Design	Approved
Office/Lab/Academic Renovations	52,500,000	6 - Final Design / Early Construction Packages	Approved
Energy Improvements	16,700,000	7 - Construction	Approved
Replace Oil Filled Transformers	2,000,000	7 - Construction	Approved
Fine Arts Center renovations	12,573,376	8 - Substantial Completion	Approved
Goessmann, SPHHS Renovations	15,100,000	8 - Substantial Completion	Approved
Total	422,123,376		

Alternative Finance & Delivery Projects	
Project	Adjusted Cost (\$)
Thermal Energy Tank	9,750,000
University Village Apartments	73,800,000
Housing Expansion	210,000,000
Total	293,550,000

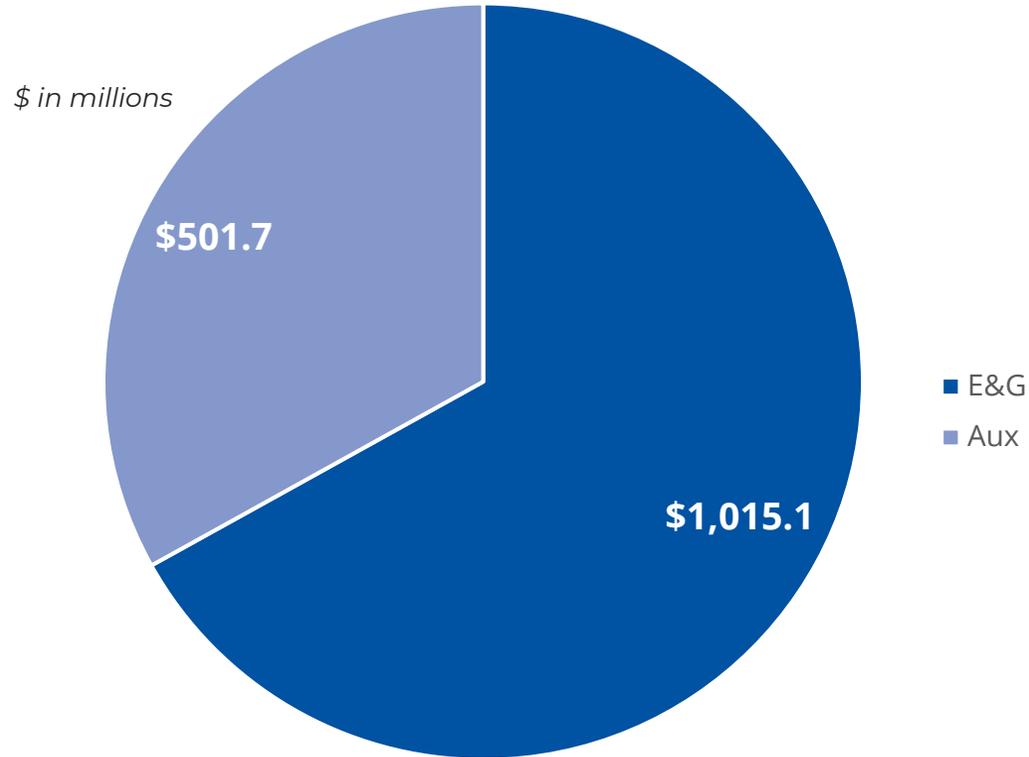
Amherst Projects: President

President Projects			
Project	Adjusted Cost (\$)	Project Phase	Status
Center for Early Education and Care	9,500,000	2 - Feasibility Report	Authorized
Class Lab Renovations	5,000,000	2 - Feasibility Report	Authorized
Deferred Maintenance and Campus Infrastructure	8,000,000	2 - Feasibility Report	Authorized
Gloucester Marine Station Improvements	3,000,000	2 - Feasibility Report	Authorized
Instructional Space Renovations	5,000,000	2 - Feasibility Report	Authorized
Johnson Residence Hall DM	6,000,000	2 - Feasibility Report	Authorized
New Faculty Hire Renovations	8,000,000	2 - Feasibility Report	Authorized
Baker Deferred Maintenance	2,000,000	4 - Study / Schematic Design	Authorized
Coolidge Life Safety Upgrades	8,000,000	4 - Study / Schematic Design	Authorized
JQA Life Safety Upgrades & Renovation	9,000,000	4 - Study / Schematic Design	Authorized
Lederle Lab Renovation	3,000,000	4 - Study / Schematic Design	Authorized
Utilities & Infrastructure	9,000,000	4 - Study / Schematic Design	Authorized
Utility Storage Tanks	2,500,000	4 - Study / Schematic Design	Authorized
Washington & Kennedy Resident Halls Life Safety Upgrades Phase 1	6,000,000	4 - Study / Schematic Design	Authorized
Water Engineering Technology Laboratories	6,000,000	4 - Study / Schematic Design	Authorized
Whitmore 3rd Floor Renovations	3,000,000	4 - Study / Schematic Design	Authorized
Lederle Chemistry Teaching Laboratories	9,000,000	5 - Design	Approved
Memorial Hall DM	2,000,000	5 - Design	Approved
Pavilion	7,000,000	5 - Design	Approved
Roof Replacements	7,000,000	5 - Design	Approved
Washington and Kennedy Residence Halls Life Safety Upgrades	5,000,000	5 - Design	Approved
Housing Deferred Maintenance	3,800,000	6 - Final Design / Early Construction Packages	Approved
Brett Residence Hall DM	4,000,000	7 - Construction	Approved
Sidewalks/Roads/Landscape	5,000,000	7 - Construction	Approved
Wareham Cranberry Station	7,750,000	7 - Construction	Approved
Total	143,550,000		

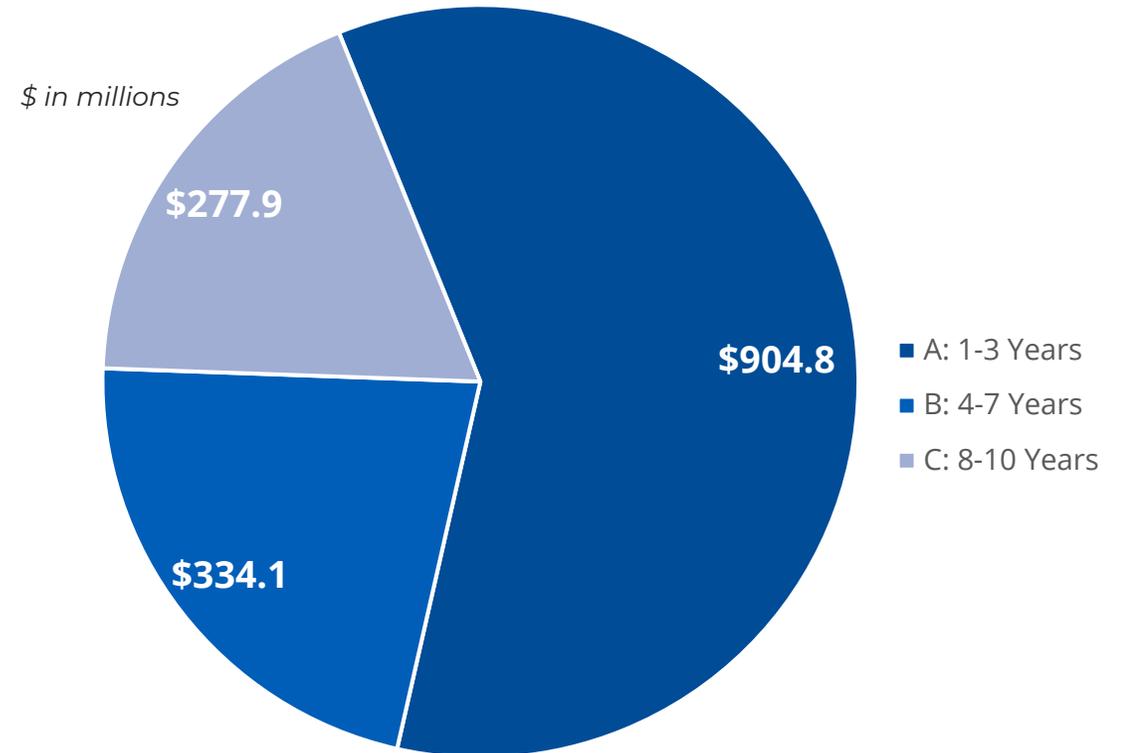
Amherst: Deferred Maintenance

\$1.5 Billion Backlog Coming Due in the Next 10 Years

\$1.5B: E&G vs. AUX



\$1.5B: By Timeframe



Amherst: Deferred Maintenance

\$1.5 Billion Backlog Coming Due in the Next 10 Years

By Package

Building Package	Project Cost (\$ millions)
Building Systems	504.2
Space Improvement	433.8
Safety/Code	271.3
Building Envelope	247.1
Infrastructure	60.5
Total	1,516.9

By System

Building System	Project Cost (\$ millions)
Interior Shell	418.2
Safety/Code	266.1
Exterior Shell	244.0
HVAC	163.6
Plumbing	139.0
Electrical	95.2
Heating	57.4
Mechanical	40.7
Grounds	39.7
Cooling	38.5
Total	1,516.9

Top 10 Building Needs

Building	Project Cost (\$ millions)
DuBois Library	103.5
Bartlett Hall	48.9
Tobin Hall	43.6
Lederle Graduate Research Center	43.3
Morrill Science Center Section III	38.4
Fine Arts Center	37.7
Lincoln Campus Center	35.6
Lincoln Apartments Units 1-11	33.5
Lederle Graduate Research Center Addition	33.4
Campus Grounds/Infrastructure	30.3
Total	448.2

Amherst: Deferred Maintenance Dashboard (v1.0)- Annual Investment

FY22 Keep Up
\$29.4 M

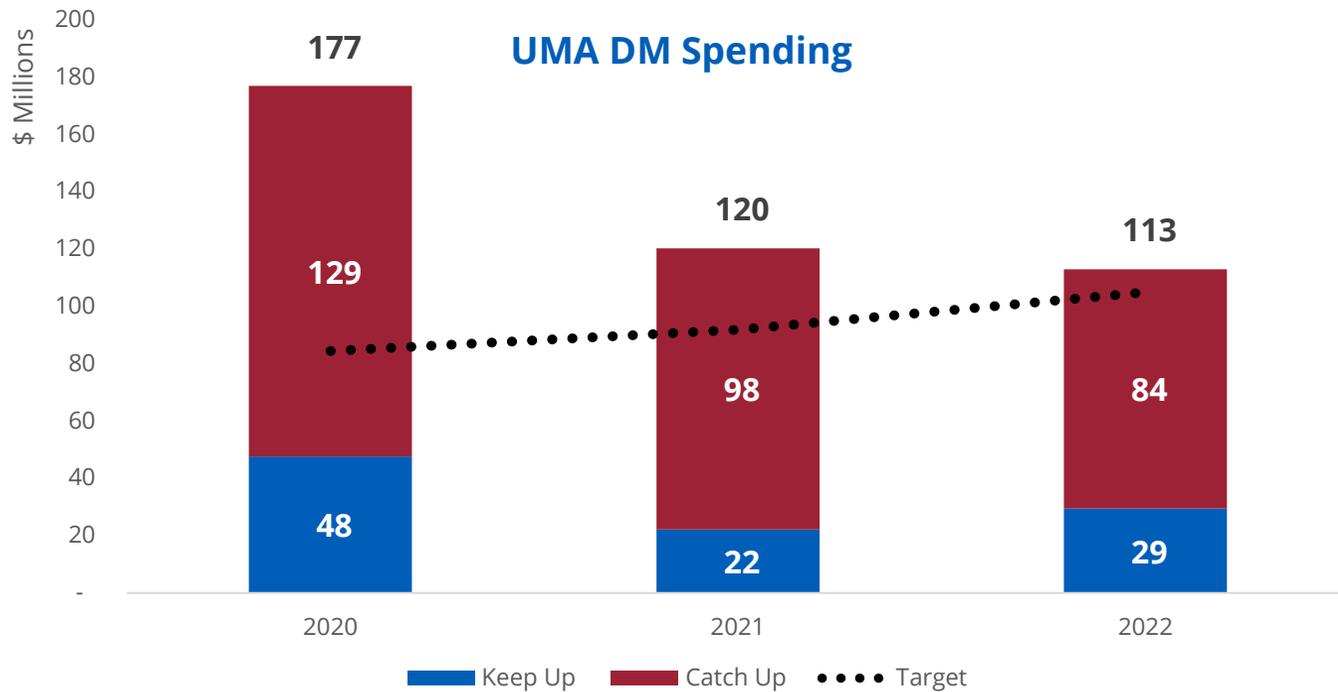
FY22 Keep Up
\$105.0 M

FY22 % Target
28.0%

FY22 Catch Up
\$83.6 M

FY22 Catch Up
TBD

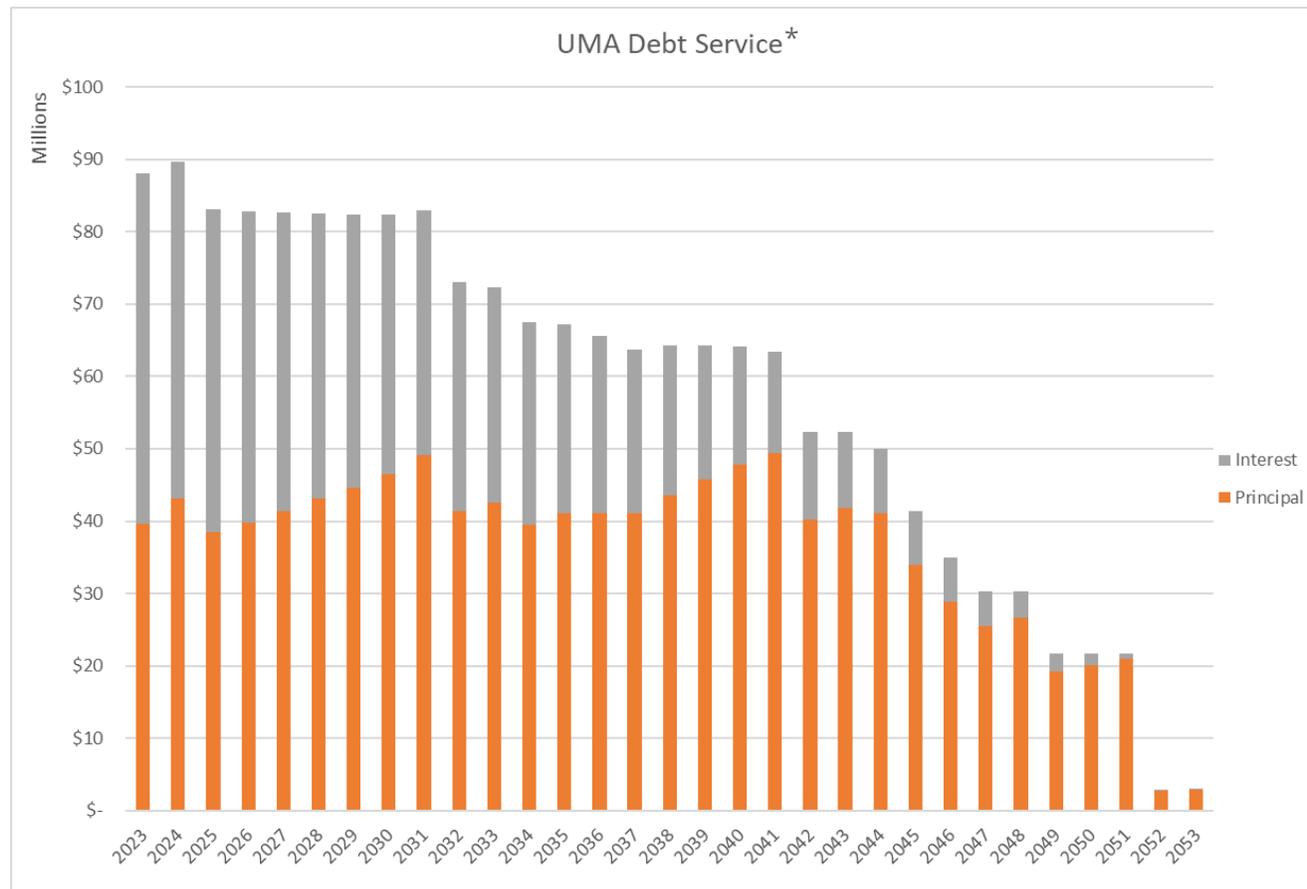
FY22 % Target
N/A



Amherst: Deferred Maintenance – Annual Investment

<i>\$ in thousands</i>	FY24	FY25	FY26	FY27	FY28
Keep Up					
Target	114,247	117,543	121,052	123,561	127,237
Depreciation	143,292	149,750	152,451	151,664	148,749
- Principal Payment	43,195	38,430	39,770	41,415	43,100
= Available Keep Up	100,097	111,320	112,681	110,249	105,649
Forecast Spend	34,000	35,000	36,000	37,000	38,000
% of Target	30%	30%	30%	30%	30%
Catch Up					
Target (15 yrs)	101,124	101,124	101,124	101,124	101,124
Forecast Spend	110,000	110,000	110,000	110,000	110,000
% of Target	109%	109%	109%	109%	109%
Debt Service Burden	5.3%	5.2%	5.4%	5.4%	5.3%

- **Keep-Up:** targets established by Gordian meant to ensure investments sufficient to prevent backlog from growing
- **Depreciation:** (non-cash expenses) budgeted as a proxy to cover debt service; additional amount beyond debt payment available for keep up
- **Catch Up:** estimated 15 years to address backlog through major capital projects and one-time sources like State grants and borrowing



Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service Burden (%)	6.8%	6.5%	6.4%	3.7%	5.4%	5.5%	5.5%	5.3%	5.2%	5.4%	5.4%	5.3%
Debt Service Coverage (x)	2.2	2.3	2.0	3.2	3.8	2.5	3.1	2.8	2.7	2.6	2.6	2.5
Financial Leverage (x)	0.71	0.71	0.65	0.80	0.92	0.66	0.83	0.86	0.79	0.80	0.82	0.87
Total Debt (\$ in thousands)	1,044,216	1,089,240	1,203,126	1,222,295	1,151,358	1,203,126	1,320,088	1,303,697	1,439,256	1,436,275	1,429,649	1,369,339

Boston



Boston FY24-28 Forecast: By the Numbers

Revenue & Expenses:

<u>FY23 Budget:</u>	<u>AAGR:</u>	<u>Rev</u>	<u>Exp</u>
Total: \$470.5M	FY24-28: 3.7%	3.3%	
	FY21-23: 2.0%	2.4%	
	FY18-20: 1.6%	1.1%	



Tuition Annual Increases:

- Undergraduate: 2.5% In state, 3.0% Out of state
- Graduate: 3.0%

Auxiliary Annual Increases:

- 100% P3 occupancy; 1,077 beds
- Dining: 2%
- Increased volume from enrollment & more staff on campus

Operating Margin:

<u>FY23 Budget:</u>	<u>Average:</u>
0.0%	FY24-28: 2.0%
	FY21-23: 2.2%
	FY18-20: 0.9%

Enrollment:

<u>FY23 Actual:</u>	<u>AAGR:</u>
FTEs: 12,876	FY24-28: 0.7%
	FY21-23: -0.9%
	FY18-20: 0.8%

Employees:

<u>FY23 Budget:</u>	<u>AAGR:</u>
Total: 1,892	FY24-28: 1.1%
	FY21-23: -1.3%
	FY18-20: -2.3%

Deferred Maintenance:

\$219 million FY22-26 capital plan

\$220 million deferred maintenance

- (15% of replacement value FY21 (24% University))



Capital:

- No new borrowing assumed
- Must continue to review timing of completion of key projects for FY24 budget:
 - Dorchester Bay City & SDQD – change in timing would impact new borrowing need, interest expense and investment earnings



Boston: Revenue & Expenses Trend

(\$ in Thousands)

Revenues	Actual					Budget	Q1 Projection	Forecast					% Change FY24-28		
	FY2018	FY2019	FY2020	FY2021	FY2022		FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual	
Gross Tuition & Fees	243,760	245,734	252,603	256,240	244,867		258,097	259,773	269,175	277,904	285,235	292,550	299,220	11.2%	3.0%
Tuition Discounts	(57,790)	(64,836)	(69,973)	(74,079)	(76,828)		(78,360)	(84,832)	(81,709)	(83,352)	(85,043)	(86,746)	(88,276)	8.0%	2.4%
Discount Rate	23.7%	26.4%	27.7%	28.9%	31.4%		30.4%	32.7%	30.4%	30.0%	29.8%	29.7%	29.5%	-2.8%	-0.6%
Net Tuition & Fees	185,970	180,898	182,630	182,161	168,039		179,736	174,941	187,466	194,552	200,192	205,804	210,944	12.5%	3.3%
Grants	56,212	53,536	54,732	58,185	63,564		61,799	65,273	68,818	70,731	74,703	77,946	81,488	18.4%	5.7%
Sales & Service, Educational	4,072	4,312	1,744	1,262	1,927		1,652	1,927	1,927	1,927	1,927	1,927	1,927	0.0%	3.3%
Auxiliary Enterprises	5,199	12,315	10,381	3,230	13,568		12,756	14,199	14,704	14,991	15,259	15,544	15,830	7.7%	4.5%
Other Operating	1,758	2,218	3,138	2,586	2,677		2,586	2,586	2,586	2,586	2,586	2,586	2,586	0.0%	0.0%
State Appropriations	135,605	140,659	146,284	152,833	158,380		171,424	187,862	179,820	187,102	194,627	202,397	210,421	17.0%	4.2%
Other NonOperating	37,773	42,529	44,706	67,866	74,208		40,544	41,217	41,800	41,910	42,094	41,923	42,021	0.5%	0.7%
Total Revenues	426,589	436,467	443,615	468,123	482,363		470,496	488,005	497,122	513,800	531,388	548,127	565,218	13.7%	3.7%
% Growth	0.8%	2.3%	1.6%	5.5%	3.0%		-2.5%	1.2%	5.7%	3.4%	3.4%	3.1%	3.1%		
Expenses															
Salaries & Fringe	269,465	269,723	269,734	270,486	274,008		289,333	291,200	298,503	306,981	321,282	334,316	347,150	16.3%	3.7%
Non-Personnel	98,972	98,428	96,680	90,822	118,316		108,307	117,723	116,137	119,926	122,758	125,574	130,102	12.0%	3.8%
Scholarships and Fellowships	17,180	17,983	20,771	30,189	35,893		19,494	18,128	17,441	17,441	17,441	17,441	17,441	0.0%	-2.1%
Depreciation	24,433	28,010	32,460	32,765	34,280		35,435	35,882	40,110	43,860	45,056	46,118	46,016	-12.6%	5.5%
Interest	14,152	16,823	19,312	18,730	19,209		17,927	18,475	15,113	15,315	14,224	13,715	13,204	14.7%	-5.8%
Total Expenses	424,202	430,967	438,957	442,992	481,706		470,497	481,408	487,304	503,524	520,761	537,164	553,913	13.7%	3.3%
% Growth	-0.1%	1.6%	1.9%	0.9%	8.7%		-2.3%	-0.1%	3.6%	3.3%	3.4%	3.1%	3.1%		
Operating Margin															
UMass OM Calc Revenues	426,589	434,863	444,014	470,026	486,208		470,496	488,005	497,122	513,800	531,388	548,127	565,218		
Total Expenses	424,202	430,967	438,957	442,992	481,849		470,497	481,408	487,304	503,524	520,761	537,164	553,913		
Surplus / (Deficit)	2,387	3,896	5,057	27,035	4,359		(0)	6,597	9,818	10,276	10,627	10,963	11,304		
UMass OM Calc	0.6%	0.9%	1.1%	5.8%	0.9%		0.0%	1.4%	2.0%	2.0%	2.0%	2.0%	2.0%		

Boston: Enrollment Trend

<u>AAGR:</u>	<u>Total:</u>	<u>Undergraduate:</u>	<u>Graduate:</u>	<u>CE/Special Programs:</u>
FY24-28:	0.7	0.5	1.8	0.5
FY21-23:	-0.9	-0.9	1.6	0.1
FY18-20:	0.8	2.3	-0.5	-8.5

<u>Students (FTEs)</u>	<u>Actual</u>					<u>Budget</u>	<u>Actual</u>	<u>Forecast</u>				
	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>		<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Undergraduate	9,843	10,258	10,303	10,370	9,810	9,945	9,997	10,064	10,123	10,176	10,231	10,236
% Change		4.2%	0.4%	0.6%	-5.4%	1.4%	1.9%	0.7%	0.6%	0.5%	0.5%	0.0%
Graduate	1,804	1,727	1,784	1,792	1,556	1,627	1,829	1,872	1,992	1,996	1,996	1,996
% Change		-4.3%	3.3%	0.4%	-13.2%	4.6%	17.5%	2.3%	6.4%	0.2%	0.0%	0.0%
CE/Special Programs	1,389	1,228	1,162	1,409	1,593	1,644	1,050	1,064	1,070	1,073	1,075	1,075
% Change		-11.6%	-5.4%	21.3%	13.0%	3.2%	-34.1%	1.4%	0.5%	0.3%	0.2%	0.0%
Total	13,036	13,213	13,249	13,571	12,959	13,216	12,876	13,000	13,185	13,245	13,302	13,307
% Change		1.4%	0.3%	2.4%	-4.5%	2.0%	-0.6%	1.0%	1.4%	0.5%	0.4%	0.0%

Source: Actuals from student profile.

