



FY18-23 Financial Forecast Refresh

**Board of Trustees:
Administration & Finance Committee
November 29, 2017**

Agenda

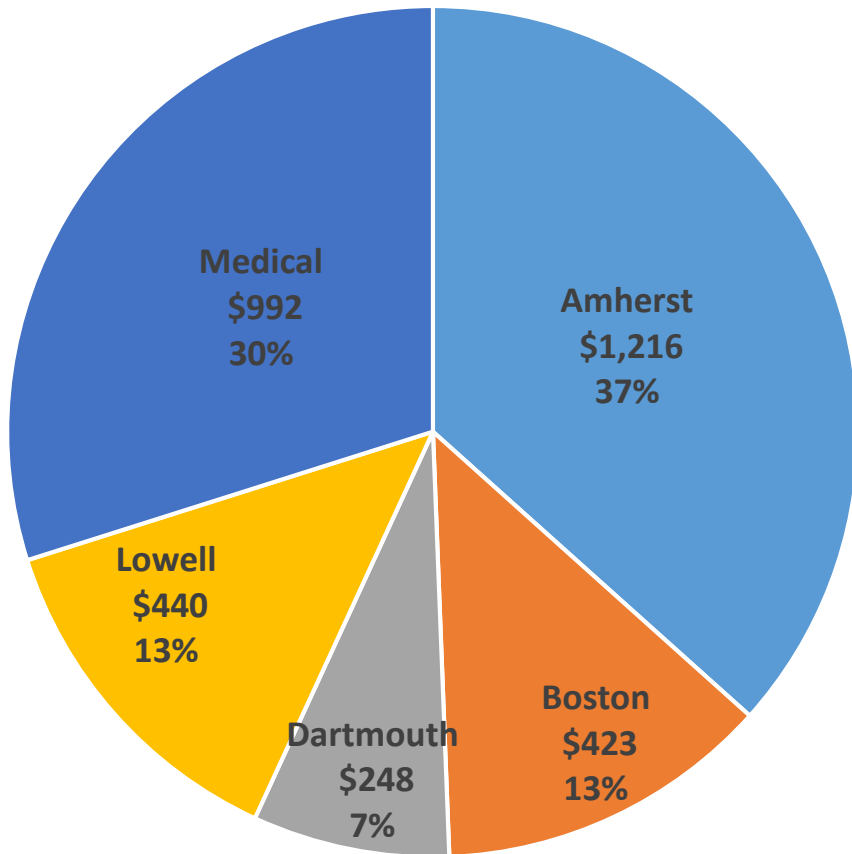
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- Financial Forecast Overview
- Highlights & Key Take Aways
- Expenses
- Revenues
- Ratios
- Appendices: Campus Data