Boston: Enrollment by Residency

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	10,248	10,635	10,647	11,045	10,608	10,555	10,056	9,989	10,036	10,088	10,140	10,140
% Change		3.8%	0.1%	3.7%	-4.0%	-0.5%	-5.2%	-0.7%	0.5%	0.5%	0.5%	0.0%
Out of State	746	813	867	898	1,046	1,152	1,377	1,445	1,464	1,471	1,476	1,480
% Change		9.0%	6.6%	3.6%	16.4%	10.1%	31.7%	5.0%	1.3%	0.5%	0.3%	0.3%
International	2,042	1,764	1,735	1,628	1,305	1,509	1,443	1,565	1,685	1,686	1,686	1,686
% Change		-13.6%	-1.6%	-6.2%	-19.8%	15.6%	10.5%	8.5%	7.6%	0.1%	0.0%	0.0%
Total	13,036	13,213	13,249	13,571	12,959	13,216	12,876	13,000	13,185	13,245	13,302	13,307
% Change		1.4%	0.3%	2.4%	-4.5%	2.0%	-0.6%	1.0%	1.4%	0.5%	0.4%	0.0%

Source: Actuals from student profile.

Boston: Enrollment by New v Continuing

<i>Undergraduate Enrollment (FTEs)</i>	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
New	2,998	3,345	3,251	3,084	3,005	3,066	3,244	3,290	3,327	3,349	3,364	3,321
First-time Freshman			1,993	2,015	1,978	2,028	2,324	2,365	2,399	2,418	2,432	2,390
Transfer			1,258	1,069	1,027	1,038	920	925	928	932	932	932
<i>% Change</i>	14.8%	11.6%	-2.8%	-5.1%	-2.6%	2.0%	8.0%	1.4%	1.1%	0.7%	0.4%	-1.3%
Continuing	6,844	6,913	7,052	7,286	6,805	6,879	6,753	6,773	6,796	6,827	6,867	6,915
<i>% Change</i>	-1.0%	1.0%	2.0%	3.3%	-6.6%	1.1%	-0.8%	0.3%	0.3%	0.5%	0.6%	0.7%
Undergraduate Total	9,843	10,258	10,303	10,370	9,810	9,945	9,997	10,063	10,123	10,176	10,231	10,236
<i>% Change</i>	3.3%	4.2%	0.4%	0.7%	-5.4%	1.4%	1.9%	0.7%	0.6%	0.5%	0.5%	0.1%

Source: Actuals from student profile.

Boston: Online Only

Career

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Undergraduate	9	2	15	28	-	-	187	187	188	189	190	190
% Change		-73.9%	536.1%	84.7%	-100.0%			0.2%	0.6%	0.5%	0.6%	0.0%
Graduate	2	13	12	9	-	-	46	46	47	47	47	47
% Change		550.0%	-5.1%	-29.7%	-100.0%			0.6%	1.1%	0.3%	0.0%	0.0%
Continuing Ed	692	630	743	810	1,310	1,351	766	769	773	776	777	777
% Change		-9.0%	17.9%	9.1%	61.7%	3.1%	-41.5%	0.3%	0.6%	0.4%	0.1%	0.0%
Total	703	645	770	847	1,310	1,351	999	1,002	1,008	1,012	1,014	1,014
% Change		-8.2%	19.4%	10.0%	54.7%	3.1%	-23.7%	0.3%	0.6%	0.4%	0.2%	0.0%

Residency

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	449	421	525	589	968	962	762	760	763	766	768	768
% Change		-6.2%	24.6%	12.2%	64.3%	-0.6%	-21.3%	-0.2%	0.3%	0.4%	0.3%	0.0%
Out of State	14	15	9	21	52	57	216	219	221	222	222	222
% Change		6.8%	-36.2%	128.5%	146.8%	8.8%	312.5%	1.5%	0.6%	0.5%	0.1%	0.1%
International	240	209	236	237	290	332	21	23	25	25	25	25
% Change		-12.9%	12.7%	0.4%	22.3%	14.5%	-92.8%	8.1%	8.4%	0.1%	0.0%	0.0%
Total	703	645	770	847	1,310	1,351	999	1,002	1,008	1,012	1,014	1,014
% Change		-8.2%	19.4%	10.0%	54.7%	3.1%	-23.7%	0.3%	0.6%	0.4%	0.2%	0.0%

Source: Actuals from student profile.

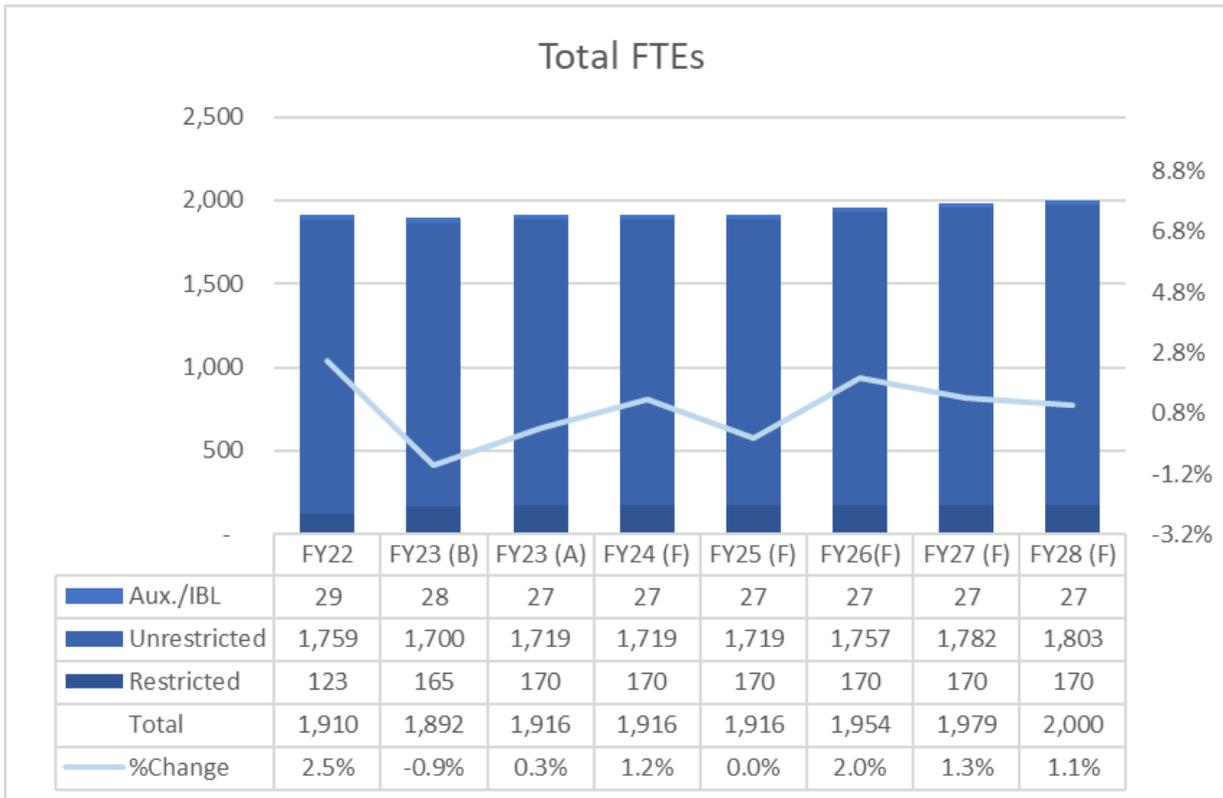
Boston: Staffing

Employee FTEs	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Restricted												
Faculty	13	12	10	7	6	9	7	7	7	7	7	7
Staff	153	135	132	126	116	156	163	163	163	163	163	163
Total Restricted	166	147	142	133	123	165	170	170	170	170	170	170
# Change		(19)	(5)	(9)	(10)	42	47	5	-	-	-	-
% Change		-11.3%	-3.4%	-6.5%	-7.8%	34.6%	38.7%	3.1%	0.0%	0.0%	0.0%	0.0%
Unrestricted General University Ops												
Faculty	862	873	864	843	861	853	851	851	851	870	882	893
Staff	983	931	941	869	898	847	868	868	868	887	900	910
<i>Executive/Admin/Managerial</i>	93	89	83	85	85	-	86	86	86	88	90	91
<i>Professional Nonfaculty</i>	590	559	574	540	572	-	546	546	546	558	566	573
<i>Secretarial/Clerical</i>	167	152	150	133	132	-	116	116	116	118	120	121
<i>Technical/Paraprofessional</i>	105	105	106	88	87	-	98	98	98	100	102	103
<i>Skilled Crafts</i>	12	11	11	9	10	-	11	11	11	11	11	12
<i>Service Maintenance Workers</i>	16	14	15	13	12	-	11	11	11	11	11	12
<i>Unspecified</i>												
Total General University Ops	1,845	1,804	1,805	1,712	1,759	1,700	1,719	1,719	1,719	1,757	1,782	1,803
# Change		(41)	1	(93)	47	(59)	(40)	19	-	38	25	21
% Change		-2.2%	0.1%	-5.2%	2.7%	-3.4%	-2.3%	1.1%	0.0%	2.2%	1.5%	1.2%
Unrestricted Aux./Independent Business												
Faculty	-	-	-	-	-	-	-	-	-	-	-	-
Staff	56	40	27	19	29	28	27	27	27	27	27	27
Total Aux./Independent Business	56	40	27	19	29	28	27	27	27	27	27	27
# Change		(16)	(13)	(8)	10	(1)	(2)	(1)	-	-	-	-
% Change		-29.1%	-32.7%	-30.6%	54.8%	-3.5%	-6.9%	-3.6%	0.0%	0.0%	0.0%	0.0%
Total Faculty & Staff	2,067	1,991	1,974	1,863	1,910	1,892	1,916	1,916	1,916	1,954	1,979	2,000
# Change		(76)	(17)	(111)	47	(18)	6	23	-	38	25	21
% Change		-3.7%	-0.8%	-5.6%	2.5%	-0.9%	0.3%	1.2%	0.0%	2.0%	1.3%	1.1%

FY23 budget staffing reflects average staffing as of 9/30 which includes filling some vacant positions

Boston: Staffing

Faculty & staff of 1,916 grows on average 1.1% over the forecast period.



Auxiliary / Independent Business Lines: staff including housing & dining

Unrestricted: faculty & staff that support general university operations

Restricted: faculty & staff funded by grant & endowed funds

FTEs:	27
% of Total FTEs:	1%
Faculty % / Staff %:	0% / 100%
Forecast AAGR:	-0.7%

FTEs:	1,719
% of Total FTEs:	90%
Faculty % / Staff %:	50% / 50%
Forecast AAGR:	1.2%

FTEs:	170
% of Total FTEs:	9%
Faculty % / Staff %:	4% / 96%
Forecast AAGR:	0.6%

Boston: Staffing Ratios

	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Student - Faculty												
Student (FTE)	13,036	13,213	13,249	13,571	12,959	13,216	12,876	13,000	13,185	13,245	13,302	13,307
Faculty (FTE)	875	885	874	850	867	862	858	858	858	876	889	899
Student-Faculty Ratio	14.9	14.9	15.2	16.0	15.0	15.3	15.0	15.2	15.4	15.1	15.0	14.8
Staff - Faculty (All)												
Staff (FTE)	1,192	1,106	1,100	1,013	1,043	1,030	1,058	1,058	1,058	1,077	1,090	1,100
Faculty (FTE)	875	885	874	850	867	862	858	858	858	876	889	899
Staff-Faculty Ratio	1.4	1.2	1.3	1.2								
Staff - Faculty (E&G)												
Staff (FTE)	983	931	941	869	898	847	868	868	868	887	900	910
Faculty (FTE)	862	873	864	843	861	853	851	851	851	870	882	893
Staff-Faculty Ratio (E&G)	1.1	1.1	1.1	1.0								

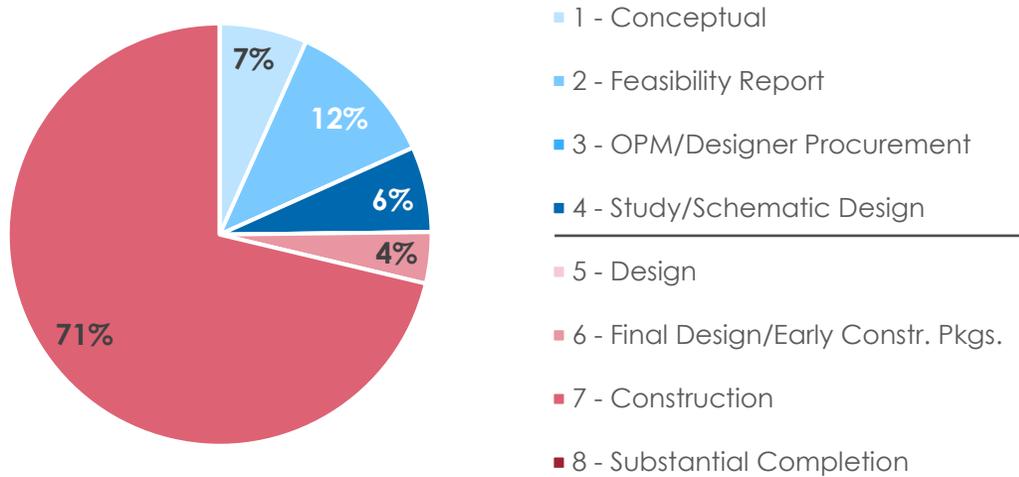
Boston: Key Ratios

Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Operating Margin (%)	0.6%	0.9%	1.1%	5.8%	0.9%	0.0%	1.4%	2.0%	2.0%	2.0%	2.0%	2.0%
Operating Margin (\$)	2,387	3,896	5,057	27,035	4,359	(0)	6,597	9,818	10,276	10,627	10,963	11,304
Operating Cash Flow Margin (%)	9.0%	11.2%	13.3%	17.3%	13.1%	12.1%	13.1%	13.7%	14.4%	14.2%	14.1%	13.7%
Operating Cash Flow Margin (\$)	36,282	46,650	56,042	75,716	59,035	54,722	61,419	66,007	71,755	73,600	75,189	75,453
Debt Service Burden (%)	6.3%	6.9%	7.5%	4.2%	6.6%	6.8%	6.6%	7.0%	6.3%	6.2%	6.1%	5.9%
Debt Service Coverage (x)	1.4	1.6	1.7	4.0	1.9	1.7	1.9	1.9	2.2	2.3	2.3	2.3
Financial Leverage (x)	0.30	0.32	0.34	0.40	0.40	0.63	0.47	0.60	0.64	0.68	0.73	0.78
Total Debt (\$ in thousands)	611,819	616,132	606,847	611,943	649,397	508,087	572,036	553,983	537,890	519,968	501,310	482,060
Total Cash & Investments to Op Expenses (x)	0.42	0.42	0.44	0.59	0.59	0.71	0.58	0.71	0.71	0.71	0.71	0.70
Enrollment	13,036	13,213	13,249	13,571	12,959	13,216	12,876	13,000	13,185	13,245	13,302	13,307
Enrollment (% Change)	-0.5%	1.4%	0.3%	2.4%	-4.5%	2.0%	-0.6%	1.0%	1.4%	0.5%	0.4%	0.0%

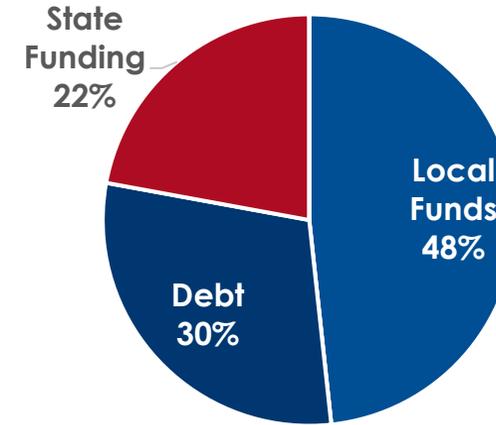
Boston: 19 Projects; \$217M; 11% of Capital Plan

71% of Projects in Construction or Substantial Completion

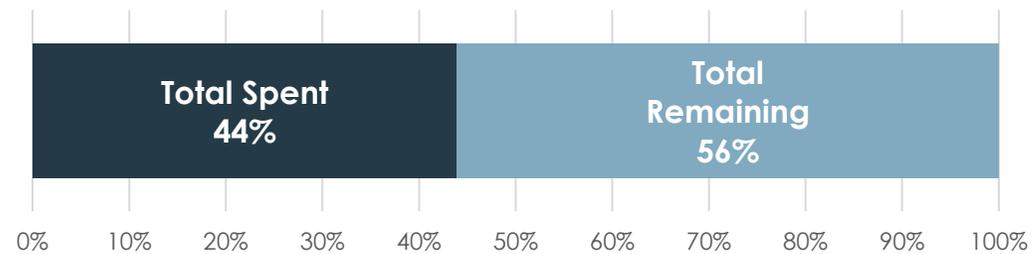
Projects by Phase



Funding Sources



Project Spending



Boston: Projects

Traditional Projects			
Project	Adjusted Cost (\$)	Project Phase	Status
Demolish Substructure, Science Center, and Pool (SDQD)	137,139,950	7 - Construction	Approved
Total	137,139,950		

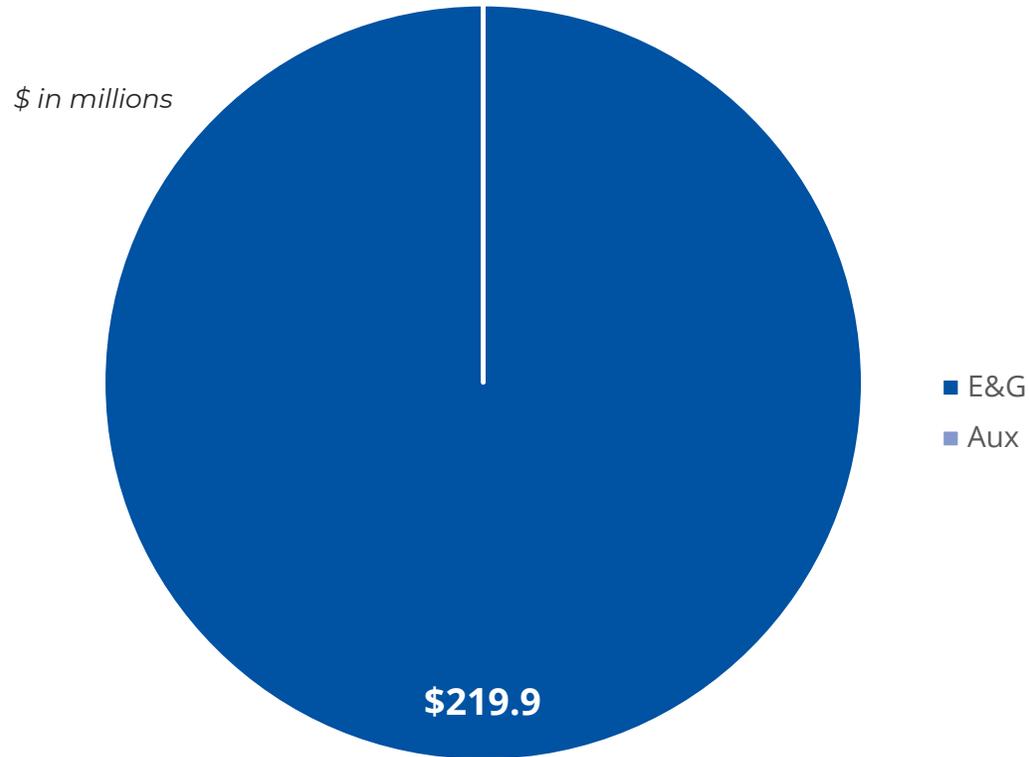
Alternative Finance & Delivery Projects	
Project	Adjusted Cost (\$)
Calf Pasture Pump House	-
Total	-

President Projects			
Project	Adjusted Cost (\$)	Project Phase	Status
Campus Center Roof Replacement	5,000,000	1 - Conceptual	Authorized
Quinn Administration and Service & Supply Buildings Fire Protection	3,025,000	1 - Conceptual	Authorized
Wheatley Hall Façade Repairs	6,500,000	1 - Conceptual	Authorized
Healey Library Building Fire Protection	8,110,000	2 - Feasibility Report	Authorized
Healey Library Transformer Replacement	2,025,000	2 - Feasibility Report	Authorized
Utilities - Pumphouse & Cooling Capacity	9,000,000	2 - Feasibility Report	Authorized
Utilities SWPH Mechanical Repairs/Dredging	6,000,000	2 - Feasibility Report	Authorized
Clark Renovations (Title IX)	7,000,000	4 - Study / Schematic Design	Authorized
Clark Softball Field Renovations (Title IX)	5,000,000	4 - Study / Schematic Design	Authorized
Upgrade Building Controls Campus-Wide	2,250,000	4 - Study / Schematic Design	Authorized
Building Utility Submeter & SCADA	2,920,000	6 - Final Design / Early Construction Packages	Approved
Utility Plant Improvements	5,600,000	6 - Final Design / Early Construction Packages	Approved
Healey Ductwork Repair & Air Handling Unit Replacement	3,230,000	7 - Construction	Approved
McCormack Hall: Roof Replacement and Building Envelope Repairs Phase 2	5,354,850	7 - Construction	Approved
Network Refresh Edge Switches	3,554,456	7 - Construction	Approved
Repairs to Falling Sections of Harborwalk	3,277,760	7 - Construction	Approved
S&S Loading Dock Concrete Repairs	2,300,000	7 - Construction	Approved
Total	80,147,066		

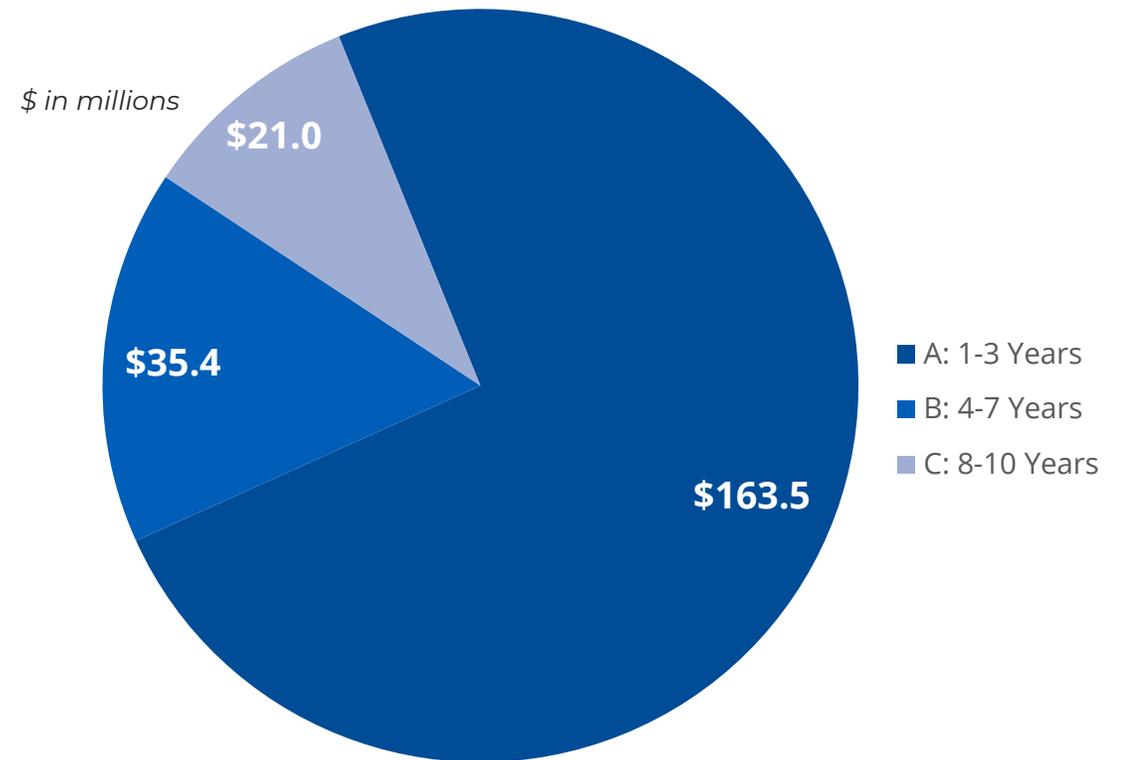
Boston: Deferred Maintenance

\$219.9 Million Backlog Coming Due in the Next 10 Years

\$219.9M: E&G vs. AUX



\$219.9M: By Timeframe



Boston: Deferred Maintenance

\$219.9 Million Backlog Coming Due in the Next 10 Years

By Package

Building Package	Project Cost (\$ millions)
Space Improvement	68.2
Building Systems	49.0
Building Envelope	46.4
Infrastructure	30.8
Safety/Code	25.4
Total	219.9

By System

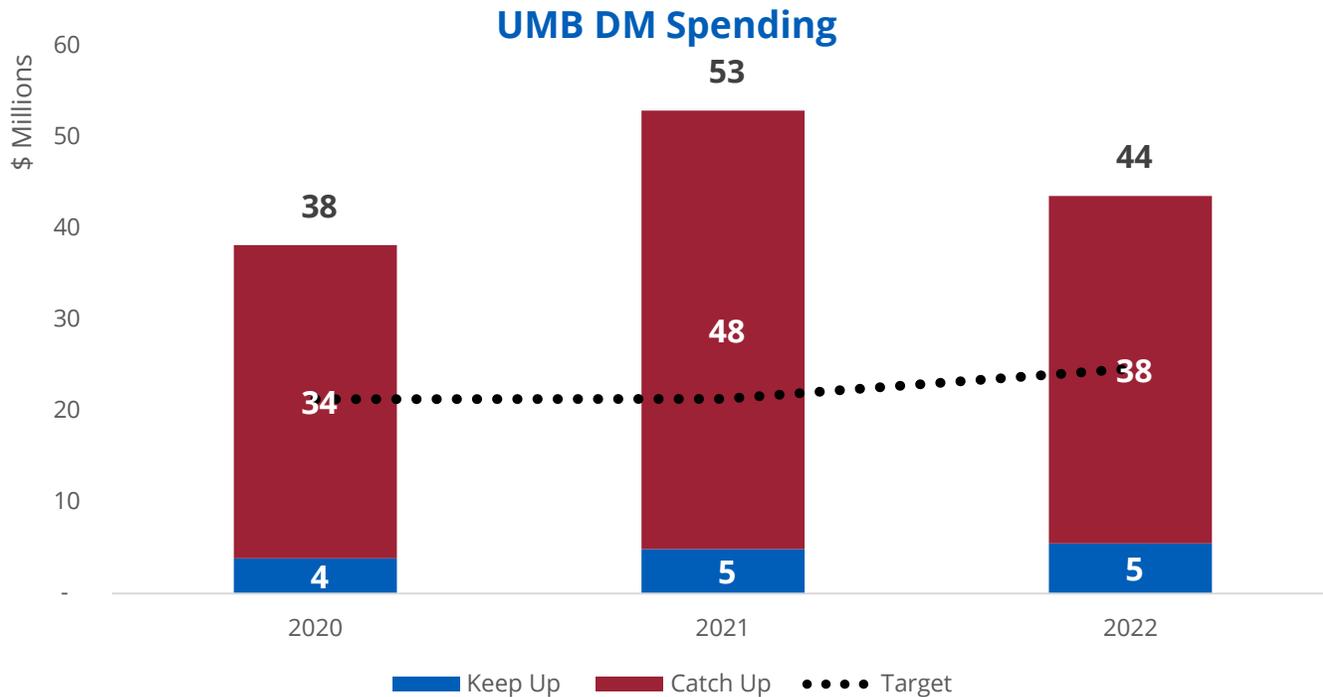
Building System	Project Cost (\$ millions)
Interior Shell	66.1
Exterior Shell	46.4
Safety/Code	25.3
Grounds	23.3
HVAC	16.5
Plumbing	13.7
Electrical	13.6
Cooling	11.3
Mechanical	2.9
Heating	0.7
Total	219.9

Top 10 Building Needs

Building	Project Cost (\$ millions)
Healey Library	45.0
Wheatley Hall	35.3
UMB Campus grounds/infrastructure	33.0
McCormack Hall	29.7
Campus Center	19.2
Service & Supply	14.1
Quinn Administration	10.5
Clark Athletic Center (Ice Rink / Lobby)	9.0
Salt Water Pump House	7.3
Integrated Sciences Complex	4.1
Total	207.4

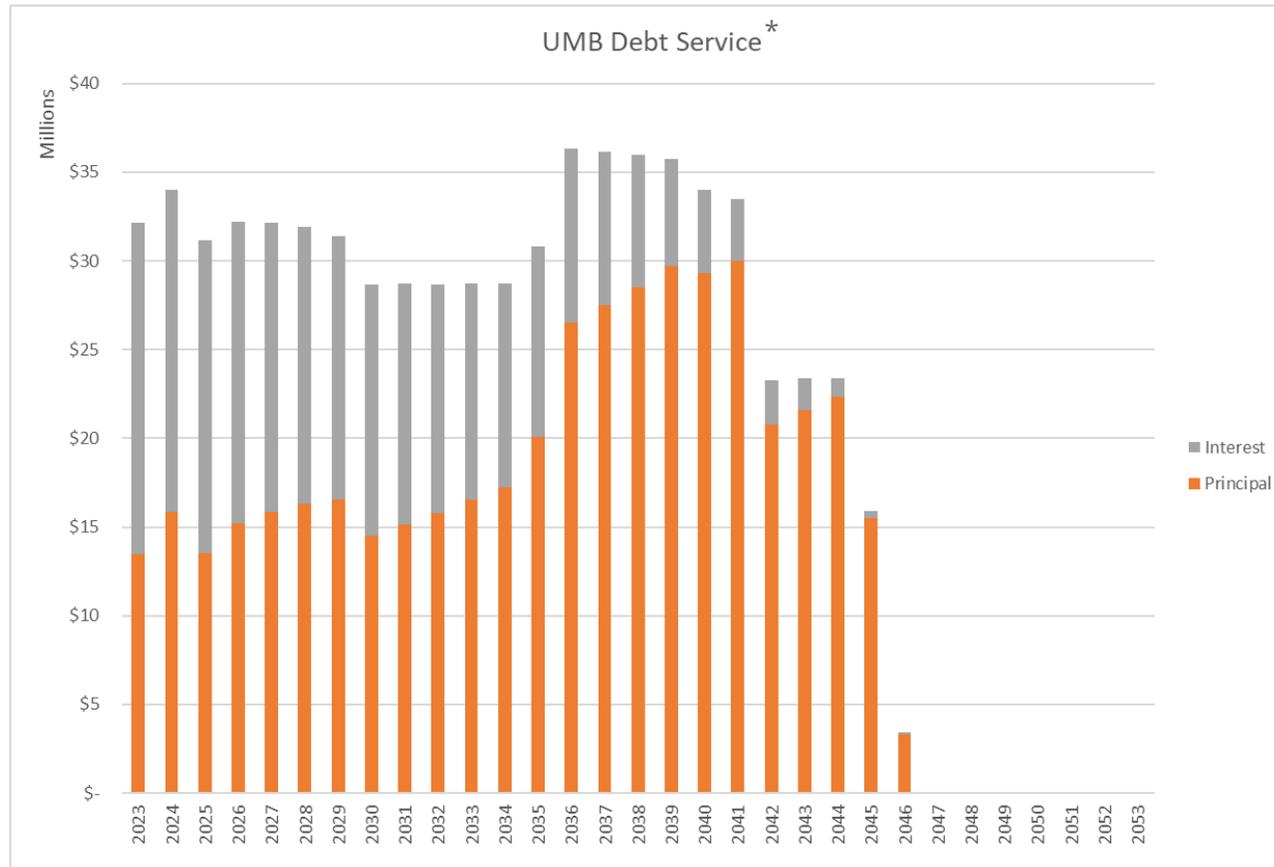
Boston: Deferred Maintenance Dashboard (v1.0)- Annual Investment

<u>FY22 Keep Up</u> \$5.5 M	<u>FY22 Keep Up</u> \$24.6 M	<u>FY22 % Target</u> 22.3%
<u>FY22 Catch Up</u> \$38.1 M	<u>FY22 Catch Up</u> TBD	<u>FY22 % Target</u> N/A



Boston: Deferred Maintenance - Annual Investment

<i>\$ in thousands</i>	FY24	FY25	FY26	FY27	FY28
Keep Up					
Depreciation	40,110	43,860	45,056	46,118	46,016
Principal Payment	18,891	16,579	18,279	18,878	19,330
Available for Keep Up	21,219	27,281	26,777	27,240	26,686
Keep Up Target	26,153	26,932	27,751	28,595	29,465
Planned Keep Up Spend	5,537	5,734	4,430	4,430	4,430
Catch Up					
Catch Up Target (15 yrs)	14,658	14,658	14,658	14,658	14,658
Planned Catch Up Spend	21,293	19,474	12,953	12,953	12,953
Debt Service Burden	7.0%	6.3%	6.2%	6.1%	5.9%



Key Ratio	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service Burden (%)	6.3%	6.9%	7.5%	4.2%	6.6%	6.8%	7.0%	6.3%	6.2%	6.1%	5.9%
Debt Service Coverage (x)	1.4	1.6	1.7	4.0	1.9	1.7	1.9	2.2	2.3	2.3	2.3
Financial Leverage (x)	0.30	0.32	0.34	0.40	0.40	0.63	0.60	0.64	0.68	0.73	0.78
Total Debt (\$ in thousands)	611,819	616,132	606,847	611,943	649,397	508,087	553,983	537,890	519,968	501,310	482,060

Dartmouth



FY24-28 Forecast: By the Numbers

Revenue & Expenses:

<u>FY23 Budget:</u>	<u>AAGR:</u>	<u>Rev</u>	<u>Exp</u>
	FY24-28: 3.6%	3.2%	
Total: \$258.8M	FY21-23: 1.1%	1.1%	
	FY18-20: 0.4%	1.8%	

Operating Margin:

<u>FY23 Budget:</u>	<u>Average:</u>
0.00%	FY24-28: 1.8%
	FY21-23: 0.5%
	FY18-20: 0.9%

Enrollment:

<u>FY23 Actual:</u>	<u>AAGR:</u>
FTEs: 6,314	FY24-28: 1.6%
	FY21-23: -3.2%
	FY18-20: -2.1%

Employees:

<u>FY23 Budget:</u>	<u>AAGR:</u>
Total: 1,077	FY24-28: 2.8%
	FY21-23: -3.0%
	FY18-20: -2.0%



Tuition Annual Increases:

- Undergraduate: 2.5%
- Graduate & Law: 0% for FY24-25; 1% FY26-28

Auxiliary Annual Increases:

- Housing: 3.0%
- Dining: 2.5%



~80% campus owned occupancy

- 2,014 beds; 800 offline due to deferred maintenance needs

~96% P3 occupancy



Deferred Maintenance:

\$132 million FY22-26 capital plan

\$649 million deferred maintenance

- (44% of replacement value FY21 (24% University))

Capital:

- No new borrowing planned
- State investment in SENG & LARTS



Dartmouth: Revenue & Expenses

(\$ in Thousands)

Revenues	Actual					Budget Q1 Projection		Forecast					% Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Gross Tuition & Fees	116,766	121,340	120,535	116,562	112,674	115,739	115,739	125,141	131,890	136,636	141,949	147,514	17.9%	5.0%
Tuition Discounts	(38,795)	(42,762)	(39,858)	(34,440)	(38,704)	(40,494)	(40,494)	(42,548)	(44,843)	(46,456)	(48,263)	(50,155)	17.9%	4.4%
Discount Rate	33.2%	35.2%	33.1%	29.5%	34.4%	35.0%	35.0%	34.0%	34.0%	34.0%	34.0%	34.0%	0.0%	-0.6%
Net Tuition & Fees	77,971	78,578	80,677	82,122	73,970	75,245	75,245	82,593	87,047	90,180	93,686	97,359	17.9%	5.3%
Grants	18,925	18,918	18,677	19,674	22,855	21,573	21,573	21,858	23,661	24,636	24,267	24,021	9.9%	2.2%
Sales & Service, Educational	96	164	154	40	647	75	75	75	75	75	75	75	0.0%	0.0%
Auxiliary Enterprises	47,666	49,451	35,932	10,282	32,695	33,508	33,508	33,794	33,868	34,526	35,425	36,604	8.3%	1.8%
Other Operating	4,438	2,955	2,312	2,041	3,208	3,142	3,142	3,100	3,100	3,100	3,100	3,100	0.0%	-0.3%
State Appropriations	83,740	86,385	92,731	95,942	99,007	105,559	117,384	111,778	115,896	120,145	124,530	129,053	15.5%	4.1%
Other NonOperating	17,792	20,141	20,963	31,139	29,795	19,661	19,661	17,413	17,428	17,617	17,870	18,149	4.2%	-1.5%
Total Revenues	250,628	256,592	251,446	241,240	262,177	258,762	270,589	270,611	281,075	290,278	298,953	308,361	13.9%	3.6%
% Growth	0.9%	2.4%	-2.0%	-4.1%	8.7%	-1.3%	3.2%	4.6%	3.9%	3.3%	3.0%	3.1%		
Expenses														
Salaries & Fringe	150,061	151,746	152,040	142,296	150,681	156,713	162,559	168,204	173,310	179,360	185,834	192,525	14.5%	4.2%
Non-Personnel	65,795	66,939	62,457	55,867	68,750	64,463	67,763	65,100	67,725	72,371	75,199	78,755	21.0%	4.1%
Scholarships & Fellowships	5,023	5,302	5,641	11,395	14,412	7,285	7,285	5,000	5,250	5,513	5,788	6,078	21.6%	-2.3%
Depreciation	20,481	21,665	22,187	21,963	22,105	22,693	22,693	22,366	21,742	20,812	20,051	18,924	-15.4%	-3.6%
Interest	8,910	9,466	9,125	8,665	7,002	7,608	7,608	7,348	7,548	6,560	6,247	6,060	-17.5%	-4.3%
Total Expenses	250,270	255,118	251,450	240,186	262,950	258,762	267,908	268,018	275,575	284,616	293,119	302,341	12.8%	3.2%
% Growth	4.8%	1.9%	-1.4%	-4.5%	9.5%	-1.6%	1.9%	3.6%	2.8%	3.3%	3.0%	3.1%		
Operating Margin														
UMass OM Calc Revenues	253,071	258,776	251,531	241,849	264,819	258,762	270,589	270,611	281,075	290,278	298,953	308,361		
Total Expenses	250,270	255,118	251,450	240,186	262,950	258,762	267,908	268,018	275,575	284,616	293,119	302,341		
Surplus / (Deficit)	2,801	3,658	81	1,663	1,869	0	2,681	2,594	5,500	5,663	5,834	6,020		
UMass OM Calc	1.1%	1.4%	0.0%	0.7%	0.7%	0.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%		

Dartmouth: Enrollment Trend

<u>AAGR:</u>	<u>Total:</u>	<u>Undergraduate:</u>	<u>Graduate:</u>	<u>CE:</u>
FY24-28:	1.6	0.0	8.2	4.0
FY21-23:	-3.2	-5.6	9.6	-2.0
FY18-20:	-2.1	-2.9	-12.3	6.5

Students (FTEs)	Actual					Budget Actual		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Undergraduate	5,582	5,600	5,261	4,993	4,635	4,512	4,422	4,374	4,321	4,322	4,360	4,418
% Change		0.3%	-6.1%	-5.1%	-7.2%	-2.7%	-4.6%	-1.1%	-1.2%	0.0%	0.9%	1.3%
Graduate	698	594	536	580	566	595	697	809	1,009	1,009	1,009	1,009
% Change		-14.9%	-9.8%	8.2%	-2.4%	5.1%	23.1%	16.1%	24.7%	0.0%	0.0%	0.0%
Continuing Ed	822	937	928	809	931	976	853	885	921	958	997	1,039
% Change		14.0%	-1.0%	-12.8%	15.1%	4.9%	-8.4%	3.8%	4.1%	4.0%	4.1%	4.2%
Law	184	199	246	328	326	325	341	343	348	353	358	363
% Change		8.4%	23.6%	33.2%	-0.5%	-0.3%	4.6%	0.6%	1.5%	1.4%	1.4%	1.4%
Total	7,285	7,330	6,971	6,710	6,458	6,408	6,314	6,411	6,599	6,642	6,724	6,829
% Change		0.6%	-4.9%	-3.7%	-3.8%	-0.8%	-2.2%	1.5%	2.9%	0.7%	1.2%	1.6%

Source: Actuals from student profile.

Dartmouth: Enrollment by Residency

Students (FTEs)	Actual					Budget Actual		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	6,211	6,188	5,814	5,603	5,316	5,207	5,014	5,010	4,988	4,936	4,935	4,970
% Change		-0.4%	-6.0%	-3.6%	-5.1%	-2.1%	-5.7%	-0.1%	-0.4%	-1.0%	-0.0%	0.7%
Out of State	928	991	1,030	1,029	1,084	1,186	911	960	1,010	1,105	1,188	1,258
% Change		6.8%	3.9%	-0.2%	5.3%	9.5%	-15.9%	5.4%	5.2%	9.4%	7.5%	5.9%
International	147	151	127	79	59	15	389	441	601	601	601	601
% Change		3.1%	-15.8%	-37.9%	-25.6%	-74.5%	562.3%	13.4%	36.3%	0.0%	0.0%	0.0%
Total	7,285	7,330	6,971	6,710	6,458	6,408	6,314	6,411	6,599	6,642	6,724	6,829
% Change		0.6%	-4.9%	-3.7%	-3.8%	-0.8%	-2.2%	1.5%	2.9%	0.7%	1.2%	1.6%

Source: Actuals from student profile.

Dartmouth: Enrollment by New v Continuing

Undergraduate Enrollment (FTEs)	Actual					Budget Actual		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
New	1,647	1,833	1,721	1,533	1,492	1,520	1,506	1,574	1,615	1,659	1,701	1,726
First-time Freshman	1,219	1,302	1,300	1,265	1,258	1,286	1,271	1,337	1,378	1,422	1,464	1,489
Transfer	428	531	421	268	234	234	235	237	237	237	237	237
<i>% Change</i>	<i>-1.0%</i>	<i>11.3%</i>	<i>-6.1%</i>	<i>-10.9%</i>	<i>-2.6%</i>	<i>1.9%</i>	<i>0.9%</i>	<i>4.5%</i>	<i>2.6%</i>	<i>2.7%</i>	<i>2.5%</i>	<i>1.5%</i>
Continuing	3,934	3,767	3,540	3,461	3,143	2,992	2,916	2,800	2,706	2,663	2,659	2,692
<i>% Change</i>	<i>-6.3%</i>	<i>-4.3%</i>	<i>-6.0%</i>	<i>-2.2%</i>	<i>-9.2%</i>	<i>-4.8%</i>	<i>-2.5%</i>	<i>-4.0%</i>	<i>-3.4%</i>	<i>-1.6%</i>	<i>-0.2%</i>	<i>1.2%</i>
Undergraduate Total	5,582	5,600	5,261	4,993	4,635	4,512	4,422	4,374	4,321	4,322	4,360	4,418
<i>% Change</i>	<i>-4.8%</i>	<i>0.3%</i>	<i>-6.1%</i>	<i>-5.1%</i>	<i>-7.2%</i>	<i>-2.7%</i>	<i>-1.8%</i>	<i>-1.1%</i>	<i>-1.2%</i>	<i>0.0%</i>	<i>0.9%</i>	<i>1.3%</i>

Source: Actuals from student profile.