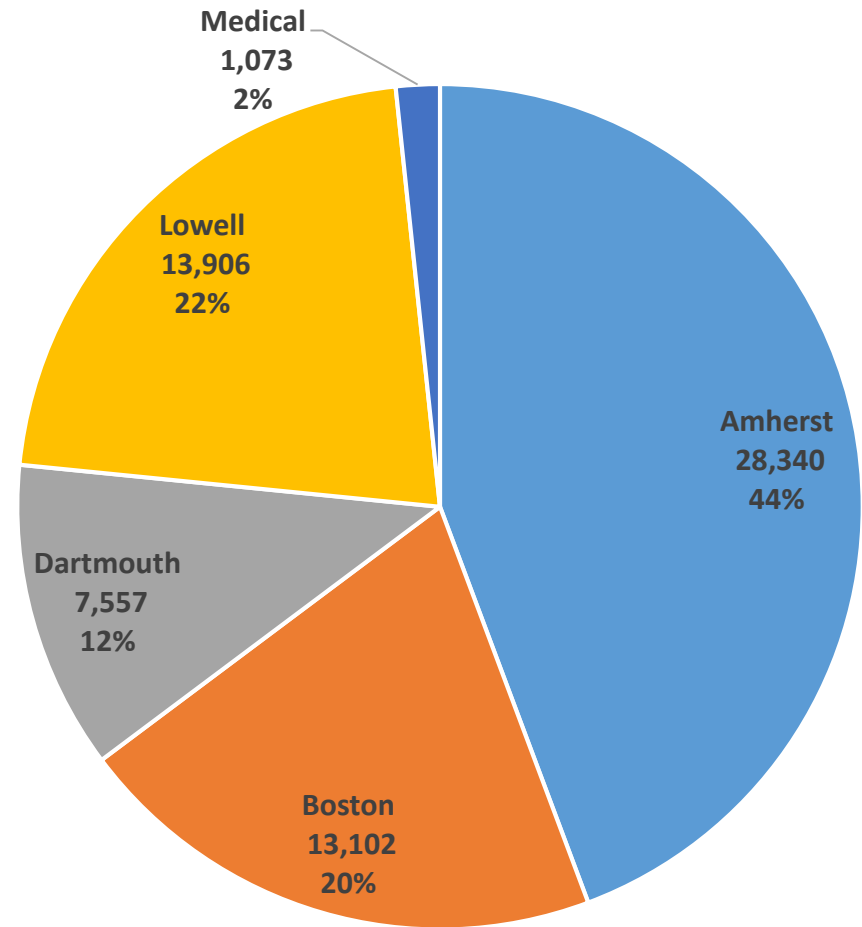
University Overview

FY17 Revenue = \$3.4 billion

(\$ in millions below)



FY17 Student FTEs = 63,978



Performance Indicators - Defined

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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

$$\frac{(\text{Total Revenues} - \text{Total Expenses}) + \text{Depreciation} + \text{Interest}}{\text{Debt Service (P\&I)}}$$

Financial Forecast Overview

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- Annual re-refresh of the 5-year forecast of revenues and expenses used for:
 - ▣ Campus 5-year Strategic Plans
 - ▣ University 5-year Capital Plan
 - ▣ Annual State Funding Request
 - ▣ Communication to Stakeholders – State, Rating Agencies, Granting Entities

- Include Enhancements:
 - ▣ Additional indicators added – financial and enrollment
 - ▣ More use of trend data
 - ▣ More details on revenue and expenses
 - ▣ Key Ratios have been revised

Changes from September

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- Boston Refresh:
 - Updates to campus forecast to reflect the implementation of the FY18 budget and refinement of forecast years revenue, expense, enrollment and staffing.

- Collective Bargaining Parameters:
 - Collective bargaining parameters released by the State in September.
 - Increases salaries by \$26-\$31 million annually based on the 2% annual increase.
 - Increased State appropriation by \$12-15 million annually to account for the State share of the increase.

- FY17 Year-End Results:
 - Reflects FY17 year-end financial statements.
 - Refines the forecast based on FY17 experience.



Highlights & Take Aways

Highlights

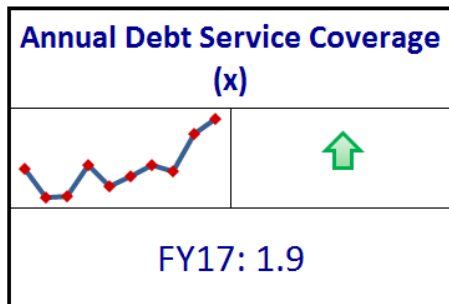
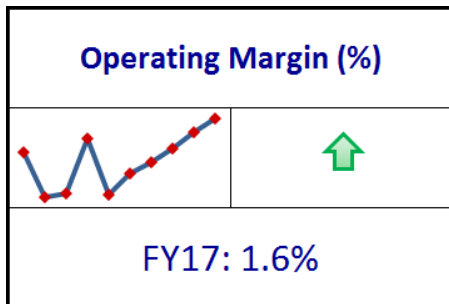
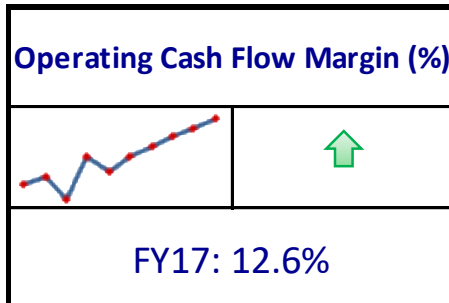
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- ❑ Improved long term financial stability through deliberate growth
- ❑ Austere financial plan with a steady state – no major expansions assumed
- ❑ Enrollment grows, reflects changing demographics and competitive environment
- ❑ State support tied to collective bargaining
- ❑ Tuition increases remain competitive
- ❑ Investments in capital are leveling off but still highly leveraged
- ❑ Highlights the need to grow online, endowment and find new strategies to grow revenue and increase margin

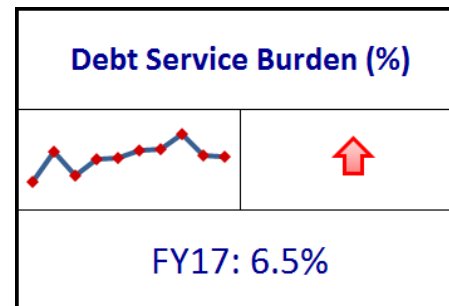
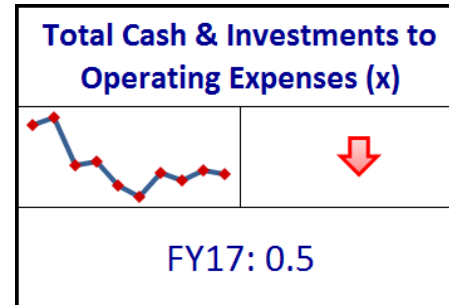
Key Take Aways