Dartmouth: Online Only

Career

Online Only Students (FTEs)	Actual					Budget Actual		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Undergraduate	-	-	-	-	-	-	-	-	-	-	-	-
% Change												
Graduate	-	-	-	-	-	-	-	-	-	-	-	-
% Change												
Continuing Ed	315	546	649	690	804	856	675	709	745	782	821	863
% Change		73.3%	18.9%	6.3%	16.5%	6.5%	-16.0%	5.0%	5.1%	5.0%	5.0%	5.1%
Total	315	546	649	690	804	856	675	709	745	782	821	863
% Change		73.3%	18.9%	6.3%	16.5%	6.5%	-16.0%	5.0%	5.1%	5.0%	5.0%	5.1%

Residency

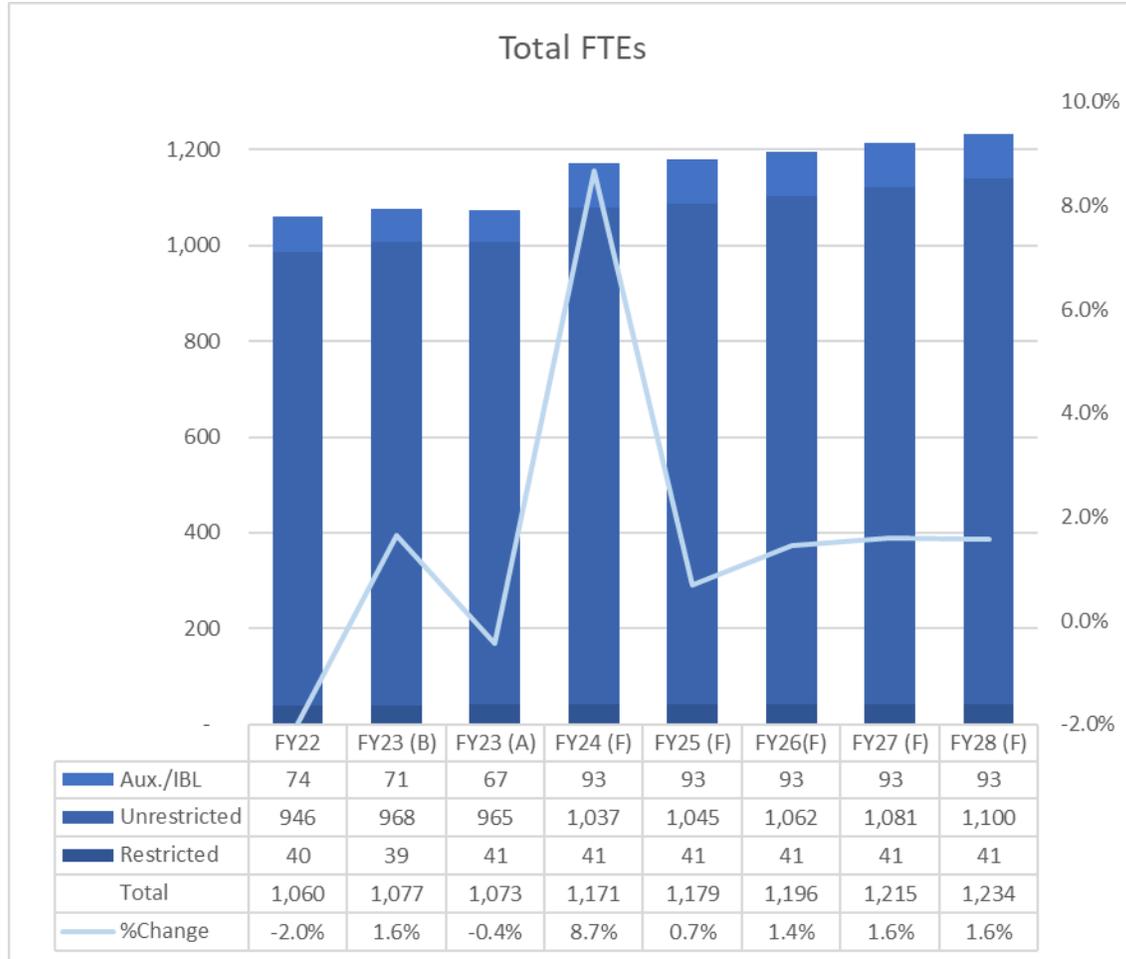
Online Only Students (FTEs)	Actual					Budget Actual		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	234	412	477	501	593	630	489	513	539	566	594	624
% Change		76.1%	15.8%	5.0%	18.4%	6.3%	-17.5%	4.9%	5.1%	5.0%	4.9%	5.1%
Out of State	81	134	172	189	211	226	174	184	194	204	215	227
% Change		65.4%	28.4%	9.9%	11.6%	7.1%	-17.5%	5.7%	5.4%	5.2%	5.4%	5.6%
International	-	-	-	-	-	-	12	12	12	12	12	12
% Change								0.0%	0.0%	0.0%	0.0%	0.0%
Total	315	546	649	690	804	856	675	709	745	782	821	863
% Change		73.3%	18.9%	6.3%	16.5%	6.5%	-16.0%	5.0%	5.1%	5.0%	5.0%	5.1%

Dartmouth: Staffing

	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Restricted												
Faculty	6	5	5	6	5	6	4	4	4	4	4	4
Staff	30	31	31	32	35	33	37	37	37	37	37	37
Total Restricted	36	36	36	38	40	39	41	41	41	41	41	41
# Change		-	-	2	2	1	2	-	-	-	-	-
% Change		0%	0%	5%	5%	2%	5%	0%	0%	0%	0%	0%
Unrestricted General University Ops												
Faculty	464	466	457	437	434	432	439	451	455	465	476	487
Staff	597	595	577	530	513	536	527	586	590	597	605	613
<i>Executive/Admin/Managerial</i>	51	51	49	46	50	-	-	-	-	-	-	-
<i>Professional Nonfaculty</i>	274	282	278	254	240	-	-	-	-	-	-	-
<i>Secretarial/Clerical</i>	9	157	150	133	130	-	-	-	-	-	-	-
<i>Technical/Paraprofessional</i>	2	41	44	43	38	-	-	-	-	-	-	-
<i>Skilled Crafts</i>	12	18	15	15	15	-	-	-	-	-	-	-
<i>Service Maintenance Workers</i>	52	46	41	39	39	-	-	-	-	-	-	-
<i>Unspecified</i>												
Total General University Ops	1,061	1,061	1,034	967	946	968	965	1,037	1,045	1,062	1,081	1,100
# Change			(27)	(67)	(21)	1	(2)	72	8	17	19	19
% Change		0%	-3%	-7%	-2%	0%	0%	7%	1%	2%	2%	2%
Unrestricted Aux./Independent Business												
Faculty	-	-	-	-	-	-	-	-	-	-	-	-
Staff	106	107	91	77	74	71	67	93	93	93	93	93
Total Aux./Independent Business	106	107	91	77	74	71	67	93	93	93	93	93
# Change		1	(16)	(14)	(3)	(6)	(5)	27	-	-	-	-
% Change		1%	-17%	-18%	-4%	-9%	-7%	28%	0%	0%	0%	0%
Total Faculty & Staff	1,203	1,204	1,161	1,082	1,060	1,077	1,073	1,171	1,179	1,196	1,215	1,234
# Change		1	(43)	(79)	(22)	(5)	(5)	98	8	17	19	19
% Change		0%	-4%	-7%	-2%	0%	0%	8%	1%	1%	2%	2%

Dartmouth: Staffing

Faculty & staff of 1,077 grows on average 3% over the forecast period.



Auxiliary / Independent

Business Lines: staff including housing & dining

Unrestricted: faculty & staff that support general university operations

Restricted: faculty & staff funded by grant & endowed funds

FTEs:	71
% of Total FTEs:	6%
Faculty % / Staff %:	0% / 100%
Forecast AAGR:	6.2%

FTEs:	968
% of Total FTEs:	90%
Faculty % / Staff %:	45% / 55%
Forecast AAGR:	2.6%

FTEs:	39
% of Total FTEs:	4%
Faculty % / Staff %:	16% / 84%
Forecast AAGR:	1.1%

Dartmouth: Staffing Ratios

	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Student - Faculty												
Student (FTE)	7,285	7,330	6,971	6,710	6,458	6,408	6,314	6,411	6,599	6,642	6,724	6,829
Faculty (FTE)	470	471	462	443	439	438	443	455	459	469	480	491
Student-Faculty Ratio	15.5	15.6	15.1	15.2	14.7	14.6	14.3	14.1	14.4	14.2	14.0	13.9
Staff - Faculty (All)												
Staff (FTE)	733	733	699	639	622	639	630	716	720	727	735	743
Faculty (FTE)	470	471	462	443	439	438	443	455	459	469	480	491
Staff-Faculty Ratio	1.6	1.6	1.5	1.4	1.4	1.5	1.4	1.6	1.6	1.6	1.5	1.5
Staff - Faculty (E&G)												
Staff (FTE)	597	595	577	530	513	536	527	586	590	597	605	613
Faculty (FTE)	464	466	457	437	434	432	439	451	455	465	476	487
Staff-Faculty Ratio (E&G)	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3

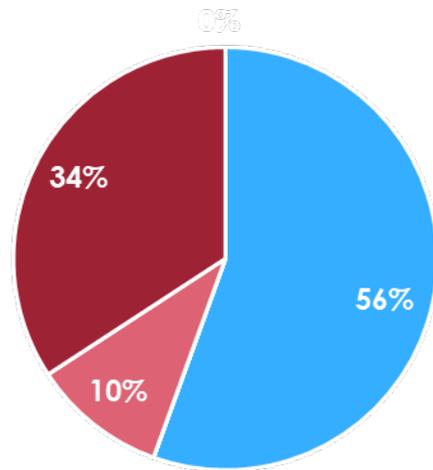
Dartmouth: Key Ratios

Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Operating Margin (%)	1.1%	1.4%	0.0%	0.7%	0.7%	0.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%
Operating Margin (\$)	2,801	3,658	81	1,663	1,869	0	2,681	2,594	5,500	5,663	5,834	6,020
Operating Cash Flow Margin (%)	10.6%	12.8%	12.2%	13.4%	12.6%	10.9%	11.7%	12.4%	12.9%	11.7%	11.0%	10.3%
Operating Cash Flow Margin (\$)	25,525	32,192	29,670	30,643	31,613	26,989	30,412	33,071	35,547	33,257	32,344	31,205
Debt Service Burden (%)	7.6%	7.8%	7.7%	4.1%	5.8%	5.9%	5.6%	6.0%	6.0%	5.6%	4.8%	4.7%
Debt Service Coverage (x)	1.3	1.6	1.5	3.1	2.1	1.8	2.0	2.0	2.2	2.1	2.3	2.2
Financial Leverage (x)	0.45	0.29	0.31	0.42	0.51	0.40	0.18	0.46	0.49	0.53	0.57	0.61
Total Debt (\$ in thousands)	205,513	351,883	338,643	346,740	342,167	338,643	315,110	305,301	295,155	284,332	274,666	264,420
Total Cash & Investments to Op Expenses (x)	0.38	0.42	0.42	0.64	0.70	0.54	0.22	0.53	0.54	0.54	0.54	0.55
Enrollment	7,285	7,330	6,971	6,710	6,458	6,408	6,314	6,411	6,599	6,642	6,724	6,829
Enrollment (% Change)	-3.6%	0.6%	-4.9%	-3.7%	-3.8%	-0.8%	-2.2%	1.5%	2.9%	0.7%	1.2%	1.6%

Dartmouth: 3 Projects; \$132M; 7% of Capital Plan

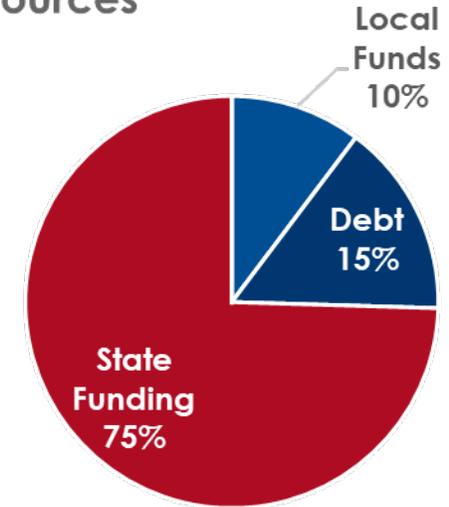
44% of Projects in Construction or Substantial Completion

Projects by Phase

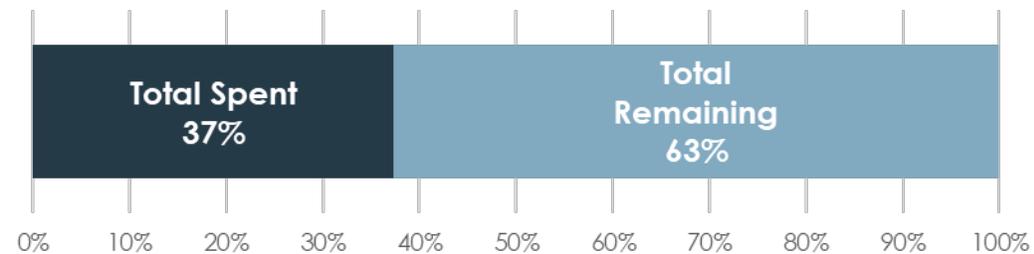


- 1 - Conceptual
- 2 - Feasibility Report
- 3 - OPM/Designer Procurement
- 4 - Study/Schematic Design
- 5 - Design
- 6 - Final Design/Early Constr. Pkgs.
- 7 - Construction
- 8 - Substantial Completion

Funding Sources



Project Spending



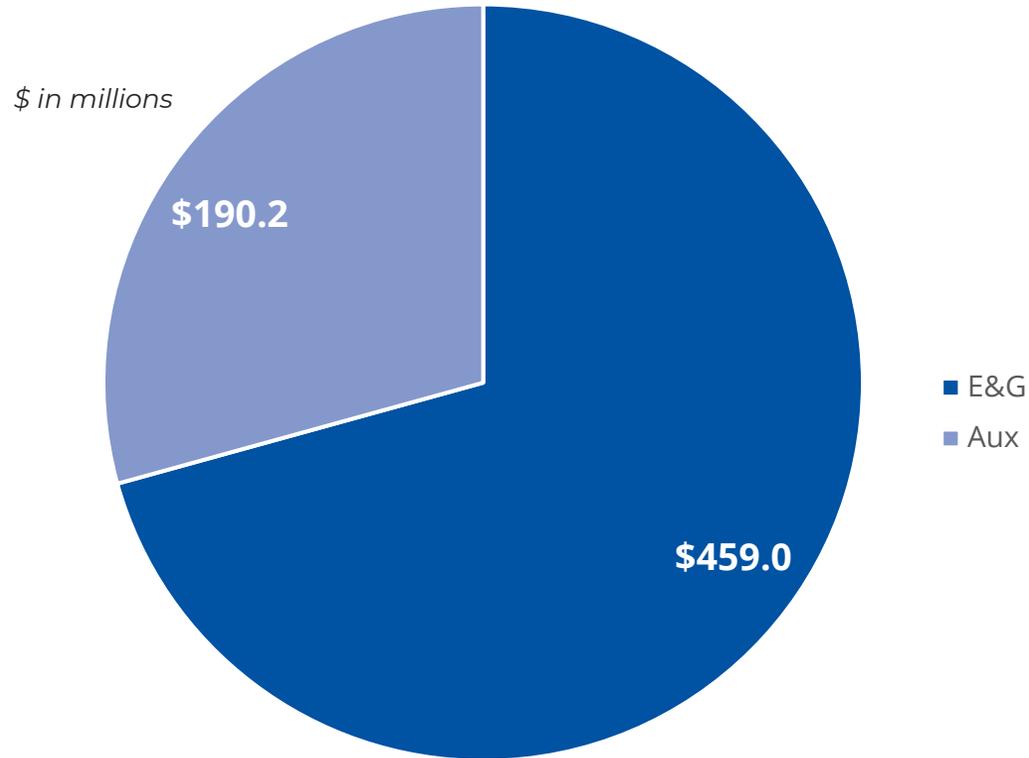
Dartmouth Projects

Traditional Projects			
Project	Adjusted Cost (\$)	Project Phase	Status
LARTS HVAC Renovation/Upgrade	73,000,000	3 - Owner's Project Manager/Designer Procurement	Authorized
Traditional First Year Residence Hall Demolition	13,500,000	7 - Construction	Approved
SENG - Building System Project	45,000,000	8 - Substantial Completion	Approved
Total	131,500,000		

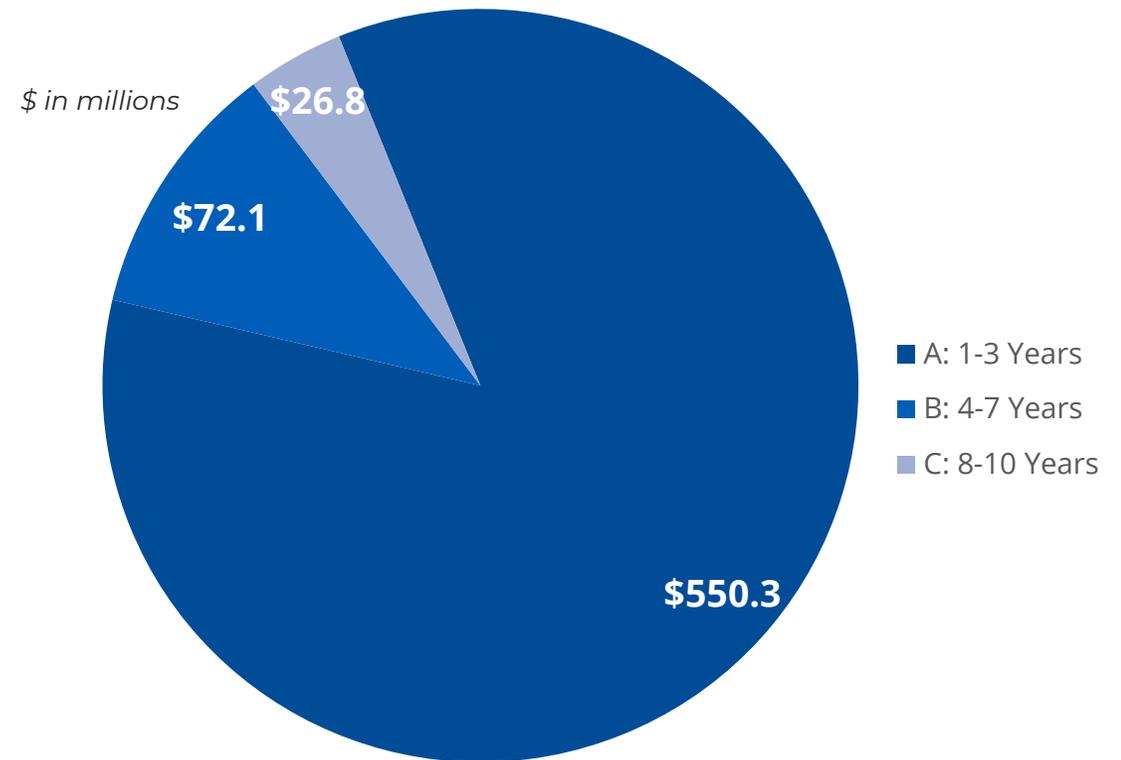
Dartmouth: Deferred Maintenance

\$649.2 Million Backlog Coming Due in the Next 10 Years

\$649.2M: E&G vs. AUX



\$649.2M: By Timeframe



Dartmouth: Deferred Maintenance

\$649.2 Million Backlog Coming Due in the Next 10 Years

- Capital plan addresses backlog at the SENG and LARTS buildings without additional debt issuance due to significant state investment

By Package

Building Package	Project Cost (\$ millions)
Building Systems	190.3
Space Improvement	124.3
Safety/Code	114.5
Infrastructure	113.0
Building Envelope	107.2
Total	649.2

By System

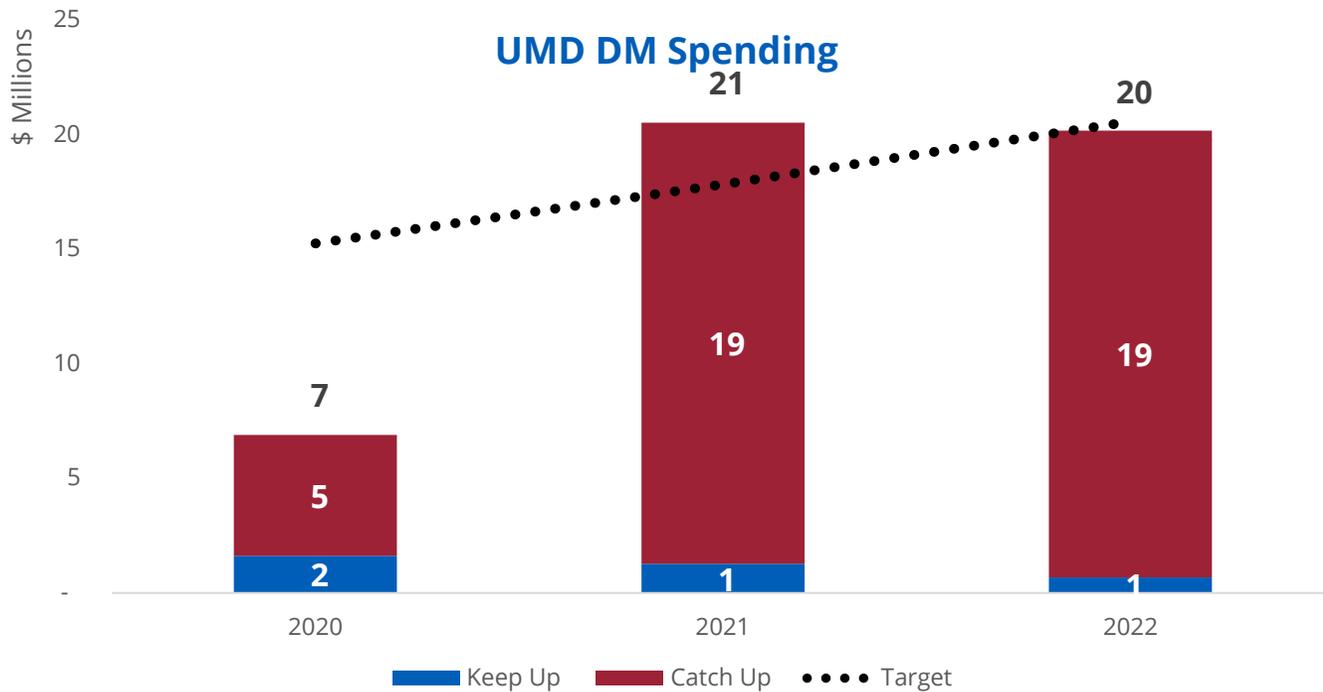
Building System	Project Cost (\$ millions)
Interior Shell	166.9
Exterior Shell	98.4
HVAC	92.1
Grounds	88.7
Safety/Code	83.2
Plumbing	59.1
Heating	32.3
Electrical	16.7
Cooling	7.6
Mechanical	4.1
Total	649.2

Top 10 Building Needs

Building	Project Cost (\$ millions)
Campus Grounds/infrastructure	100.1
Science and Engineering - Group II	83.5
Liberal Arts- Group 1	71.2
Tripp Athletic Center	46.2
Dion Science and Engineering	25.3
Central Utility Plant	22.3
Oak Glen Hall	20.7
Center for Visual and Performing Arts -Group VI	19.5
Ring Road	17.5
Foster Administration	15.7
Total	422.1

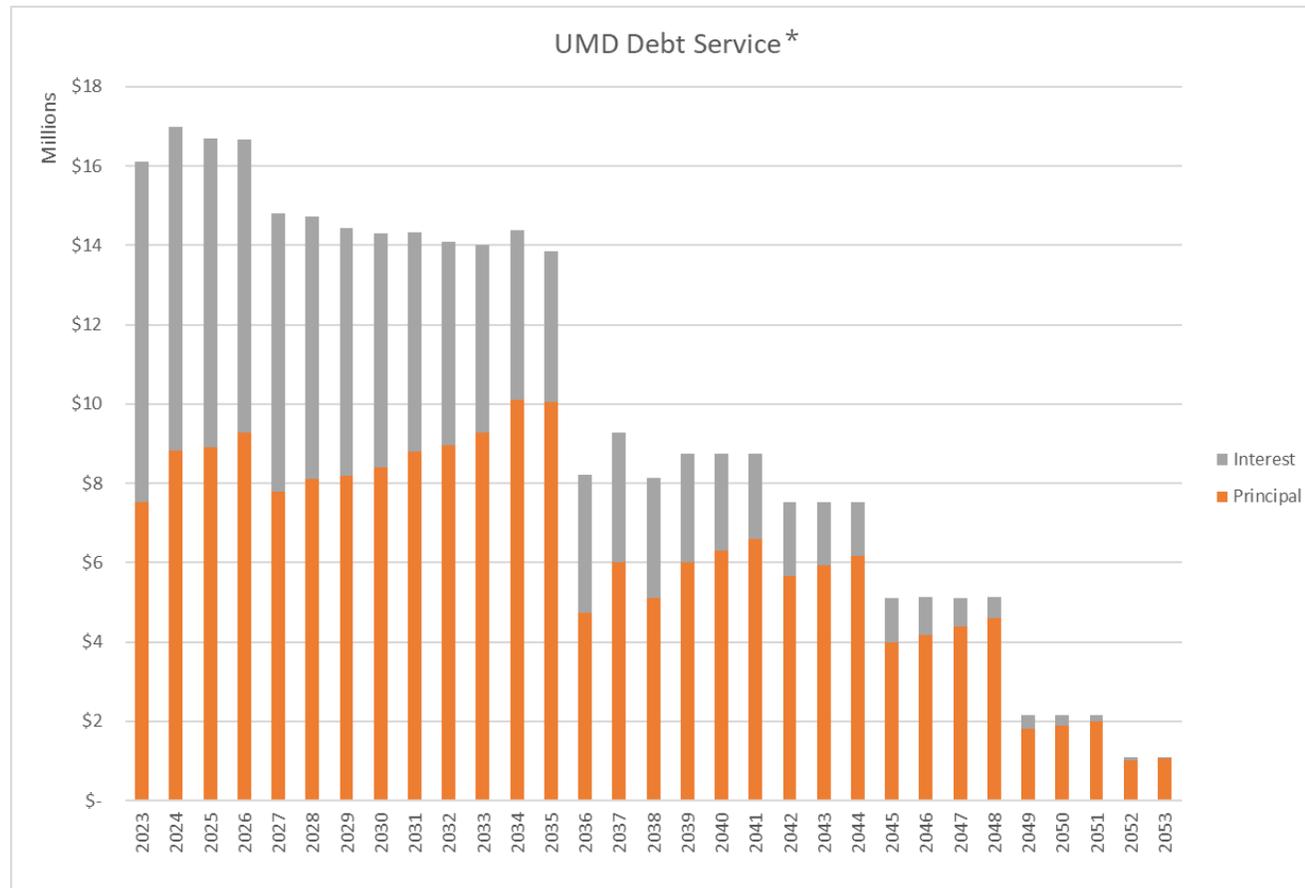
Dartmouth: Deferred Maintenance Dashboard (v1.0)- Annual Investment

<u>FY22 Keep Up</u> \$684 k	<u>FY22 Keep Up</u> \$20.6 M	<u>FY22 % Target</u> 3.3%
<u>FY22 Catch Up</u> \$19.5 M	<u>FY22 Catch Up</u> TBD	<u>FY22 % Target</u> N/A



Dartmouth: Deferred Maintenance - Annual Investment

<i>\$ in thousands</i>	FY24	FY25	FY26	FY27	FY28
Keep Up					
Depreciation	20,580	19,986	19,602	18,939	17,794
Principal Payment	8,834	8,896	9,277	7,801	8,101
Available for Keep Up	11,746	11,090	10,325	10,588	9,693
Keep Up Target	20,536	21,249	21,735	22,207	22,506
Planned Keep Up Spend	2,200	2,300	4,255	4,325	4,850
Catch Up					
Catch Up Target (15 yrs)	43,280	43,280	43,280	43,280	43,280
Planned Catch Up Spend	29,500	47,500	30,000	9,500	-
Debt Service Burden	6.0%	6.0%	5.6%	4.8%	4.7%



Key Ratio

	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service Burden (%)	7.6%	7.8%	7.7%	4.1%	5.8%	5.9%	5.6%	6.0%	6.0%	5.6%	4.8%	4.7%
Debt Service Coverage (x)	1.3	1.6	1.5	3.1	2.1	1.8	2.0	2.0	2.2	2.1	2.3	2.2
Financial Leverage (x)	0.45	0.29	0.31	0.42	0.51	0.40	0.18	0.46	0.49	0.53	0.57	0.61
Total Debt (\$ in thousands)	205,513	351,883	338,643	346,740	342,167	338,643	315,110	305,301	295,155	284,332	274,666	264,420

Lowell



Lowell: Overview

Revenue & Expenses:

<u>FY23 Budget:</u>	<u>AAGR:</u>	<u>Rev</u>	<u>Exp</u>
	FY24-28: 4.5%	4.1%	
Total: \$529.2M	FY21-23: 3.5%	3.4%	
	FY18-20: 3.0%	4.1%	

Operating Margin:

<u>FY23 Budget:</u>	<u>Average:</u>	
0.0%	FY24-28: 1.9%	
	FY21-23: 1.3%	
	FY18-20: 0.7%	

Enrollment:

<u>FY23 Actual:</u>	<u>AAGR:</u>	
	FY24-28: 1.4%	
FTEs: 13,925	FY21-23: -2.0%	
	FY18-20: 1.3%	

Employees:

<u>FY23 Budget:</u>	<u>AAGR:</u>	
	FY24-28: 0.9%	
Total: 1,986	FY21-23: 0.1%	
	FY18-20: 1.9%	



Tuition Annual Increases:

- Undergraduate: 2.5%
- Graduate: 2.5%

Auxiliary Annual Increases:

- Housing: 2.5%
- Dining: 3.0%



~92% Occupancy

- 4,600 available beds
- 4,232 forecasted



Deferred Maintenance:

\$203 million FY22-26 capital plan

\$854.9 million deferred maintenance

- (39% of replacement value FY21 (24% University))

Capital:

- \$72M in new borrowing planned in FY26
 - Olney & Weed Hall & Ball Hall

Lowell: Revenue & Expenses Trend

(\$ in Thousands)

Revenues	Actual					Budget	Q1 Projection	Forecast					% Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022		FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Gross Tuition & Fees	256,002	259,130	263,115	267,559	254,039	254,039	255,782	263,193	273,856	284,024	291,081	298,315	13.3%	3.3%
Tuition Discounts	(61,218)	(65,369)	(67,631)	(61,850)	(66,040)	(67,000)	(67,000)	(68,169)	(70,177)	(72,089)	(73,374)	(74,697)	9.6%	2.2%
Discount Rate	23.9%	25.2%	25.7%	23.1%	26.0%	26.4%	26.2%	25.9%	25.6%	25.4%	25.2%	25.0%	-3.3%	-1.0%
Net Tuition & Fees	194,784	193,761	195,484	205,709	187,999	187,039	188,782	195,024	203,679	211,935	217,707	223,618	14.7%	3.6%
Grants	44,875	53,613	57,639	66,027	80,543	82,446	86,081	92,861	100,737	106,935	113,204	118,767	27.9%	7.6%
Sales & Service, Educational	925	1,436	1,481	2,224	2,474	2,223	2,768	3,356	3,691	4,060	4,466	4,913	46.4%	18.2%
Auxiliary Enterprises	65,030	68,923	55,461	14,473	57,875	68,024	61,718	68,257	70,169	72,075	75,057	78,329	14.8%	2.9%
Other Operating	7,438	8,129	6,629	5,023	6,322	4,915	5,642	6,342	5,504	5,786	6,087	6,339	0.0%	6.1%
State Appropriations	117,668	122,802	127,688	133,768	140,053	152,134	163,606	157,945	165,144	171,725	179,381	187,299	18.6%	4.2%
Other NonOperating	28,322	36,106	35,738	47,702	58,424	32,377	33,015	37,163	38,582	38,477	39,451	39,723	6.9%	4.3%
Total Revenues	459,042	484,770	480,120	474,927	533,690	529,157	541,612	560,949	587,506	610,993	635,353	658,989	17.5%	4.5%
% Growth	4.4%	5.6%	-1.0%	-1.1%	12.4%	-0.8%	1.5%	6.0%	4.7%	4.0%	4.0%	3.7%		
Expenses														
Salaries & Fringe	262,133	274,695	284,516	275,253	295,290	300,745	310,422	324,338	336,146	359,499	371,424	383,298	18.2%	5.0%
Non-personnel	121,734	128,938	123,928	107,933	132,945	135,508	131,874	132,213	142,014	137,915	146,822	158,567	19.9%	3.3%
Scholarships & Fellowships	9,983	9,641	11,439	14,024	24,612	14,081	16,153	18,238	19,672	20,930	22,241	22,541	23.6%	10.3%
Depreciation	37,806	42,147	44,482	47,873	59,075	58,522	58,902	57,260	55,339	56,905	59,212	59,057	3.1%	0.2%
Interest	19,896	21,231	18,879	18,800	21,536	20,301	20,329	20,485	22,587	23,517	22,942	22,343	9.1%	2.0%
Total Expenses	451,552	476,652	483,244	463,883	533,458	529,157	537,680	552,534	575,758	598,766	622,641	645,806	16.9%	4.1%
% Growth	5.4%	5.6%	1.4%	-4.0%	15.0%	-0.8%	0.8%	4.4%	4.2%	4.0%	4.0%	3.7%		
Operating Margin														
UMass OM Calc Revenues	458,337	482,786	480,544	477,589	538,248	529,157	541,612	560,949	587,506	610,993	635,353	658,989		
Total Expenses	451,552	476,652	483,244	463,883	533,458	529,157	537,680	552,534	575,758	598,766	622,641	645,806		
Surplus / (Deficit)	6,785	6,134	(2,700)	13,706	4,790	0	3,933	8,414	11,748	12,227	12,711	13,182		
UMass OM Calc	1.5%	1.3%	-0.6%	2.9%	0.9%	0.0%	0.7%	1.5%	2.0%	2.0%	2.0%	2.0%		

Lowell: Enrollment Trend

<u>AAGR:</u>	<u>Total:</u>	<u>Undergraduate:</u>	<u>Graduate:</u>	<u>CE:</u>
FY24-28:	1.4	1.8	1.0	0.8
FY21-23:	-2.0	-4.8	9.2	13.6
FY18-20:	1.3	2.4	-0.9	1.4

<u>Students (FTEs)</u>	<u>Actual</u>					<u>Budget</u>	<u>Actual</u>	<u>Forecast</u>				
	<u>FY2018</u>	<u>FY2019</u>	<u>FY2020</u>	<u>FY2021</u>	<u>FY2022</u>	<u>FY2023</u>		<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>FY2028</u>
Undergraduate	10,488	10,767	10,995	10,739	10,010	9,405	9,469	9,573	9,887	10,154	10,239	10,325
% Change		2.7%	2.1%	-2.3%	-6.8%	-6.0%	-5.4%	1.1%	3.3%	2.7%	0.8%	0.8%
Graduate	2,692	2,674	2,642	2,942	3,292	3,480	3,432	3,466	3,501	3,536	3,571	3,607
% Change		-0.7%	-1.2%	11.4%	11.9%	5.7%	4.2%	1.0%	1.0%	1.0%	1.0%	1.0%
Continuing Ed	1,243	1,160	1,152	1,173	1,019	1,034	1,024	1,024	1,024	1,024	1,024	1,024
% Change		-6.6%	-0.7%	1.8%	-13.1%	1.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	14,423	14,601	14,788	14,855	14,321	13,919	13,925	14,063	14,412	14,714	14,834	14,956
% Change		1.2%	1.3%	0.4%	-3.6%	-2.8%	-2.8%	1.0%	2.5%	2.1%	0.8%	0.8%

Source: Actuals from student profile.

Lowell: Enrollment by Residency

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	11,501	11,835	12,127	12,170	11,554	11,138	11,004	11,115	11,411	11,666	11,760	11,856
% Change		2.9%	2.5%	0.4%	-5.1%	-3.6%	-4.8%	1.0%	2.7%	2.2%	0.8%	0.8%
Out of State	1,612	1,583	1,573	1,648	1,660	1,656	1,637	1,651	1,684	1,714	1,727	1,740
% Change		-1.8%	-0.6%	4.7%	0.8%	-0.3%	-1.4%	0.9%	2.0%	1.7%	0.8%	0.8%
International	1,310	1,183	1,088	1,037	1,107	1,125	1,284	1,297	1,316	1,334	1,347	1,360
% Change		-9.7%	-8.0%	-4.7%	6.8%	1.7%	16.1%	1.0%	1.5%	1.3%	1.0%	1.0%
Total	14,423	14,601	14,788	14,855	14,321	13,919	13,925	14,063	14,412	14,714	14,834	14,956
% Change		1.2%	1.3%	0.4%	-3.6%	-2.8%	-2.8%	1.0%	2.5%	2.1%	0.8%	0.8%

Source: Actuals from student profile.

Lowell: Enrollment by New v Continuing

Undergraduate Enrollment (FTEs)	Actual					Budget	Actual	Forecast					
	FY2018	FY2019	FY2020	FY2021	FY2022		FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	
New	2,884	3,029	3,223	2,845	2,515		2,413	2,502	2,579	2,716	2,804	2,893	2,981
% Change	7.9%	5.0%	6.4%	-11.7%	-11.6%		-4.1%	-0.5%	3.1%	5.3%	3.2%	3.2%	3.0%
Continuing	7,604	7,738	7,772	7,894	7,495		6,992	6,966	6,994	7,171	7,350	7,346	7,344
% Change	7.6%	1.8%	0.4%	1.6%	-5.1%		-6.7%	-7.0%	0.4%	2.5%	2.5%	-0.1%	0.0%
Undergraduate Total	10,488	10,767	10,995	10,739	10,010		9,405	9,469	9,573	9,887	10,154	10,239	10,325
% Change	7.7%	2.7%	2.1%	-2.3%	-6.8%		-6.0%	-5.4%	1.1%	3.3%	2.7%	0.8%	0.8%

Source: Actuals from student profile.

Lowell: Online Only

Career	Actual					Budget	Actual	Forecast				
	Students (FTEs)	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Undergraduate	131	121	120	171	330	317	289	292	302	310	312	315
% Change		-7.5%	-1.1%	42.5%	93.1%	-3.9%	-12.5%	1.1%	3.3%	2.7%	0.8%	0.8%
Graduate	856	938	949	1,208	1,605	1,657	1,588	1,603	1,619	1,636	1,652	1,668
% Change		9.6%	1.2%	27.3%	32.8%	3.2%	-1.1%	1.0%	1.0%	1.0%	1.0%	1.0%
Continuing Ed	903	878	873	976	911	926	935	935	935	935	935	935
% Change		-2.7%	-0.6%	11.8%	-6.7%	1.6%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	1,890	1,937	1,942	2,356	2,846	2,900	2,811	2,830	2,856	2,880	2,899	2,918
% Change		2.5%	0.2%	21.3%	20.8%	1.9%	-1.2%	0.7%	0.9%	0.9%	0.7%	0.7%

Residency	Actual					Budget	Actual	Forecast				
	Students (FTEs)	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
In State	1,200	1,235	1,254	1,493	1,794	1,828	1,821	1,832	1,849	1,866	1,877	1,888
% Change		2.9%	1.5%	19.1%	20.1%	1.9%	1.5%	0.6%	0.9%	0.9%	0.6%	0.6%
Out of State	543	541	521	614	685	698	629	633	638	642	646	651
% Change		-0.5%	-3.6%	17.9%	11.4%	1.9%	-8.1%	0.7%	0.7%	0.7%	0.7%	0.7%
International	147	162	167	248	367	374	362	365	369	372	376	380
% Change		10.1%	3.3%	48.1%	48.2%	2.0%	-1.5%	1.0%	1.0%	1.0%	1.0%	1.0%
Total	1,890	1,937	1,942	2,356	2,846	2,900	2,811	2,830	2,856	2,880	2,899	2,918
% Change		2.5%	0.2%	21.3%	20.8%	1.9%	-1.2%	0.7%	0.9%	0.9%	0.7%	0.7%

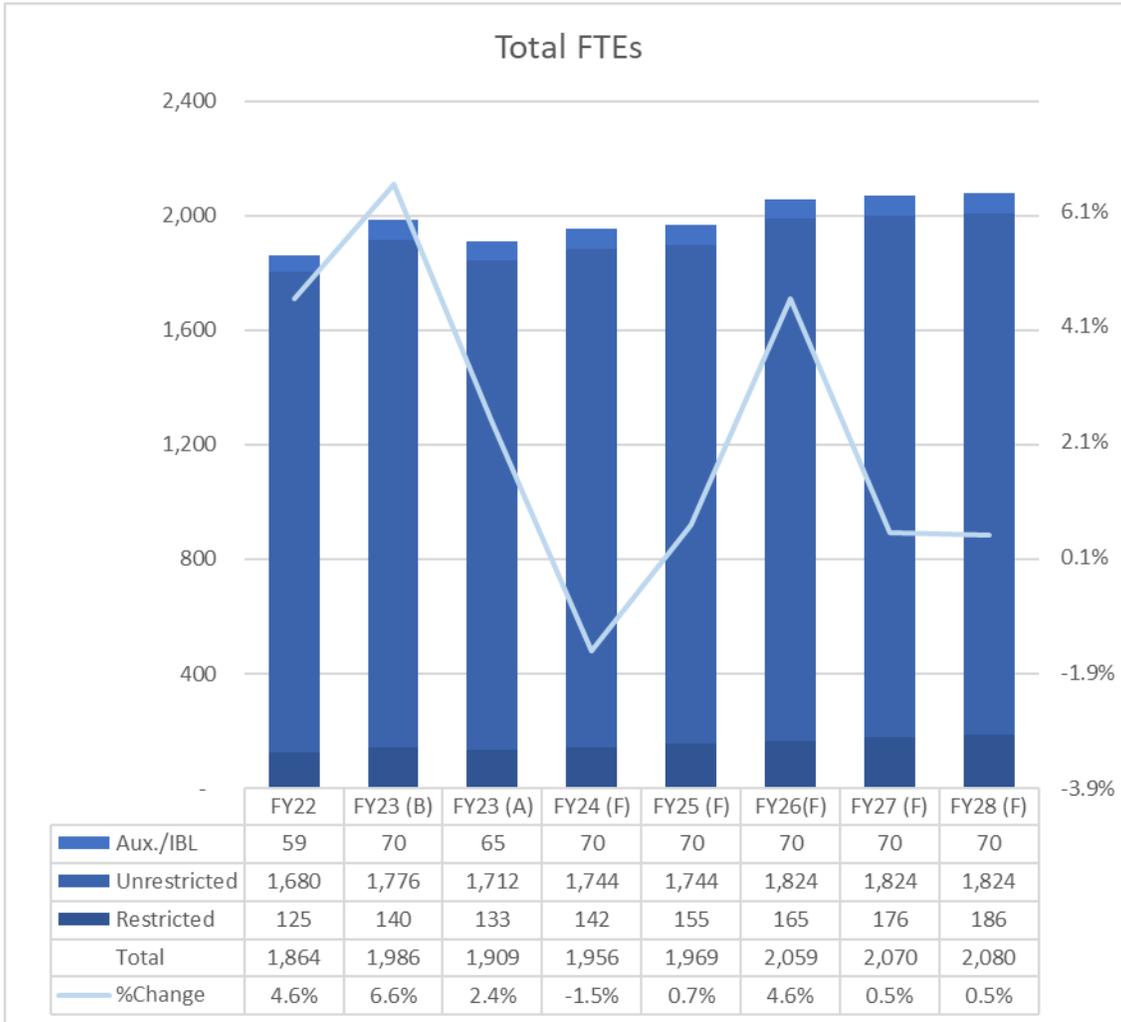
Source: Actuals from student profile.

Lowell: Staffing

Employee FTEs	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022		FY2023	FY2024	FY2025	FY2026	FY2027	FY2028
Restricted												
Faculty	7	8	15	16	17	16	16	12	13	14	15	16
Staff	74	82	88	98	108	124	117	130	142	151	161	170
Total Restricted	81	91	102	114	125	140	133	142	155	165	176	186
# Change		9	11	12	11	15	8	2	13	10	11	10
% Change		11.4%	12.5%	11.8%	9.6%	12.1%	6.4%	1.4%	9.2%	6.5%	6.7%	5.7%
Unrestricted General University Ops												
Faculty	825	837	839	767	793	801	797	793	793	813	813	813
Staff	979	974	988	841	887	975	914	951	951	1,011	1,011	1,011
Executive/Admin/Managerial	63	70	74	68	69	-	149	-	-	-	-	-
Professional Nonfaculty	658	678	687	576	629	-	537	-	-	-	-	-
Secretarial/Clerical	52	50	51	35	41	-	77	-	-	-	-	-
Technical/Paraprofessional	68	67	67	62	59	-	55	-	-	-	-	-
Skilled Crafts	52	43	43	38	35	-	40	-	-	-	-	-
Service Maintenance Workers	86	65	66	62	54	-	55	-	-	-	-	-
Unspecified												
Total General University Ops	1,804	1,811	1,827	1,608	1,680	1,776	1,712	1,744	1,744	1,824	1,824	1,824
# Change		7	16	(218)	72	96	32	(32)	-	80	-	-
% Change		0.4%	0.9%	-12.0%	4.4%	5.7%	1.9%	-1.8%	0.0%	4.6%	0.0%	0.0%
Unrestricted Aux./Independent Business												
Faculty	-	-	-	-	-	-	-	-	-	-	-	-
Staff	40	75	71	60	59	70	65	70	70	70	70	70
Total Aux./Independent Business	40	75	71	60	59	70	65	70	70	70	70	70
# Change		35	(4)	(11)	(1)	11	6	-	-	-	-	-
% Change		87%	-5%	-15%	-2%	19%	10%	0%	0%	0%	0%	0%
Total Faculty & Staff	1,925	1,976	1,999	1,782	1,864	1,986	1,909	1,956	1,969	2,059	2,070	2,080
# Change		51	23	(217)	81	122	46	(30)	13	90	11	10
% Change		2.7%	1.2%	-10.9%	4.6%	6.6%	2%	-1.5%	0.7%	4.6%	0.5%	0.5%

Lowell: Staffing

Faculty & staff of 1,909 grows on average 0.9% over the forecast period.



Auxiliary / Independent

Business Lines: staff including housing & dining

Unrestricted: faculty & staff that support general university operations

Restricted: faculty & staff funded by grant & endowed funds

FTEs:	65
% of Total FTEs:	3%
Faculty % / Staff %:	0% / 100%
Forecast AAGR:	0.0%

FTEs:	1,712
% of Total FTEs:	90%
Faculty % / Staff %:	47% / 53%
Forecast AAGR:	0.6%

FTEs:	133
% of Total FTEs:	7%
Faculty % / Staff %:	12% / 88%
Forecast AAGR:	5.9%

Lowell: Staffing Ratios

	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Student - Faculty												
Student (FTE)	14,423	14,601	14,788	14,855	14,321	13,919	13,925	14,063	14,412	14,714	14,834	14,956
Faculty (FTE)	832	845	853	783	810	817	813	805	806	827	828	829
Student-Faculty Ratio	17.3	17.3	17.3	19.0	17.7	17.0	17.1	17.5	17.9	17.8	17.9	18.0
Staff - Faculty (All)												
Staff (FTE)	1,093	1,131	1,146	999	1,054	1,169	1,096	1,151	1,163	1,232	1,242	1,251
Faculty (FTE)	832	845	853	783	810	817	813	805	806	827	828	829
Staff-Faculty Ratio	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.4	1.4	1.5	1.5	1.5
Staff - Faculty (E&G)												
Staff (FTE)	979	974	988	841	887	975	914	951	951	1,011	1,011	1,011
Faculty (FTE)	825	837	839	767	793	801	797	793	793	813	813	813
Staff-Faculty Ratio (E&G)	1.2	1.2	1.2	1.1	1.1	1.2	1.1	1.2	1.2	1.2	1.2	1.2

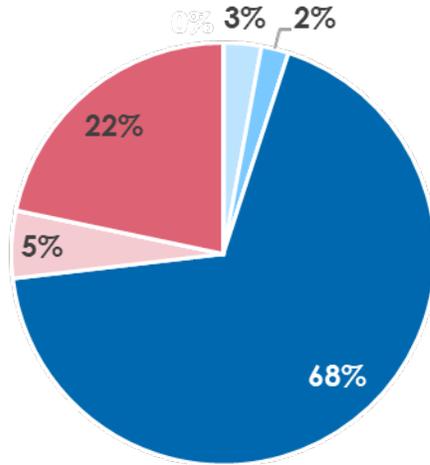
Lowell: Key Ratios

Key Ratio	Actual					Budget Q1 Projection		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Operating Margin (%)	1.5%	1.3%	-0.6%	2.9%	0.9%	0.0%	0.7%	1.5%	2.0%	2.0%	2.0%	2.0%
Operating Margin (\$)	6,785	6,134	(2,700)	13,706	4,790	0	3,933	8,414	11,748	12,227	12,711	13,182
Operating Cash Flow Margin (%)	14.3%	14.7%	13.1%	16.9%	17.0%	15.7%	20.7%	15.3%	15.9%	15.8%	15.5%	15.0%
Operating Cash Flow Margin (\$)	64,009	69,416	61,776	78,130	87,461	81,098	115,475	82,716	90,216	93,186	95,342	95,736
Debt Service Burden (%)	7.4%	7.7%	6.8%	4.9%	6.6%	6.6%	9.0%	7.1%	6.4%	6.8%	6.4%	6.0%
Debt Service Coverage (x)	1.9	1.9	1.9	3.4	2.5	2.3	2.4	2.1	2.5	2.3	2.4	2.5
Financial Leverage (x)	0.37	0.36	0.38	0.52	0.45	0.62	0.58	0.60	0.56	0.56	0.58	0.60
Total Debt (\$ in thousands)	500,656	556,087	552,657	557,367	642,343	489,943	497,706	486,244	515,070	516,537	500,255	483,105
Total Cash & Investments to Op Expenses (x)	184,293	197,616	209,322	290,584	290,572	302,746	290,189	290,189	290,189	290,189	290,189	290,190
Enrollment	14,423	14,601	14,788	14,855	14,321	13,919	13,925	14,063	14,412	14,714	14,834	14,956
Enrollment (% Change)	3.7%	1.2%	1.3%	0.4%	-3.6%	-2.8%	-2.8%	1.0%	2.5%	2.1%	0.8%	0.8%