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Improving



On Watch





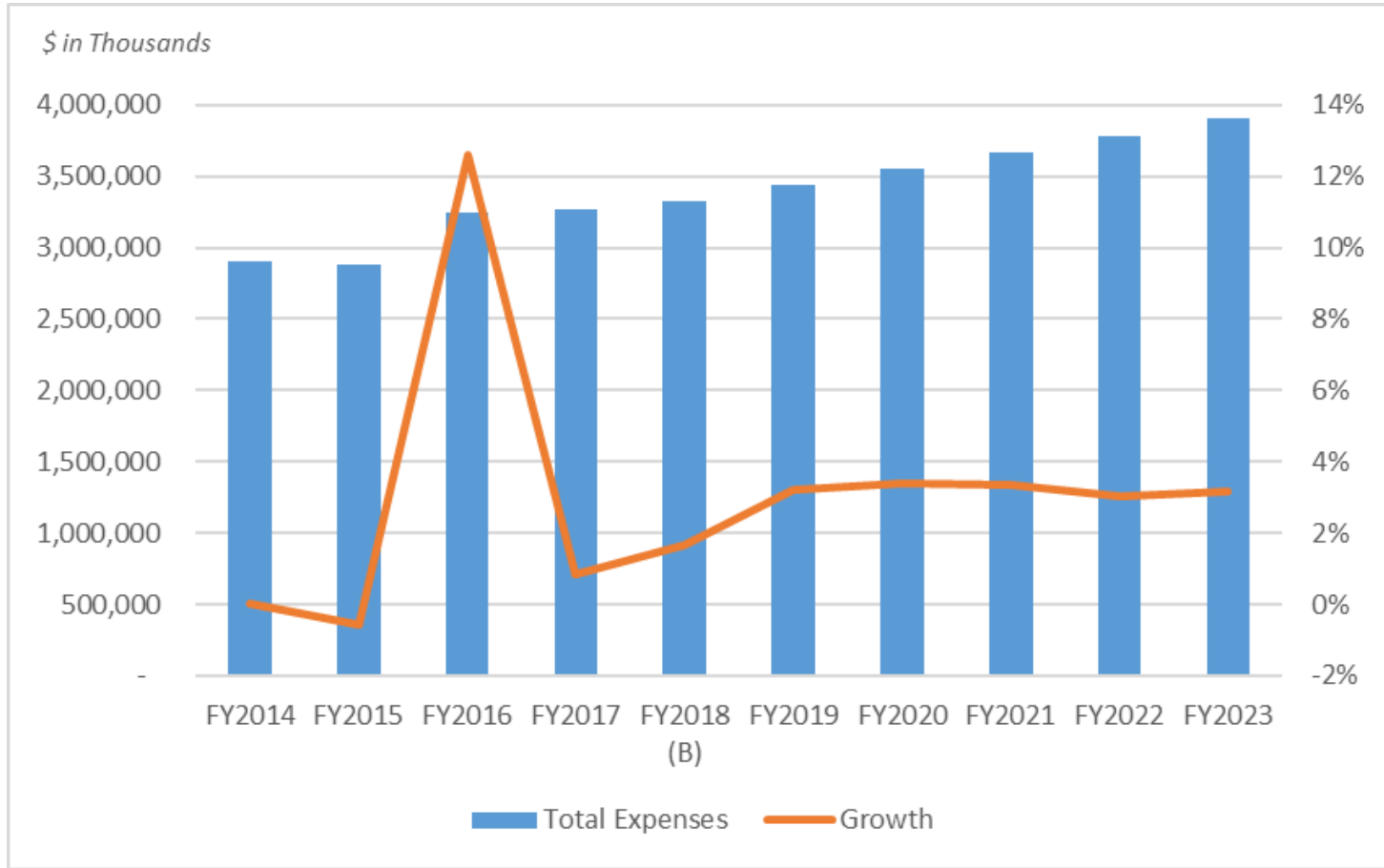
Expenses

Expenses: Modeling Assumptions

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	FY2019	FY2020	FY2021	FY2022	FY2023
Collective Bargaining	2.0%	2.0%	2.0%	2.0%	2.0%
Fringe Rate	36.64%	38.41%	40.19%	41.96%	43.74%
Payroll Tax	1.43%	1.46%	1.48%	1.51%	1.53%
Inflation for non-personnel expenses (based on HEPI 2016)	1.8%	1.8%	1.8%	1.8%	1.8%
Interest on new borrowing	5.0%	5.0%	5.0%	5.0%	5.0%
Assessment / BDL Student System	2.0%	2.0%	2.0%	2.0%	2.0%
Financial Aid	Consistent with T&F Increase	Consistent with T&F Increase	Consistent with T&F Increase	Consistent with T&F Increase	Consistent with T&F Increase

University Expenses: Annual Changes

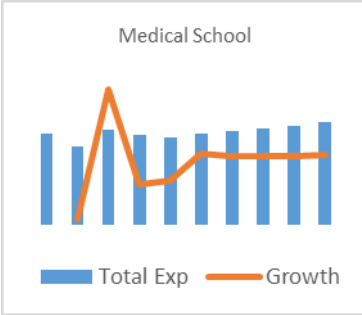
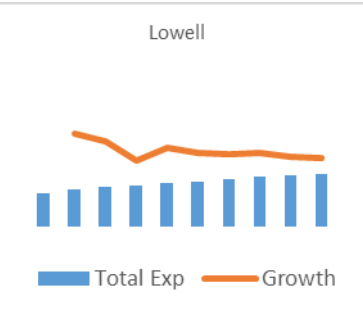
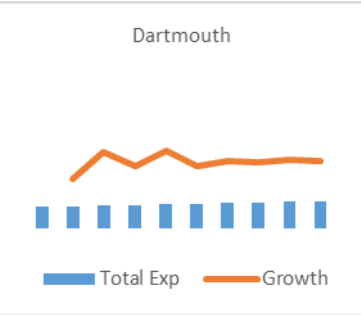
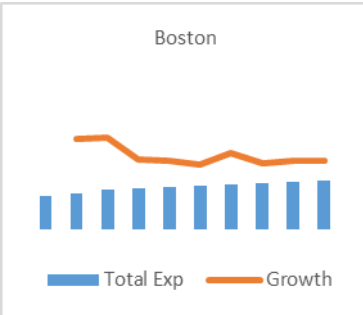
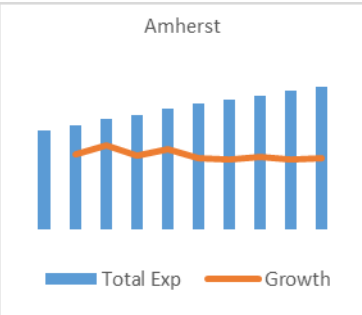
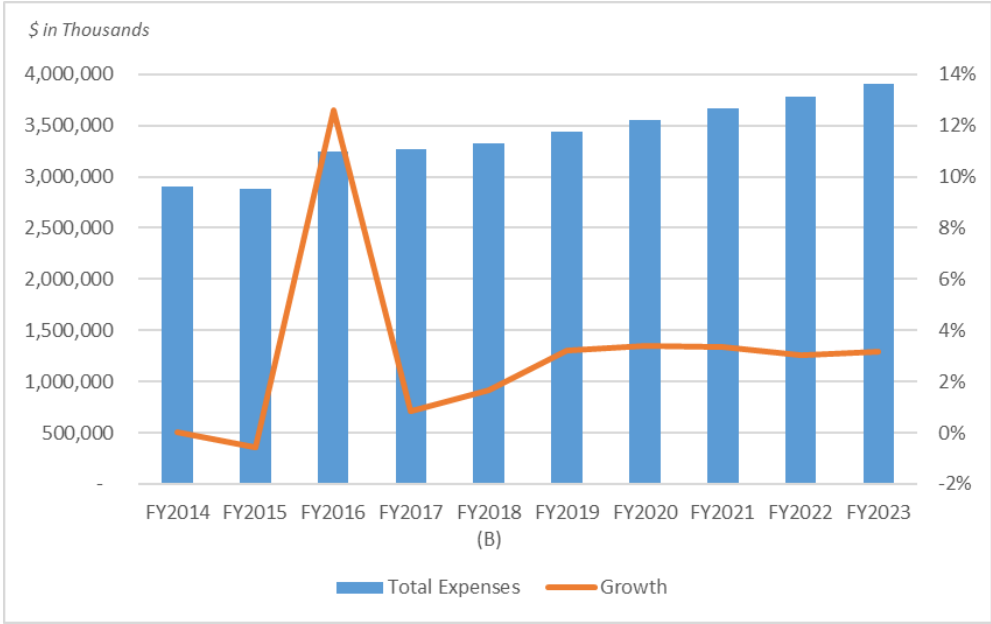