Lowell: 15 Projects; \$203M; 11% of Capital Plan

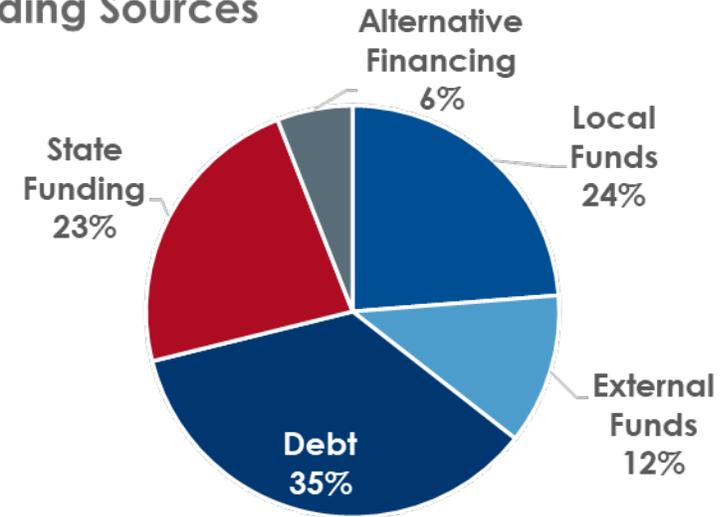
22% of Projects in Construction or Substantial Completion

Projects by Phase

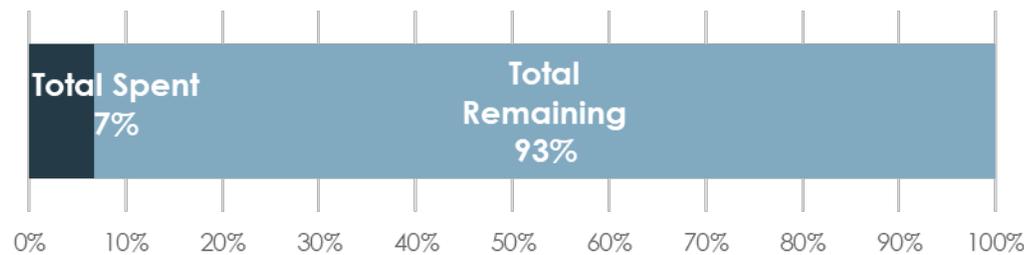


- 1 - Conceptual
- 2 - Feasibility Report
- 3 - OPM/Designer Procurement
- 4 - Study/Schematic Design
- 5 - Design
- 6 - Final Design/Early Constr. Pkgs.
- 7 - Construction
- 8 - Substantial Completion

Funding Sources



Project Spending



Lowell Projects: Board & President

Traditional Projects				
Project	Adjusted Cost (\$)	Project Phase	Status	
Ball Hall Comprehensive Renewal Phase I	30,000,000	4 - Study / Schematic Design	Authorized	
Olney Project A - Instructional Modernization	75,000,000	4 - Study / Schematic Design	Authorized	
Weed Hall Renewal Phase I	25,000,000	4 - Study / Schematic Design	Authorized	
Critical Repair - Olsen Strategic Renovations, Repairs and Replacements	22,745,756	7 - Construction	Approved	
Total	152,745,756			

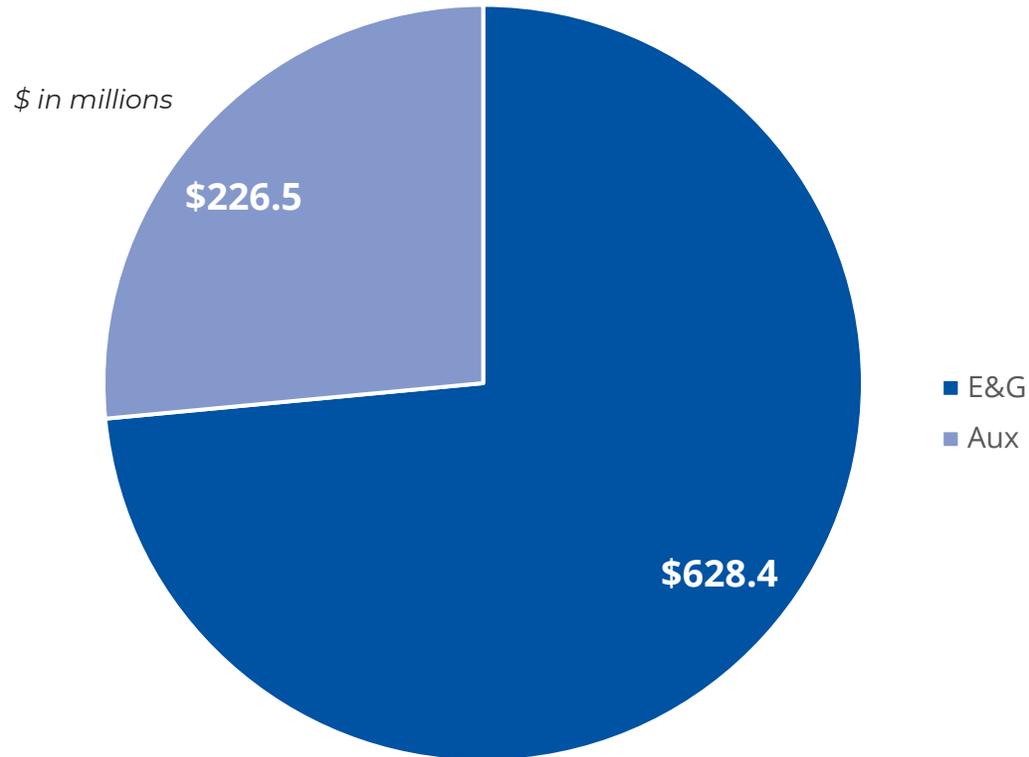
Alternative Finance & Delivery Projects	
Project	Adjusted Cost (\$)
Tsongas Center Annex	12,000,000
Total	12,000,000

President Projects				
Project	Adjusted Cost (\$)	Project Phase	Status	
South Campus Electrical & Steam Infrastructure	5,500,000	1 - Conceptual	Authorized	
Costello D1 Improvements Phase 2 - Fill & Repurpose Pool Area	4,000,000	2 - Feasibility Report	Authorized	
Dugan - Art & Design 3D Studio Renovation	3,000,000	5 - Design	Approved	
Durgin Concert Hall	2,000,000	5 - Design	Approved	
Olney Laser Lab	2,200,000	5 - Design	Approved	
Riverhawk Village Centralize Water Heaters	2,650,000	5 - Design	Approved	
Critical Repair Tsongas HVAC	9,500,000	7 - Construction	Approved	
Pinanski Radiation Physics Lab	2,000,000	7 - Construction	Approved	
Southwick Lowell Advanced Robotics Initiative (LARI), Math & Chem E	7,125,000	7 - Construction	Approved	
Total	37,975,000			

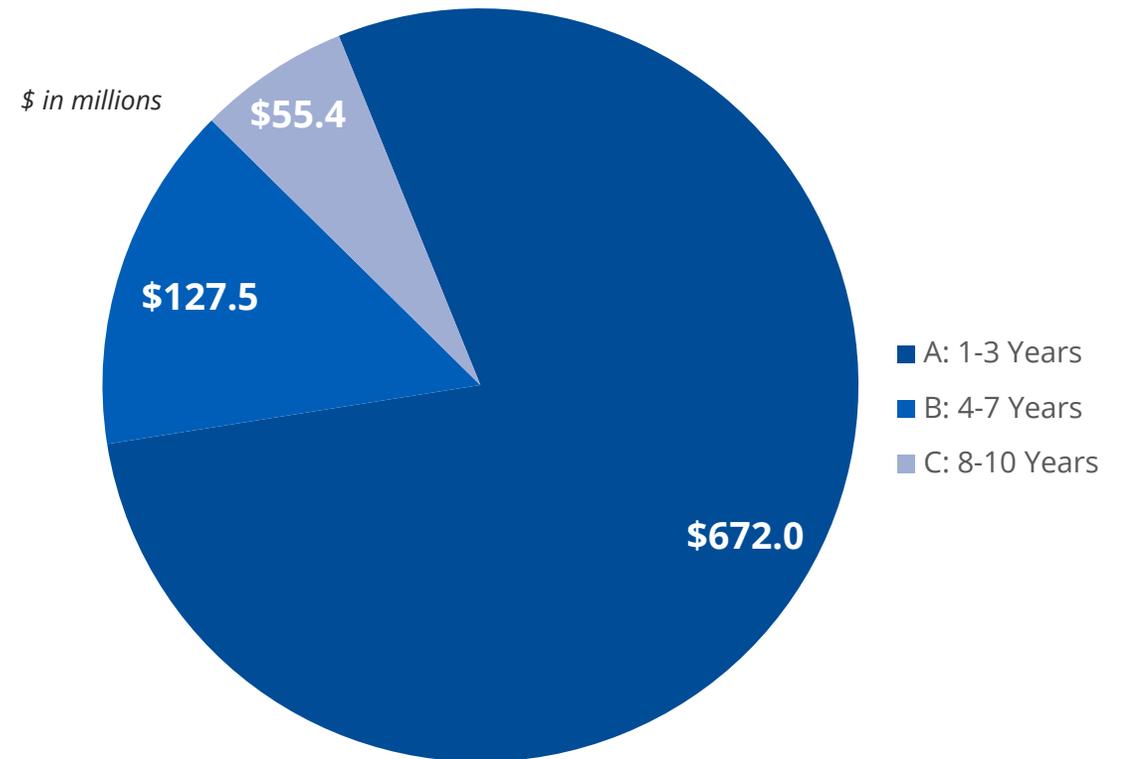
Lowell: Deferred Maintenance

\$854.9 Million Backlog Coming Due in the Next 10 Years

\$854.9M: E&G vs. AUX



\$854.9M: By Timeframe



Lowell: Deferred Maintenance

\$854.9 Million Backlog Coming Due in the Next 10 Years

By Package

Building Package	Project Cost (\$ millions)
Building Systems	411.4
Space Improvement	196.4
Building Envelope	118.4
Infrastructure	68.1
Safety/Code	60.5
Total	854.9

By System

Building System	Project Cost (\$ millions)
Interior Shell	190.9
Plumbing	153.0
Exterior Shell	120.0
HVAC	119.5
Electrical	95.9
Safety/Code	58.9
Heating	42.1
Grounds	40.8
Cooling	22.9
Mechanical	11.0
Total	854.9

Top 10 Building Needs

Building	Project Cost (\$ millions)
Olney	124.7
Ball Hall	75.0
Fox Hall	69.5
Olsen	47.7
Campus	41.8
Tsongas Center	29.4
Weed Hall	26.5
Costello Gymnasium	26.5
River Hawk Village	25.7
Concordia	25.5
Total	492.3

Lowell: Deferred Maintenance Dashboard (v1.0)- Annual Investment

FY22 Keep Up
\$6.4 M

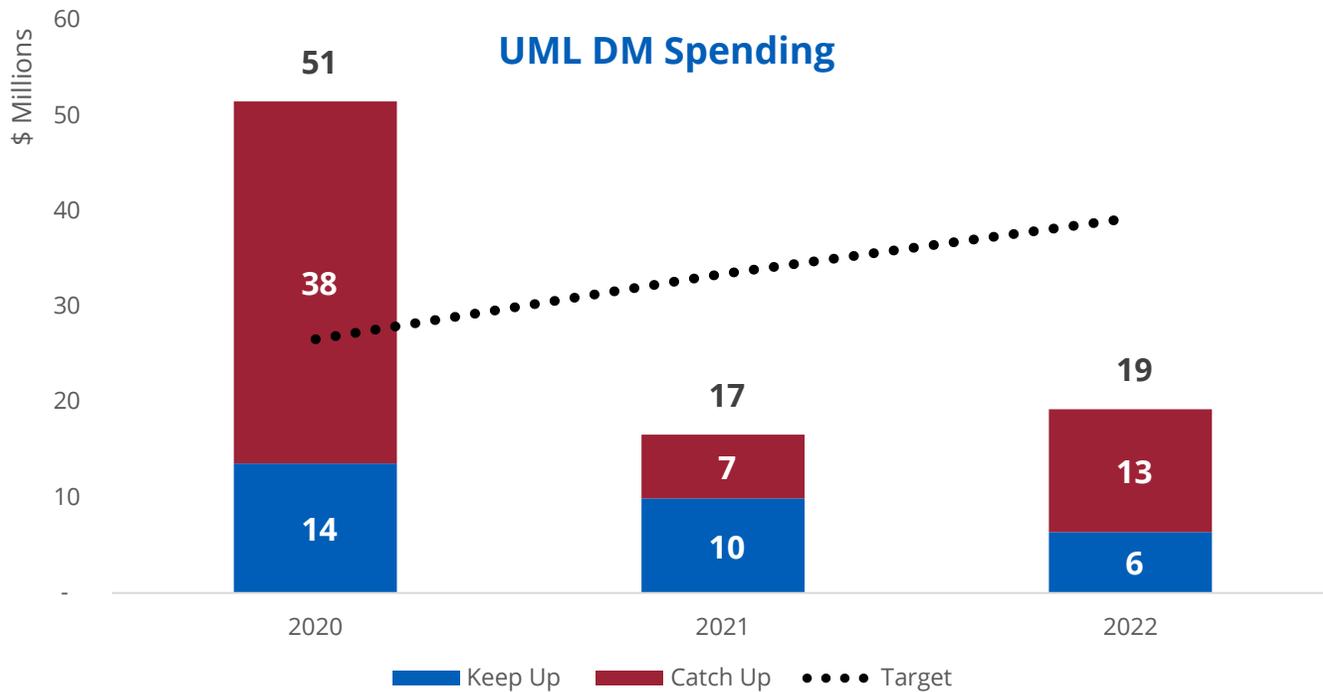
FY22 Keep Up
\$39.3 M

FY22 % Target
16.3%

FY22 Catch Up
\$12.9 M

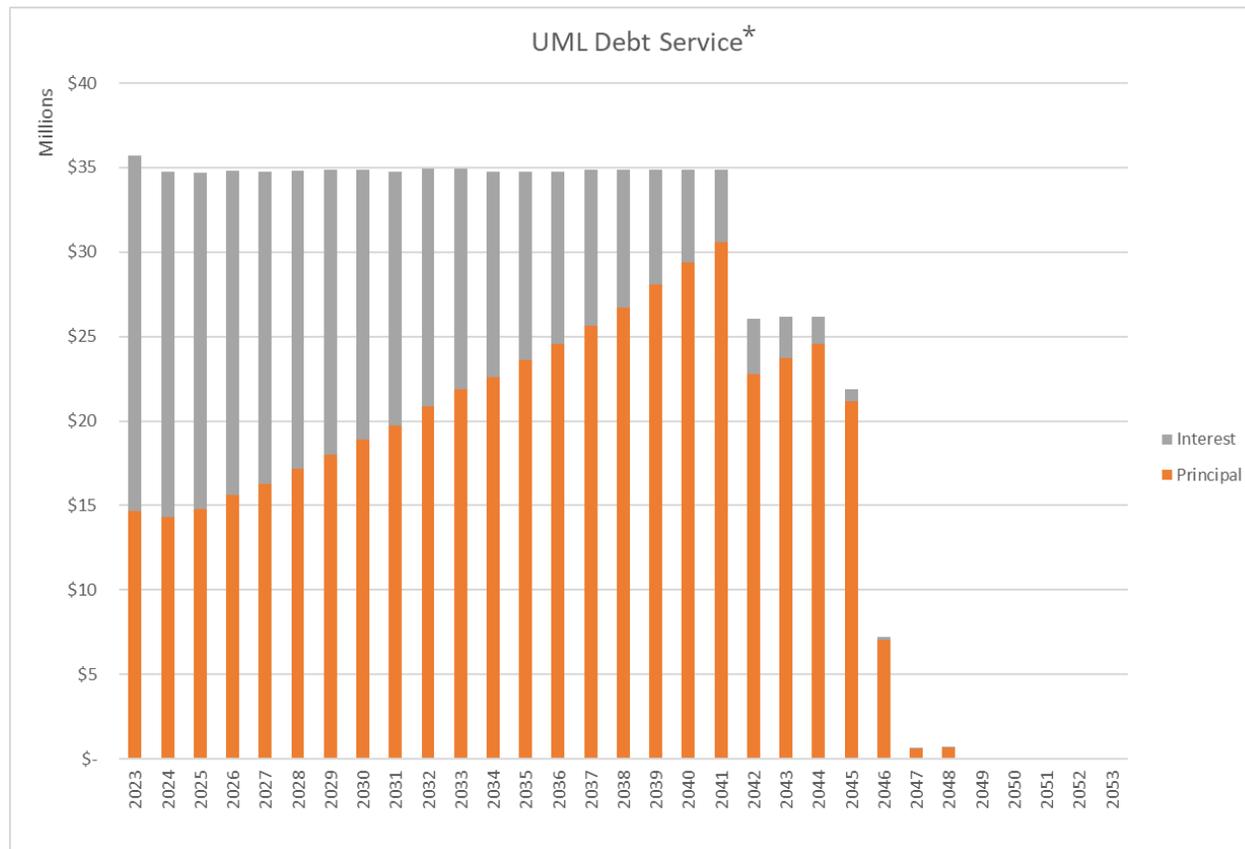
FY22 Catch Up
TBD

FY22 % Target
N/A



Lowell: Deferred Maintenance - Annual Investment

<i>\$ in thousands</i>	FY24	FY25	FY26	FY27	FY28
Keep Up					
Depreciation	57,260	55,339	56,905	59,212	59,057
Principal Payment	14,287	14,802	15,617	16,282	17,150
Available for Keep Up	42,973	40,537	41,288	42,930	41,907
Keep Up Target	41,138	42,230	43,402	44,704	45,958
Planned Keep Up Spend	27,000	30,000	45,000	46,000	50,000
Catch Up					
Catch Up Target (15 yrs)	56,992	56,992	56,992	56,992	56,992
Planned Catch Up Spend	30,000	71,000	31,000	35,000	35,000
Debt Service Burden	7.1%	6.4%	6.8%	6.4%	6.0%



Key Ratio	Actual					Budget Q1 Projection		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service Burden (%)	7.4%	7.7%	6.8%	4.9%	6.6%	6.6%	9.0%	7.1%	6.4%	6.8%	6.4%	6.0%
Debt Service Coverage (x)	1.9	1.9	1.9	3.4	2.5	2.2	2.4	2.1	2.5	2.3	2.4	2.5
Financial Leverage (x)	0.37	0.36	0.38	0.52	0.45	0.62	0.58	0.60	0.56	0.56	0.58	0.60
Total Debt (\$ in thousands)	500,656	556,087	552,657	557,367	642,343	489,943	497,706	486,244	515,070	516,537	500,255	483,105

Chan Medical School



Chan Medical School FY24-28 Forecast: By the Numbers

Revenue & Expenses:



FY23 Budget:	AAGR:	Rev	Exp
Total: \$986.8M	FY24-28: 5.5%	5.6%	
	FY21-23: 2.4%	2.7%	
	FY18-20: -2.4%	-1.7%	



Tuition Annual Increases:

- All Rates: 2.5%

Salary Annual Increases:

- 2.5% consistent with all campuses

Operating Margin:

FY23 Budget:	Average:
2.0%	FY24-28: 2.0%
	FY21-23: 2.3%
	FY18-20: 2.9%



Independent Business Lines:

No restructuring to MassBiologics or Commonwealth Medicine

Enrollment:

FY23 Actual:	AAGR:
FTEs: 1,301	FY24-28: 2.7%
	FY21-23: 2.9%
	FY18-20: 3.8%



Employees:

FY23 Budget:	AAGR:
Total: 3,812	FY24-28: 3.7%
	FY21-23: 1.2%
	FY18-20: 1.4%



Capital and Deferred Maintenance:

No new borrowing/reserves

\$503 million FY22-26 capital plan

\$660 million deferred maintenance

- (13% of replacement value FY21 (24% University))

Chan Medical School: Revenue & Expenses

(\$ in Thousands)

Revenues	Actual					Budget	Q1 Projection	Forecast					% Change FY24-28		
	FY2018	FY2019	FY2020	FY2021	FY2022		FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Annual	
Gross Tuition & Fees	28,609	34,681	37,769	38,823	39,826		42,071	42,890	47,076	50,747	55,380	60,212	63,485	34.9%	8.6%
Tuition Discounts	(3,320)	(4,235)	(5,139)	(4,204)	(4,664)		(6,409)	(7,051)	(7,877)	(8,491)	(9,267)	(10,075)	(10,623)	34.9%	10.8%
Discount Rate	11.6%	12.2%	13.6%	29.2%	11.7%		15.2%	16.4%	16.7%	16.7%	16.7%	16.7%	16.7%	0.0%	2.0%
Net Tuition & Fees	25,289	30,446	32,630	34,619	35,162		35,662	35,839	39,199	42,256	46,113	50,137	52,862	34.9%	8.2%
Grants	269,721	286,603	280,279	348,461	355,915		329,031	331,031	385,528	425,125	466,384	490,591	516,986	34.1%	9.5%
Sales & Service, Educational	14,023	15,023	17,190	17,574	26,781		21,692	23,448	24,034	24,635	25,251	25,882	26,529	10.4%	4.2%
Auxiliary Enterprises	30,797	31,561	32,675	31,249	36,301		39,850	40,544	43,937	45,004	46,098	47,220	48,370	10.1%	4.0%
Other Operating	268,909	183,268	194,723	166,678	221,582		179,470	209,205	198,491	204,599	205,566	206,174	206,377	4.0%	2.9%
State Appropriations	54,560	57,959	57,396	57,686	60,392		59,297	66,737	64,898	67,127	69,417	71,767	74,180	14.3%	4.6%
Other NonOperating	27,800	32,008	26,059	23,793	29,229		32,602	35,913	38,634	40,348	40,716	43,345	45,923	18.9%	7.3%
Independent Business Lines	274,555	266,509	280,620	311,262	251,782		289,220	288,067	299,164	294,007	300,298	307,838	315,533	5.5%	1.8%
Total Revenues	965,654	903,377	921,572	991,322	1,017,143		986,824	1,030,784	1,093,885	1,143,101	1,199,843	1,242,954	1,286,760	17.6%	5.5%
% Growth	-2.7%	-6.4%	2.0%	7.6%	2.6%		-3.0%	1.3%	10.8%	4.5%	5.0%	3.6%	3.5%		
Expenses															
Salaries & Fringe	416,112	433,752	438,008	431,173	503,785		522,583	548,470	580,206	604,613	637,146	662,671	689,778	18.9%	5.7%
Non-personnel	435,266	343,729	369,200	451,230	414,033		335,078	356,891	380,543	396,133	417,272	432,553	447,375	17.6%	6.0%
Scholarships & Fellowships	-	-	-	-	-		-	-	-	-	-	-	-		
Depreciation	65,013	64,722	65,478	67,213	66,226		68,380	69,794	77,269	86,792	89,329	91,867	94,305	22.0%	6.7%
Interest	26,753	24,830	19,256	18,108	23,632		34,835	35,207	32,407	31,359	30,428	29,373	28,225	-12.9%	-4.1%
Total Expenses	943,144	867,033	891,942	967,724	1,007,677		960,876	1,010,362	1,070,425	1,118,897	1,174,175	1,216,464	1,259,683	17.7%	5.6%
% Growth	0.1%	-8.1%	2.9%	8.5%	4.1%		-4.6%	0.3%	11.4%	4.5%	4.9%	3.6%	3.6%		
Operating Margin															
UMass OM Calc Revenues	964,299	898,882	919,648	995,455	1,029,573		980,427	1,030,784	1,091,736	1,141,176	1,198,019	1,241,114	1,284,880		
Total Expenses	943,144	867,033	891,942	967,724	1,007,677		960,876	1,010,362	1,070,425	1,118,897	1,174,175	1,216,464	1,259,683		
Surplus / (Deficit)	21,155	31,849	27,706	27,731	21,896		19,551	20,422	21,311	22,279	23,844	24,650	25,197		
UMass OM Calc	2.2%	3.5%	3.0%	2.8%	2.1%		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		

Commonwealth Medicine: Revenue & Expenses

(\$ in Thousands)

Revenues	Actual	Budget	Q1 Projection	Forecast					% Change FY24-28	
	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Annual
Total Revenues	199,651	205,950	207,684	213,139	218,510	224,029	229,670	235,369	10.4%	2.7%
% Growth		3.2%	4.0%	3.5%	2.5%	2.5%	2.5%	2.5%		
Expenses										
Total Expenses	185,075	195,183	196,682	201,598	206,638	211,804	217,098	222,527	10.4%	2.7%
% Growth		5.5%	6.3%	3.3%	2.5%	2.5%	2.5%	2.5%		
Operating Margin										
UMass OM Calc Revenues	199,651	205,950	207,684	213,139	218,510	224,029	229,670	235,369		
Total Expenses	185,075	195,183	196,682	201,598	206,638	211,804	217,098	222,527		
Surplus / (Deficit)	14,576	10,767	11,002	11,541	11,872	12,225	12,572	12,842		
UMass OM Calc	7.3%	5.2%	5.3%	5.4%	5.4%	5.5%	5.5%	5.5%		

MassBiologics: Revenue & Expenses

(\$ in Thousands)

Revenues	Actual	Budget	Q1 Projection	Forecast					% Change FY24-28	
	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Annual
Total Revenues	61,240	63,327	62,445	61,646	58,138	58,899	60,438	61,985	0.5%	-0.4%
% Growth		3.4%	2.0%	-2.7%	-5.7%	1.3%	2.6%	2.6%		
Expenses										
Total Expenses	70,369	76,327	69,862	68,555	58,021	58,771	60,280	61,797	-9.9%	-3.8%
% Growth		8.5%	-0.7%	-10.2%	-15.4%	1.3%	2.6%	2.5%		
Operating Margin										
UMass OM Calc Revenues	61,240	63,327	62,445	61,646	58,138	58,899	60,438	61,985		
Total Expenses	70,369	76,327	69,862	68,555	58,021	58,771	60,280	61,797		
Surplus / (Deficit)	(9,129)	(13,000)	(7,417)	(6,909)	117	128	158	188		
UMass OM Calc		-20.5%	-11.9%	-11.2%	0.2%	0.2%	0.3%	0.3%		

Chan Medical School: Enrollment by Career

<u>AAGR:</u>	<u>Total:</u>
FY24-28:	2.7
FY21-23:	2.9
FY18-20:	3.8

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Graduate	1,074	1,153	1,195	1,242	1,246	1,257	1,301	1,325	1,363	1,413	1,463	1,488
% Change		7.3%	3.7%	3.9%	0.3%	0.9%	4.4%	1.8%	2.9%	3.7%	3.5%	1.7%
Total	1,074	1,153	1,195	1,242	1,246	1,257	1,301	1,325	1,363	1,413	1,463	1,488
% Change		7.3%	3.7%	3.9%	0.3%	0.9%	4.4%	1.8%	2.9%	3.7%	3.5%	1.7%

Source: Actuals from student profile.