University Expenses: by Expense Category

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<i>\$ in Thousands</i>	Actual				Budget	Forecast					Average
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
Salaries & Fringe	1,579,542	1,659,054	1,788,018	1,847,346	1,927,127	1,995,231	2,059,530	2,127,933	2,195,061	2,262,505	
<i>Salaries & Fringe Growth</i>		5.0%	7.8%	3.3%	4.3%	3.5%	3.2%	3.3%	3.2%	3.1%	3.3%
Non-personnel	975,060	852,900	1,067,226	1,018,600	965,061	983,879	1,017,673	1,048,670	1,080,771	1,117,315	
<i>Non-personnel Growth</i>		-12.5%	25.1%	-4.6%	-5.3%	1.9%	3.4%	3.0%	3.1%	3.4%	3.0%
Scholarships and fellowships	51,177	49,300	44,645	47,706	46,795	51,967	53,834	56,041	58,470	60,862	
<i>Scholarships & fellowships Growth</i>		-3.7%	-9.4%	6.9%	-1.9%	11.1%	3.6%	4.1%	4.3%	4.1%	5.4%
Depreciation	204,121	221,043	240,864	249,669	272,172	280,753	293,023	301,169	310,277	321,848	
<i>Depreciation Growth</i>		8.3%	9.0%	3.7%	9.0%	3.2%	4.4%	2.8%	3.0%	3.7%	3.4%
Interest	89,496	100,332	105,276	110,069	117,347	123,796	128,274	136,873	136,636	138,735	
<i>Interest Growth</i>		12.1%	4.9%	4.6%	6.6%	5.5%	3.6%	6.7%	-0.2%	1.5%	3.4%
Total Expenses	2,899,396	2,882,629	3,246,029	3,273,391	3,328,501	3,435,626	3,552,335	3,670,687	3,781,216	3,901,264	
<i>Total Growth</i>		-0.6%	12.6%	0.8%	1.7%	3.2%	3.4%	3.3%	3.0%	3.2%	3.2%