Chan Medical School: Enrollment by Residency

Students (FTEs)	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
In State	768	788	791	813	788	795	822	807	807	807	807	807
% Change		2.6%	0.3%	2.8%	-3.1%	0.9%	4.3%	-1.8%	0.0%	0.0%	0.0%	0.0%
Out of State	172	239	282	319	340	344	367	400	438	488	538	563
% Change		39.1%	17.9%	13.3%	6.6%	1.3%	7.9%	9.0%	9.5%	11.4%	10.2%	4.6%
International	134	125	123	110	118	118	112	118	118	118	118	118
% Change		-6.6%	-1.9%	-10.6%	7.0%	0.0%	-4.8%	5.4%	0.0%	0.0%	0.0%	0.0%
Total	1,074	1,153	1,195	1,242	1,246	1,257	1,301	1,325	1,363	1,413	1,463	1,488
% Change		7.3%	3.7%	3.9%	0.3%	0.9%	4.4%	1.8%	2.9%	3.7%	3.5%	1.7%

Source: Actuals from student profile.

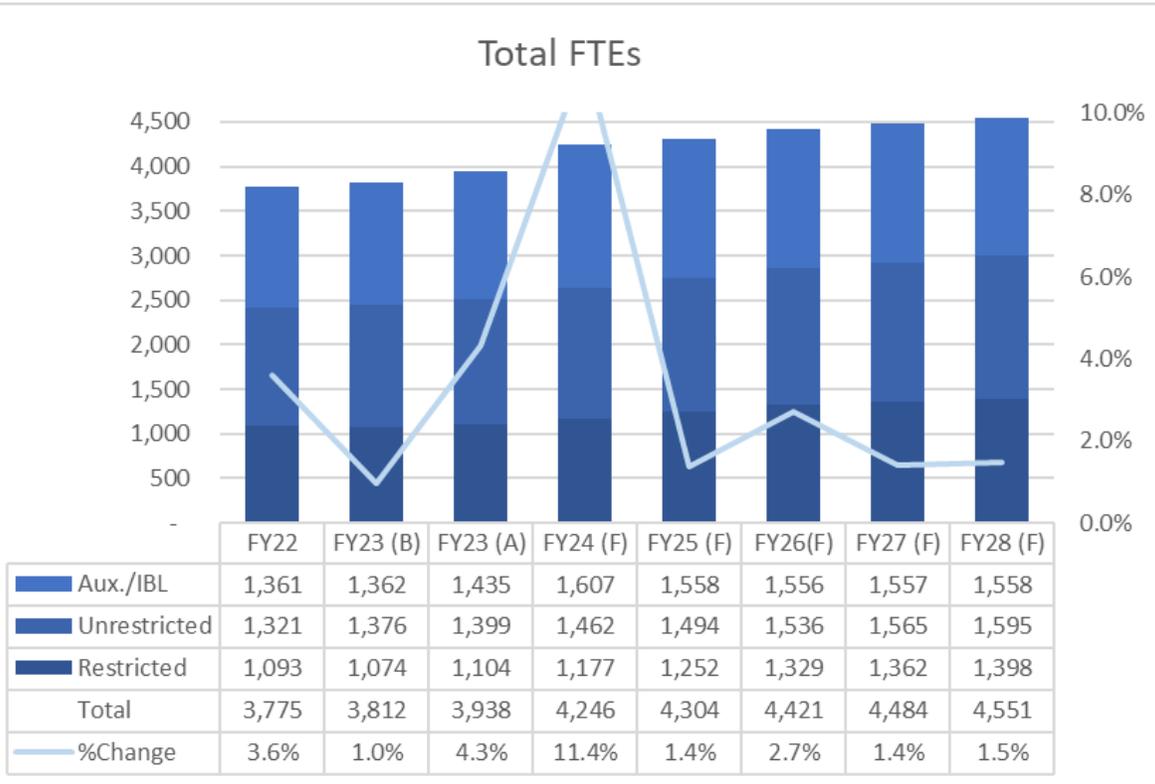
Chan Medical School: Staffing

Employee FTEs	Actual					Budget Actual		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Restricted												
Faculty	239	250	243	241	252	247	248	271	288	306	314	322
Staff	852	854	876	855	842	827	856	906	964	1,023	1,048	1,076
Total Restricted	1,091	1,104	1,118	1,096	1,093	1,074	1,104	1,177	1,252	1,329	1,362	1,398
# change		13	14	(23)	(2)	(19)	11	103	75	77	33	36
% change		1.2%	1.3%	-2.0%	-0.2%	-1.8%	1.0%	9.6%	6.4%	6.2%	2.5%	2.6%
Unrestricted General University Ops												
Faculty	220	216	211	221	237	271	271	288	294	302	308	314
Staff	1,009	1,018	1,024	996	1,084	1,105	1,128	1,174	1,200	1,234	1,257	1,281
Executive/Admin/Managerial	58	53	56	51	64	-	-	-	-	-	-	-
Professional Nonfaculty	666	691	727	731	807	-	-	-	-	-	-	-
Secretarial/Clerical	126	120	96	69	69	-	-	-	-	-	-	-
Technical/Paraprofessional	94	90	86	88	92	-	-	-	-	-	-	-
Skilled Crafts	12	12	9	10	13	-	-	-	-	-	-	-
Service Maintenance Workers	54	52	49	47	39	-	-	-	-	-	-	-
Unspecified												
Total General University Ops	1,229	1,234	1,234	1,217	1,321	1,376	1,399	1,462	1,494	1,536	1,565	1,595
# change		5	1	(17)	104	55	78	86	32	42	29	30
% change		0.4%	0.0%	-1.4%	8.5%	4.2%	5.9%	6.3%	2.2%	2.8%	1.9%	1.9%
*Unrestricted Aux./Independent Business												
Faculty	15	13	10	11	12	12	10	14	14	14	14	14
Staff	1,241	1,302	1,316	1,320	1,349	1,350	1,425	1,593	1,544	1,542	1,543	1,544
Total Aux./Independent Business	1,256	1,315	1,326	1,331	1,361	1,362	1,435	1,607	1,558	1,556	1,557	1,558
# change		58	11	5	30	1	74	245	(49)	(2)	1	1
% change		4.7%	0.8%	0.4%	2.2%	0.1%	5.5%	18.0%	-3.0%	-0.1%	0.1%	0.1%
Total Faculty & Staff	3,576	3,653	3,679	3,644	3,775	3,812	3,938	4,246	4,304	4,421	4,484	4,551
# change		76	26	(35)	131	37	163	434	58	117	63	67
% change		2.1%	0.7%	-0.9%	3.6%	1.0%	4.3%	11.4%	1.4%	2.7%	1.4%	1.5%

*FTE increase in Independent Business Lines is due to correction between payroll and non-payroll for Commonwealth Medicine, based on accounting of certain contracts that was incorrect in the budget

Chan Medical School: Staffing

Faculty & staff of 3,938 grows on average 3.7% over the forecast period.



Auxiliary / Independent

Business Lines: staff including housing & dining

Unrestricted: faculty & staff that support general university operations

Restricted: faculty & staff funded by grant & endowed funds

FTEs:	1,435
% of Total FTEs:	36%
Faculty % / Staff %:	1% / 99%
Forecast AAGR:	3.0%

FTEs:	1,399
% of Total FTEs:	36%
Faculty % / Staff %:	19% / 81%
Forecast AAGR:	3.0%

FTEs:	1,104
% of Total FTEs:	28%
Faculty % / Staff %:	22% / 78%
Forecast AAGR:	5.4%

Chan Medical School: Staffing Ratios

	Actual					Budget	Actual	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
<i>Student - Faculty</i>												
Student (FTE)	1,074	1,153	1,195	1,242	1,246	1,257	1,301	1,325	1,363	1,413	1,463	1,488
Faculty (FTE)	473	479	463	473	501	530	529	573	596	622	636	650
Student-Faculty Ratio	2.3	2.4	2.6	2.6	2.5	2.4	2.5	2.3	2.3	2.3	2.3	2.3
<i>Staff - Faculty (All)</i>												
Staff (FTE)	3,103	3,174	3,215	3,170	3,275	3,282	3,409	3,673	3,708	3,799	3,848	3,901
Faculty (FTE)	473	479	463	473	501	530	529	573	596	622	636	650
Staff-Faculty Ratio	6.6	6.6	6.9	6.7	6.5	6.2	6.4	6.4	6.2	6.1	6.1	6.0
<i>Staff - Faculty (E&G)</i>												
Staff (FTE)	1,009	1,018	1,024	996	1,084	1,105	1,128	1,174	1,200	1,234	1,257	1,281
Faculty (FTE)	220	216	211	221	237	271	271	288	294	302	308	314
Staff-Faculty Ratio (E&G)	4.6	4.7	4.9	4.5	4.6	4.1	4.2	4.1	4.1	4.1	4.1	4.1

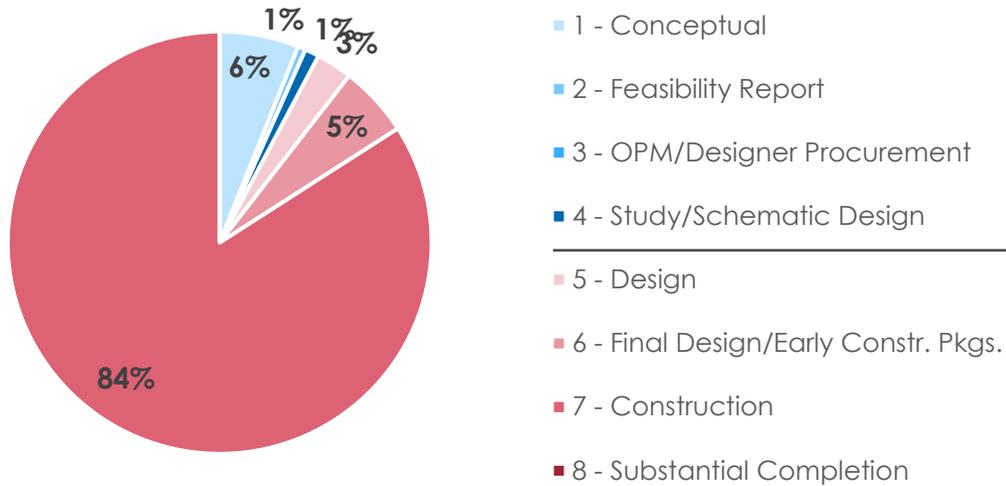
Chan Medical School: Key Ratios

Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Operating Margin (%)	2.2%	3.5%	3.0%	2.8%	2.1%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Operating Margin (\$)	21,155	31,849	27,706	27,731	21,896	19,551	20,422	21,311	22,279	23,844	24,650	25,197
Operating Cash Flow Margin (%)	11.5%	13.7%	12.6%	11.3%	11.5%	13.5%	11.6%	12.5%	12.6%	12.0%	11.5%	11.1%
Operating Cash Flow Margin (\$)	110,201	123,144	116,120	112,825	119,654	133,920	118,651	137,193	144,311	143,215	142,868	142,630
Debt Service Burden (%)	5.1%	5.5%	4.9%	2.0%	5.1%	7.0%	7.1%	7.1%	6.8%	5.7%	5.5%	5.4%
Debt Service Coverage (x)	2.3	2.6	2.7	5.8	2.3	2.0	1.6	1.8	1.9	2.1	2.1	2.1
Financial Leverage (x)	0.83	0.98	0.84	1.15	0.95	0.91	0.82	0.84	0.95	1.07	1.17	1.30
Total Debt (\$ in thousands)	590,265	536,644	603,933	639,298	924,853	856,423	889,075	844,683	799,778	763,238	725,178	685,763
Total Cash & Investments to Op Expenses (x)	0.52	0.61	0.57	0.76	0.87	0.81	0.73	0.66	0.68	0.70	0.70	0.71
Enrollment	1,074	1,153	1,195	1,242	1,246	1,257	1,301	1,325	1,363	1,413	1,463	1,488
Enrollment (% Change)	0.4%	7.3%	3.7%	3.9%	0.3%	0.9%	4.4%	1.8%	2.9%	3.7%	3.5%	1.7%

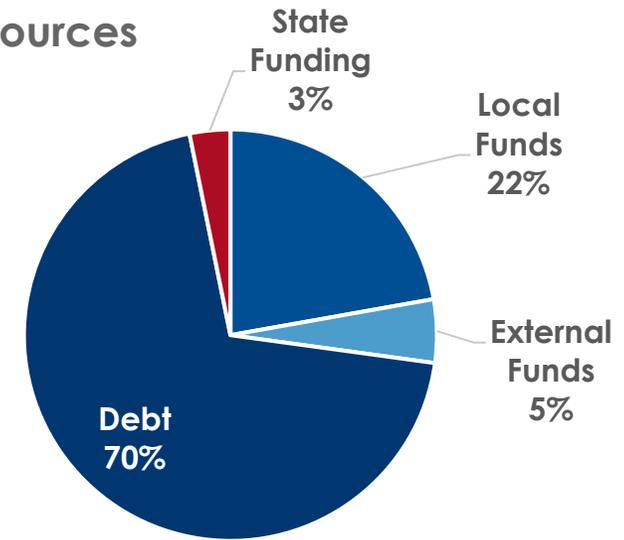
Chan Medical School: 19 Projects; \$503M; 26% of Capital Plan

83% of Projects in Construction or Substantial Completion

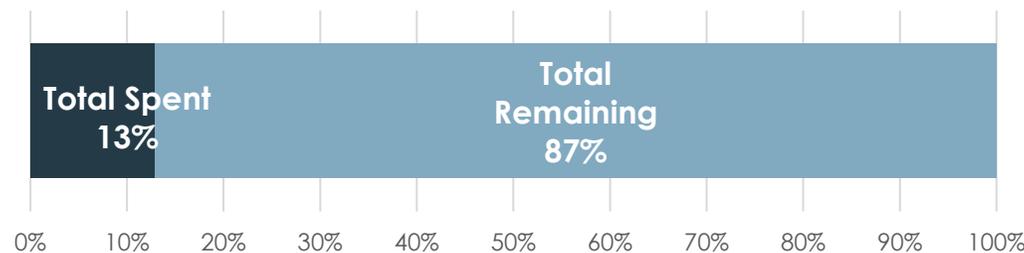
Projects by Phase



Funding Sources



Project Spending



Chan Medical School Projects: Board & President

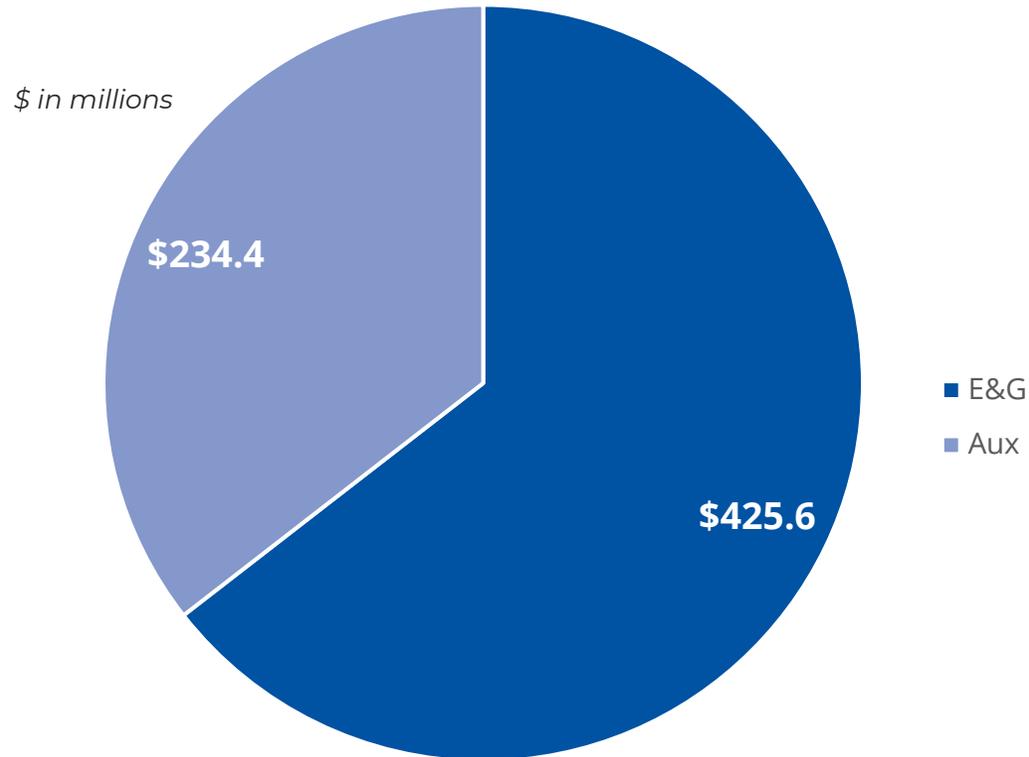
Traditional Projects			
Project	Adjusted Cost (\$)	Project Phase	Status
Departmental equipment purchases	10,000,000	1 - Conceptual	Authorized
Parking Lot Maintenance - Main Campus	10,840,000	1 - Conceptual	Authorized
Library repurposing and renovations	5,500,000	4 - Study / Schematic Design	Authorized
New Education and Research Facility	350,000,000	7 - Construction	Approved
Power Plant Expansion	50,000,000	7 - Construction	Approved
Total	426,340,000		

President Projects			
Project	Adjusted Cost (\$)	Project Phase	Status
Fall River MBL CGMP Upgrades	9,500,000	1 - Conceptual	Authorized
Enhance chilled water loop pump/controls	3,000,000	2 - Feasibility Report	Authorized
Childcare Expansion	2,800,000	5 - Design	Approved
E/M DM - 5 School HVAC Upgrades / Replacements - Amphitheater Mechanical Systems and AHU	4,000,000	5 - Design	Approved
E/M DM - 5 School HVAC Upgrades / Replacements - Student Wing Mechanical Systems and AHU	4,000,000	5 - Design	Approved
Gnotobiotics Core (LRB)	3,000,000	5 - Design	Approved
Basic Wing Restroom Upgrade (14 Rooms)	3,000,000	6 - Final Design / Early Construction Packages	Approved
Clinical Wing Renovation - 4th Phase (2nd Floor)	7,000,000	6 - Final Design / Early Construction Packages	Approved
Clinical Wing Restroom Upgrades (14 Rooms)	3,000,000	6 - Final Design / Early Construction Packages	Approved
Medical School Elevator Replacement	6,000,000	6 - Final Design / Early Construction Packages	Approved
Student Wing Substation, Risers and Electrical Room Replacements	8,300,000	6 - Final Design / Early Construction Packages	Approved
Basic Wing Substations, Risers and Electrical Room Replacements	8,300,000	7 - Construction	Approved
Clinical Wing Substations, Risers and Electrical Room Replacements	8,300,000	7 - Construction	Approved
Install Chiller 6	6,000,000	7 - Construction	Approved
Total	76,200,000		

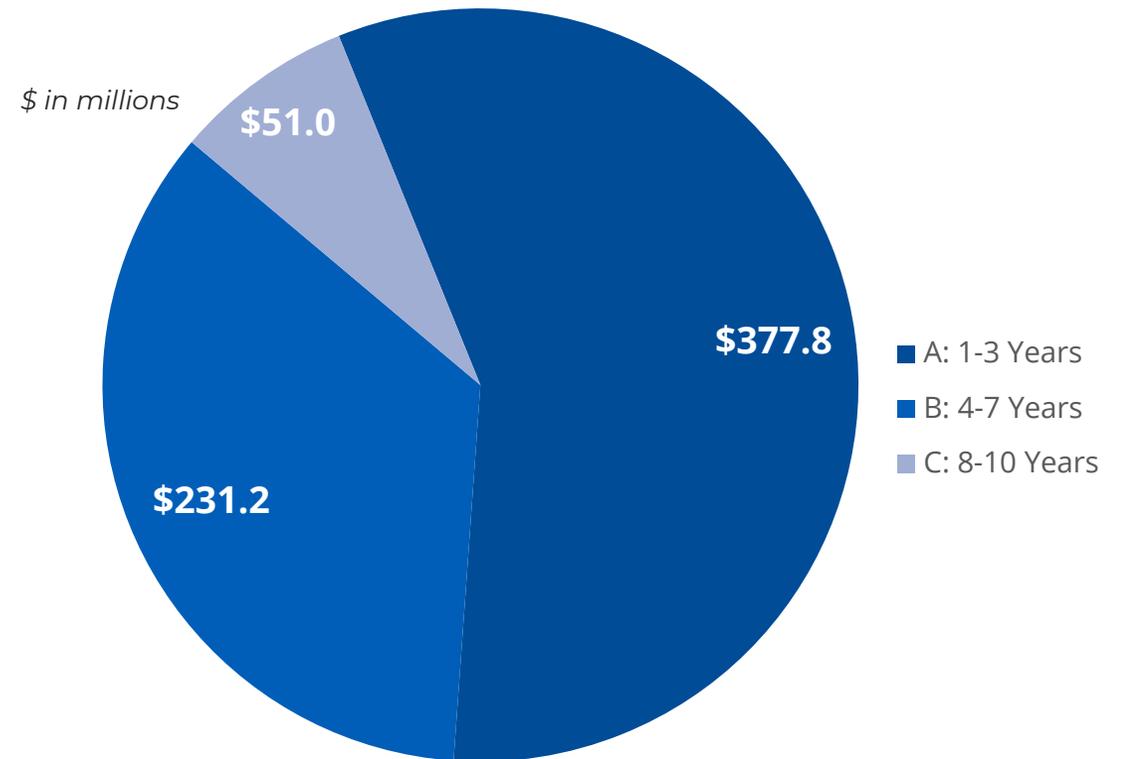
Chan Medical School: Deferred Maintenance

\$660.0 Million Backlog Coming Due in the Next 10 Years

\$660.0M: E&G vs. AUX



\$660.0M: By Timeframe



Chan Medical School: Deferred Maintenance

\$660.0 Million Backlog Coming Due in the Next 10 Years

By Package

Building Package	Project Cost (\$ millions)
Building Systems	350.4
Infrastructure	142.9
Space Improvement	87.1
Safety/Code	46.1
Building Envelope	33.5
Total	660.0

By System

Building System	Project Cost (\$ millions)
HVAC	152.6
Electrical	120.2
Heating	68.3
Cooling	68.0
Safety/Code	49.5
Renovation	44.4
Plumbing	40.2
Mechanical	33.7
Exterior Shell	33.4
Grounds	26.2
Total	660.0

Top 10 Building Needs

Building	Project Cost (\$ millions)
Medical School	235.7
Power Plant	123.5
Teaching Hospital	98.1
Lazare Research Building	30.6
South Street	25.6
Biotech Two	23.9
Biotech Five	16.4
Biotech Three	16.0
Grounds	14.6
Lakeside Addition	13.0
Total	597.4

Chan Medical School: Deferred Maintenance Dashboard (v1.0)- Annual Investment*

FY21 Keep Up
\$17.5 M

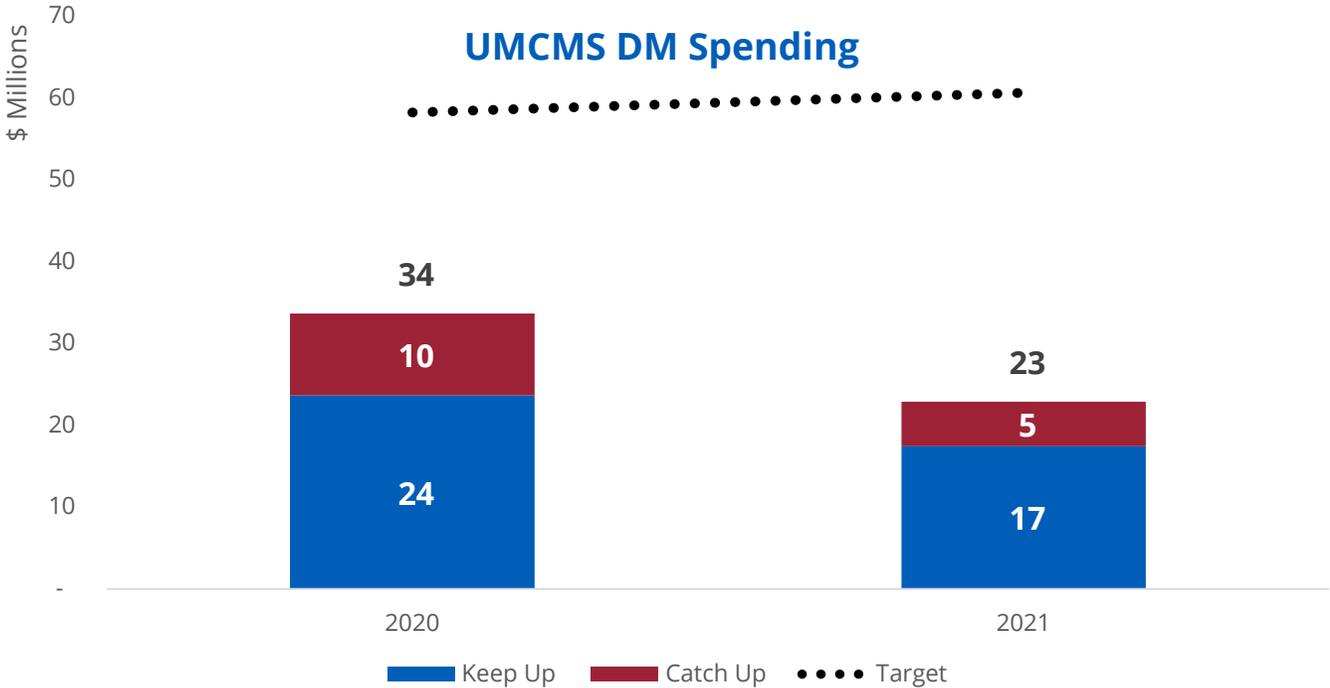
FY21 Keep Up
\$60.6 M

FY21 % Target
28.9%

FY21 Catch Up
\$5.4 M

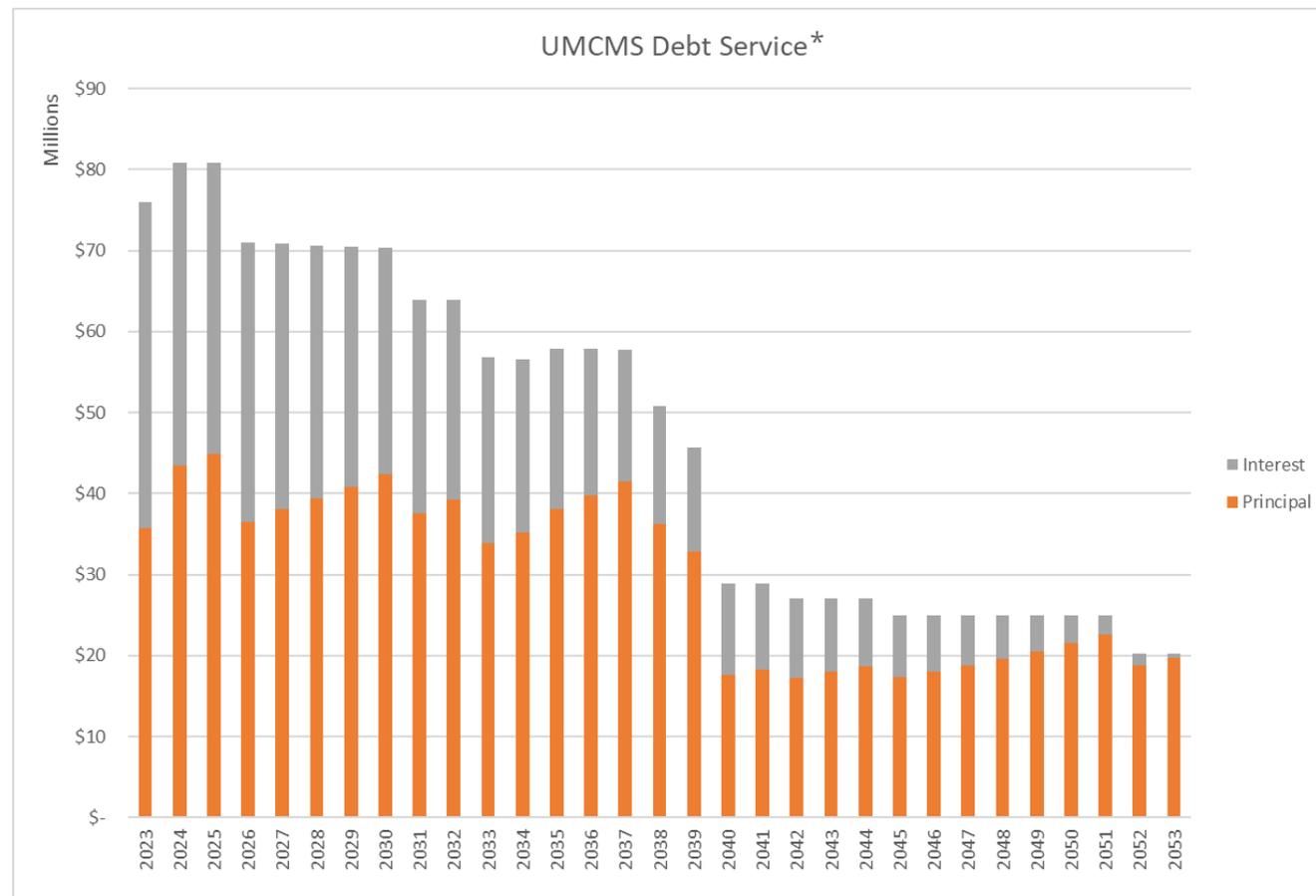
FY21 Catch Up
TBD

FY21 % Target
N/A



Chan Medical School: Deferred Maintenance - Annual Investment

<i>\$ in thousands</i>	FY24	FY25	FY26	FY27	FY28
Keep Up					
Depreciation	77,269	86,792	89,329	91,867	94,305
Principal Payment	43,425	44,905	36,540	38,059	39,415
Available for Keep Up	33,844	41,887	52,789	53,808	54,890
Keep Up Target	70,728	71,866	73,445	75,634	76,054
Planned Keep Up Spend	48,300	48,300	48,300	48,300	48,300
Catch Up					
Catch Up Target (15 yrs)	44,000	44,000	44,000	44,000	44,000
Planned Catch Up Spend	12,000	12,240	12,485	12,734	12,989
Debt Service Burden	7.1%	6.8%	5.7%	5.5%	5.4%



Key Ratio	Actual					Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service Burden (%)	5.1%	5.5%	4.9%	2.0%	5.1%	7.0%	7.1%	7.1%	6.8%	5.7%	5.5%	5.4%
Debt Service Coverage (x)	2.3	2.6	2.7	5.8	2.3	2.0	1.6	1.8	1.9	2.1	2.1	2.1
Financial Leverage (x)	0.83	0.98	0.84	1.15	0.95	0.91	0.83	0.84	0.95	1.07	1.17	1.30
Total Debt (\$ in thousands)	590,265	536,644	603,933	639,298	924,853	856,423	886,470	844,683	799,778	763,238	725,178	685,763

President's Office



President's Office: Revenue & Expenses

(\$ in Thousands)

Revenues	Actual					Budget	Q1 Projection	Forecast					% Change FY24-28	
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Gross Tuition & Fees	6,144	6,802	6,202	6,193	6,675	6,027	6,027	6,027	6,027	6,027	6,027	6,027	0.0%	0.0%
Tuition Discounts	-	-	-	-	-	-	-	-	-	-	-	-	0.0%	0.0%
Discount Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Tuition & Fees	6,144	6,802	6,202	6,193	6,675	6,027	6,027	6,027	6,027	6,027	6,027	6,027	0.0%	0.0%
Grants	20,651	20,019	21,664	9,320	761	-	1,046	250	-	-	-	-	-100.0%	20.0%
Sales & Service, Educational	2,154	3,255	26	-	-	-	-	-	-	-	-	-	0.0%	0.0%
Other Operating	83,159	80,662	83,339	76,826	93,577	91,145	90,308	92,193	94,286	96,133	98,208	100,133	8.6%	1.9%
State Appropriations	160	636	362	400	400	-	-	-	-	-	-	-	0.0%	0.0%
Other NonOperating	6,951	13,104	4,086	6,534	(1,276)	2,665	3,740	3,565	3,601	3,562	3,515	3,431	-3.8%	4.3%
Total Revenues	119,219	124,478	115,679	99,273	100,136	99,837	101,121	102,035	103,914	105,722	107,750	109,591	7.4%	1.9%
% Growth	1.3%	4.4%	-7.1%	-14.2%	0.9%	-0.3%	1.0%	2.2%	1.8%	1.7%	1.9%	1.7%		
Expenses														
Salaries & Fringe	60,023	60,409	65,444	58,074	54,652	60,227	58,396	60,688	62,649	64,674	66,757	68,909	13.5%	2.7%
Non-Personnel	40,025	45,385	41,612	30,042	33,026	32,980	31,817	33,286	33,251	33,311	33,174	32,841	-1.3%	-0.1%
Depreciation	3,719	3,008	2,566	1,933	5,112	1,731	2,963	2,996	2,996	2,957	2,917	2,917	-2.6%	7.9%
Interest	3,009	3,161	2,961	1,757	4,179	2,892	3,155	3,024	2,939	2,666	2,746	2,733	-9.6%	-1.3%
Total Expenses	106,776	111,963	112,583	91,806	96,969	97,830	96,331	99,994	101,835	103,608	105,594	107,400	7.4%	0.0%
% Growth	-2.0%	4.9%	0.6%	-18.5%	5.6%	0.9%	-0.7%	2.2%	1.8%	1.7%	1.9%	1.7%		
Operating Margin														
UMass OM Calc Revenues	119,219	122,841	117,375	101,841	105,949	99,837	101,121	102,035	103,914	105,722	107,750	109,591		
Total Expenses	106,776	111,963	112,583	91,804	96,969	97,830	96,331	99,994	101,835	103,608	105,594	107,400		
Surplus / (Deficit)	12,443	10,878	4,792	10,037	8,980	2,007	4,790	2,041	2,079	2,114	2,156	2,191		
UMass OM Calc	10.4%	8.9%	4.1%	9.9%	8.5%	2.0%	4.7%	2.0%	2.0%	2.0%	2.0%	2.0%		

President's Office: Staffing

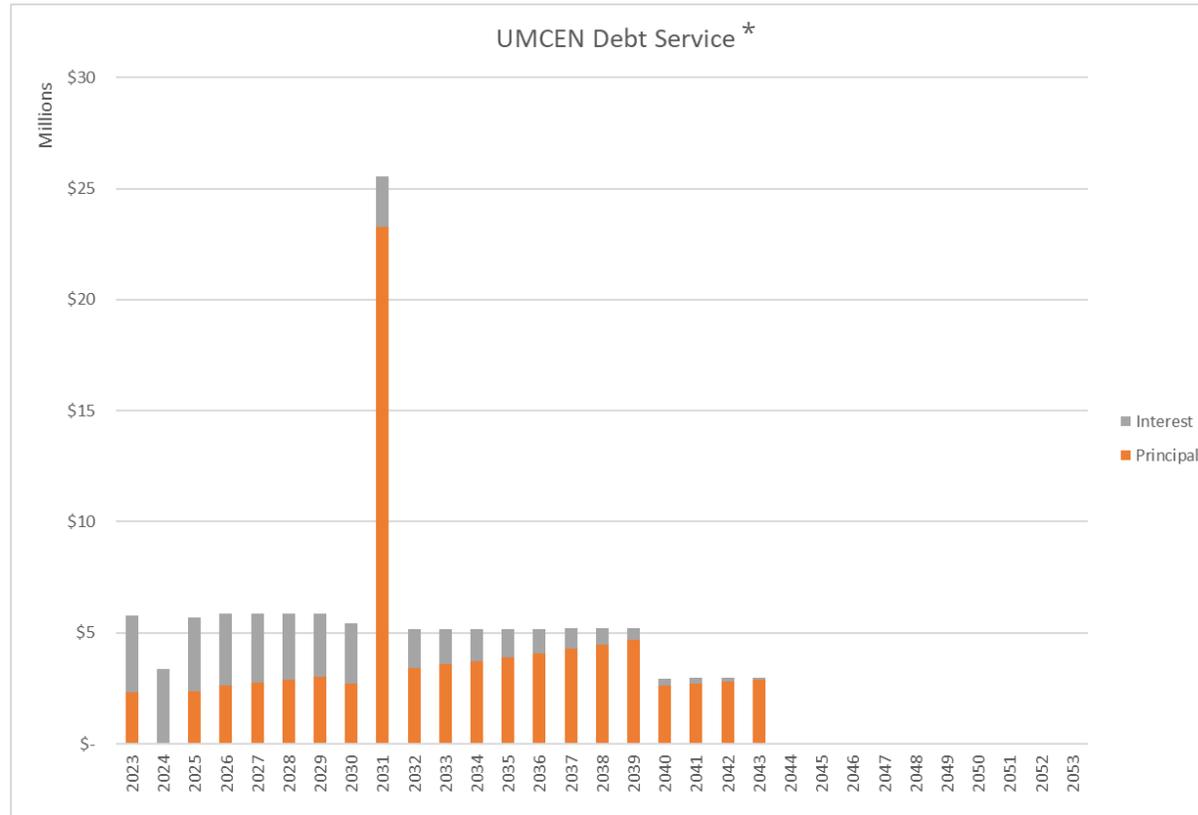
Employee FTEs	Actual					Budget Actuals		Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Restricted												
Faculty	-	-	-	-	-	-	-	-	-	-	-	-
Staff	69	73	88	-	-	-	-	-	-	-	-	-
Total Restricted	69	73	88	-	-	-	-	-	-	-	-	-
# change		4	15	(88)	-	-	-	-	-	-	-	-
% change		5.8%	20.5%	-100.0%								
Unrestricted General University Ops												
Faculty	-	-	-	-	-	-	-	-	-	-	-	-
Staff	323	311	297	296	304	329	334	334	334	334	334	334
Executive/Admin/Managerial	68	71	77	80	83	82	82	82	82	82	82	82
Professional Nonfaculty	214	205	195	179	182	211	215	215	215	215	215	215
Secretarial/Clerical	28	25	22	35	37	35	35	35	35	35	35	35
Technical/Paraprofessional	13	11	4	2	2	2	2	2	2	2	2	2
Skilled Crafts	-	-	-	-	-	-	-	-	-	-	-	-
Service Maintenance Workers	-	-	-	-	-	-	-	-	-	-	-	-
Unspecified	-	-	-	-	-	-	-	-	-	-	-	-
Total General University Ops	323	311	297	296	304	329	334	334	334	334	334	334
# change		(12)	(14)	(1)	8	33	5	-	-	-	-	-
% change		-3.6%	-4.5%	-0.4%	2.7%	11.2%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Unrestricted Aux./Independent Business												
Faculty	-	-	-	-	-	-	-	-	-	-	-	-
Staff	-	-	-	-	-	-	-	-	-	-	-	-
Total Aux./Independent Business	-	-	-	-	-	-	-	-	-	-	-	-
Total Faculty & Staff	392	384	385	296	304	329	334	334	334	334	334	334
# Change		(8)	1	(89)	(88)	33	38	-	-	-	-	-
% change		-1.9%	0.2%	-23.2%	-22.4%	11.2%	12.9%	0.0%	0.0%	0.0%	0.0%	0.0%

*Actual data reflects snapshot of 9/30 annually.

President's Office: Key Ratios

Key Ratio						Budget	Q1 Projection	Forecast				
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028
Operating Margin (%)	10.4%	8.9%	4.1%	9.9%	8.5%	2.0%	4.7%	2.0%	2.0%	2.0%	2.0%	2.0%
<i>Operating Margin (\$)</i>	<i>12,443</i>	<i>10,878</i>	<i>4,792</i>	<i>10,037</i>	<i>8,980</i>	<i>2,007</i>	<i>4,790</i>	<i>2,041</i>	<i>2,079</i>	<i>2,114</i>	<i>2,156</i>	<i>2,191</i>
Operating Cash Flow Margin (%)	17.5%	12.0%	12.2%	15.1%	22.6%	14.3%	17.2%	14.7%	14.2%	13.8%	13.7%	13.6%
<i>Operating Cash Flow Margin (\$)</i>	<i>21,177</i>	<i>14,473</i>	<i>14,812</i>	<i>15,611</i>	<i>25,535</i>	<i>15,588</i>	<i>18,783</i>	<i>16,188</i>	<i>15,844</i>	<i>15,752</i>	<i>15,881</i>	<i>15,987</i>
Debt Service Burden (%)	2.8%	4.5%	4.4%	4.2%	6.6%	5.3%	5.7%	3.0%	5.2%	5.1%	5.2%	5.2%
Debt Service Coverage (x)	7.0	2.8	3.0	4.0	4.0	3.0	3.4	5.4	3.0	3.0	2.9	2.9
Financial Leverage (x)	2.56	2.82	2.75	3.04	3.19	3.30	3.30	3.30	3.40	3.51	3.64	3.79
Total Debt (\$ in thousands)	84,734	86,615	87,961	87,961	83,019	82,880	82,880	82,880	80,495	77,850	75,090	72,215
Total Cash & Investments to Op Expenses (x)	2.03	2.18	2.15	2.91	2.73	2.80	2.84	2.74	2.69	2.64	2.59	2.55

President's Office: Debt Service



Key Ratio	FY2018	FY2019	FY2020	FY2021	FY2022	Budget FY2023	Q1 Projection	Forecast				
								FY2024	FY2025	FY2026	FY2027	FY2028
Debt Service Burden (%)	2.8%	4.5%	4.4%	4.2%	6.6%	5.3%	5.7%	3.0%	5.2%	5.1%	5.2%	5.2%
Debt Service Coverage (x)	7.0	2.8	3.0	4.0	4.0	3.0	3.4	5.4	3.0	3.0	2.9	2.9
Financial Leverage (x)	2.56	2.82	2.75	3.04	3.19	3.30	3.30	3.30	3.40	3.51	3.64	3.79
Total Debt (\$ in thousands)	84,734	86,615	87,961	87,961	83,019	82,880	82,880	82,880	80,495	77,850	75,090	72,215

*Reflects existing debt only

UMass Global

Global: Revenue & Expenses Trend

(\$ in Thousands)

Revenues	Actual	Budget	Q1 Projection	Forecast					% Change FY24-28	
	FY2022	FY2023		FY2024	FY2025	FY2026	FY2027	FY2028	Cumulative	Avg. Annual
Gross Tuition & Fees	104,200	115,828	110,606	127,968	150,091	166,756	180,904	194,061	51.6%	10.9%
Tuition Discounts	(6,892)	(8,254)	(7,829)	(10,607)	(11,822)	(12,613)	(12,976)	(12,860)	21.2%	9.7%
Discount Rate	6.6%	7.1%	7.1%	8.3%	7.9%	7.6%	7.2%	6.6%	-20.1%	-1.1%
Net Tuition & Fees	97,308	107,574	102,777	117,361	138,270	154,144	167,929	181,201	54.4%	11.0%
Grants	3,146	-	-	-	-	-	-	-	0.0%	0.0%
Auxiliary Enterprises	1,181	118	35	109	111	114	116	118	0.0%	0.1%
Other Operating	60	2,320	1,455	1,551	1,751	1,897	1,992	2,077	33.9%	-0.5%
Other NonOperating	238	-	(1,067)	-	-	-	-	-	0.0%	0.0%
Total Revenues	101,934	110,012	103,200	119,021	140,132	156,154	170,036	183,396	54.1%	10.8%
% Growth				15.3%	17.7%	11.4%	8.9%	7.9%		
Expenses										
Salaries & Fringe	67,148	73,600	71,106	69,099	74,777	78,707	83,293	87,612	26.8%	3.7%
Non-Personnel	40,795	42,446	44,836	48,871	49,800	54,024	61,237	68,275	39.7%	10.1%
Scholarships & Fellowships	3,037	-	-	-	-	-	-	-	0.0%	0.0%
Depreciation	6,872	7,379	7,380	6,660	6,660	6,660	6,660	6,660	0.0%	-1.9%
Interest	2,702	3,430	3,703	3,189	2,944	2,591	2,168	1,733	-45.7%	-12.6%
Total Expenses	120,554	126,854	127,025	127,819	134,181	141,982	153,358	164,280	28.5%	5.3%
% Growth				0.6%	5.0%	5.8%	8.0%	7.1%		
Operating Margin										
Surplus / (Deficit)	(18,620)	(16,842)	(23,825)	(8,798)	5,951	14,172	16,678	19,116		
UMass OM Calc	-18.3%	-15.3%	-23.1%	-7.4%	4.2%	9.1%	9.8%	10.4%		
April 2020 Proforma OM										
Surplus / (Deficit)	(11,165)	(15,170)		(8,037)	(1,797)	3,079	15,016	24,966		
UMass OM Calc	-8.8%	-10.8%		-5.0%	-1.0%	1.5%	6.4%	9.5%		