Expenses: Annual Changes



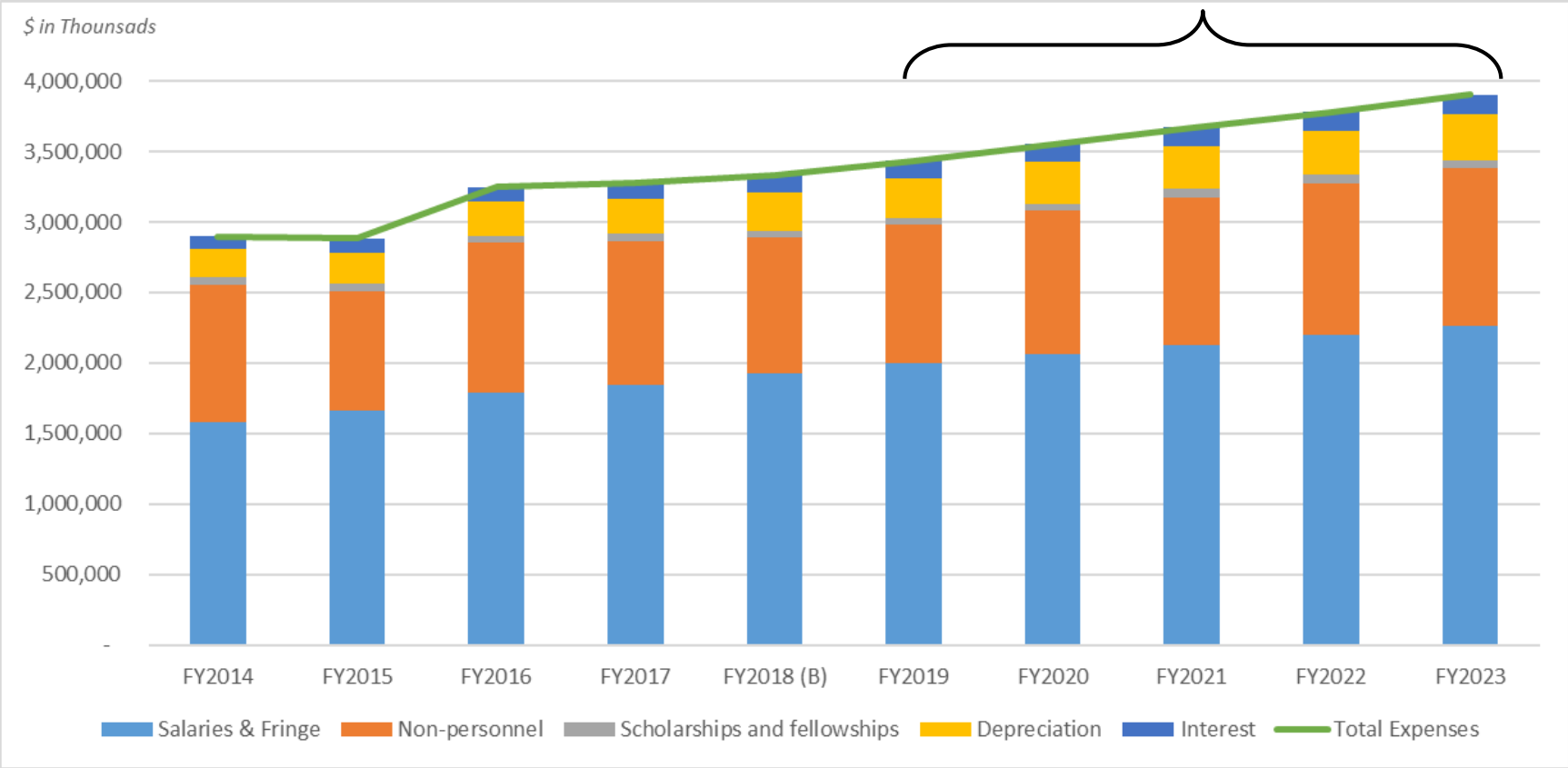
Expenses: by Campus

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<i>\$ in Thousands</i>	Actual				Budget	Forecast					Average
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
Amherst	1,010,500	1,056,072	1,128,807	1,173,095	1,239,377	1,281,414	1,321,598	1,371,955	1,412,713	1,457,763	
<i>Amherst Growth</i>		4.5%	6.9%	3.9%	5.7%	3.4%	3.1%	3.8%	3.0%	3.2%	3.3%
Boston	347,427	377,435	411,912	424,463	436,135	444,164	465,561	476,022	490,229	504,553	
<i>Boston Growth</i>		8.6%	9.1%	3.0%	2.7%	1.8%	4.8%	2.2%	3.0%	2.9%	3.0%
Dartmouth	231,125	225,308	236,213	238,763	251,175	254,142	260,099	265,657	273,253	280,024	
<i>Dartmouth Growth</i>		-2.5%	4.8%	1.1%	5.2%	1.2%	2.3%	2.1%	2.9%	2.5%	2.2%
Lowell	351,922	387,313	417,850	428,306	454,350	474,744	495,294	517,221	534,401	551,908	
<i>Lowell Growth</i>		10.1%	7.9%	2.5%	6.1%	4.5%	4.3%	4.4%	3.3%	3.3%	4.0%
Medical	949,379	811,896	987,866	942,132	907,932	943,605	972,610	1,003,173	1,034,364	1,070,931	
<i>Medical Growth</i>		-14.5%	21.7%	-4.6%	-3.6%	3.9%	3.1%	3.1%	3.1%	3.5%	3.4%
Central	86,791	97,339	104,744	108,938	115,358	114,899	116,062	117,127	118,332	119,803	
<i>Central Growth</i>		12.2%	7.6%	4.0%	5.9%	-0.4%	1.0%	0.9%	1.0%	1.2%	0.8%
Total	2,899,396	2,882,629	3,246,029	3,273,391	3,328,501	3,435,626	3,552,335	3,670,687	3,781,216	3,901,264	
<i>Total Growth</i>		-0.6%	12.6%	0.8%	1.7%	3.2%	3.4%	3.3%	3.0%	3.2%	3.2%

University Expenses: Drivers

Average Annual Growth FY19-23:
\$115.6 million or 3.2%



University Expenses: by Program Area

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	Actual				Budget	Forecast					Average
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
<i>\$ in Thousands</i>											
(1) E&G (ABDL)	1,497,345	1,546,676	1,613,294	1,708,158	1,785,948	1,851,000	1,923,723	1,992,436	2,055,968	2,122,867	
<i>E&G Growth</i>		3.3%	4.3%	5.9%	4.6%	3.6%	3.9%	3.6%	3.2%	3.3%	3.5%
Research (ABDL)	205,972	211,109	230,981	235,562	257,014	259,840	266,467	274,418	282,546	290,723	
<i>Research Growth</i>		2.5%	9.4%	2.0%	9.1%	1.1%	2.6%	3.0%	3.0%	2.9%	2.5%
Auxiliary (ABDL)	231,252	274,770	330,577	334,935	352,530	356,306	363,523	374,202	382,817	391,787	
<i>Auxiliary Growth</i>		18.8%	20.3%	1.3%	5.3%	1.1%	2.0%	2.9%	2.3%	2.3%	2.1%
(2) Other (Med)	665,013	568,199	757,329	677,349	666,763	688,925	704,802	720,432	734,716	754,051	
<i>Other Growth</i>		-14.6%	33.3%	-10.6%	-1.6%	3.3%	2.3%	2.2%	2.0%	2.6%	2.5%
Law School	7,997	8,092	7,820	7,728	8,103	8,177	8,423	8,838	9,068	9,158	
<i>Law School Growth</i>		1.2%	-3.4%	-1.2%	4.9%	0.9%	3.0%	4.9%	2.6%	1.0%	2.5%
Independent Business Lines	369,564	346,517	347,392	361,099	333,970	348,720	364,287	380,829	398,179	416,394	
<i>Independent Business Lines Growth</i>		-6.2%	0.3%	3.9%	-7.5%	4.4%	4.5%	4.5%	4.6%	4.6%	4.5%
Total	2,899,396	2,882,629	3,246,030	3,273,391	3,328,502	3,435,625	3,552,335	3,670,687	3,781,216	3,901,263	
<i>Total Growth</i>		-0.6%	12.6%	0.8%	1.7%	3.2%	3.4%	3.3%	3.0%	3.2%	3.2%

(1) ABDL: Amherst, Boston, Dartmouth, Lowell

(2) Other: 85% of expenses are for the Medical School Research and Education; the remaining 15% are for ABDL costs not reflected in other

Expense Drivers: Assumptions

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- ❑ **Salaries & Fringe:**
 - ❑ Collective bargaining increases beginning in FY18 of 2.0% or \$26-31 million annually.
 - ❑ State funding for collective bargaining beginning in FY18 included at 2.0% or \$12-15 million annually.
 - ❑ Annual fringe rate increase of 4.5% based on historical average.

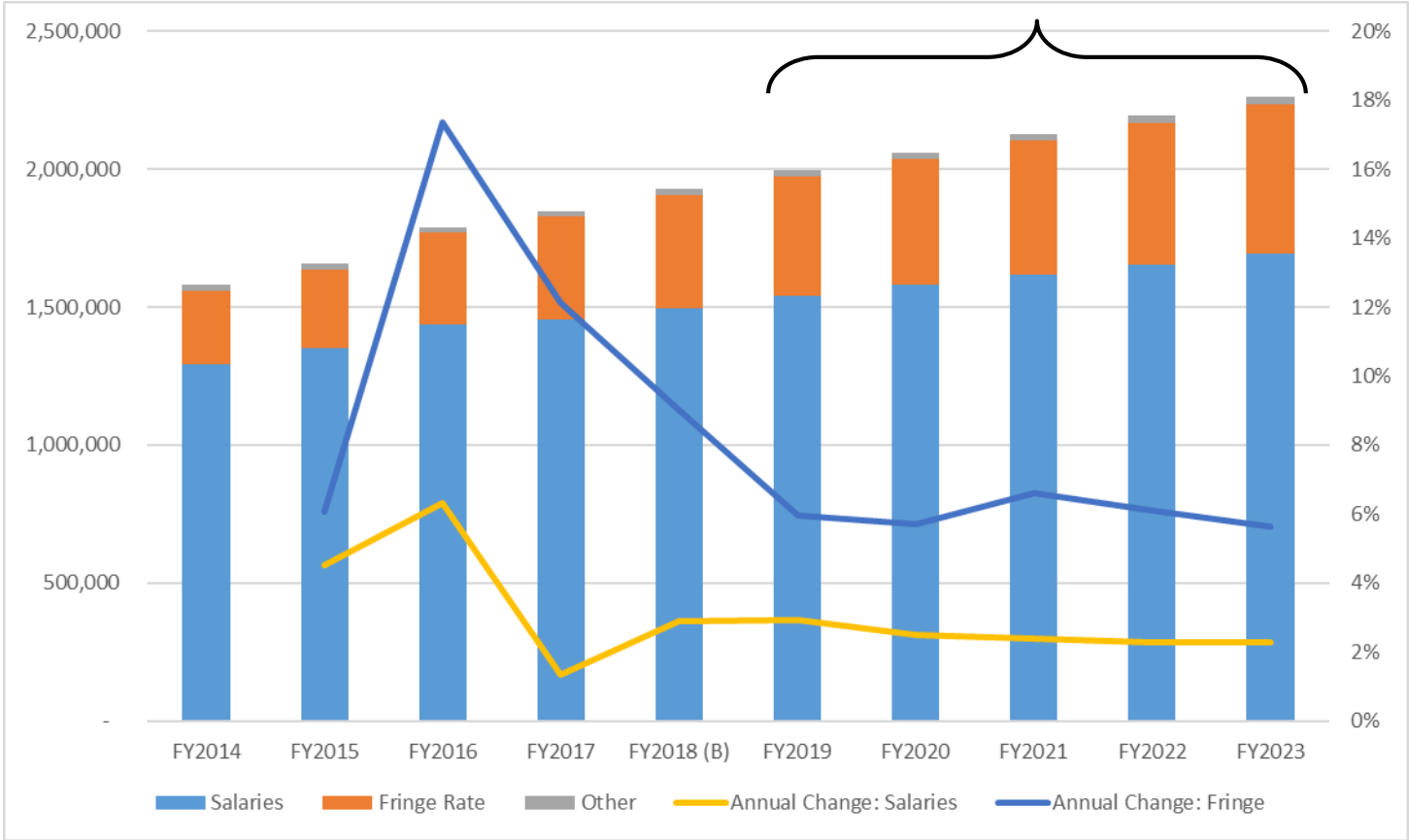
- ❑ **Staffing:** Consistent with enrollment, research opportunities and other programmatic needs.

- ❑ **Capital & Debt:** Reflects final borrowing required to fully implement the current capital plan; Amherst built in planning amount for projects not yet approved; Medical did not build in borrowing or revenues / expenses associated with the VA project pending its final federal approval; the impact of including this project is immaterial to the ratios.

- ❑ **Financial Aid:** Increases consistent with tuition increase and to meet student need.

Expense Drivers: Salaries & Fringe

Average Annual Growth FY19-23:
 Salaries = \$37 million or 2%; Fringe = \$28 million or 6%

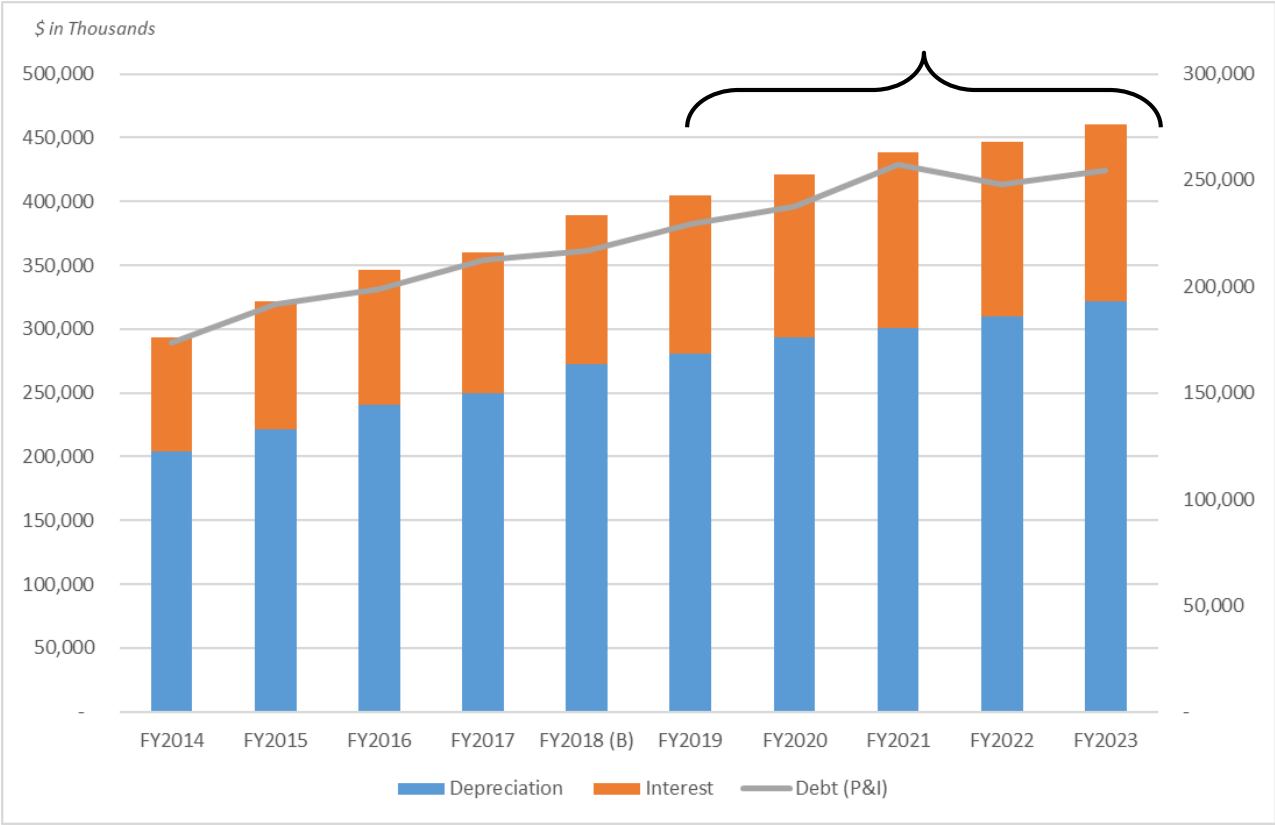


Expense Drivers: Staffing

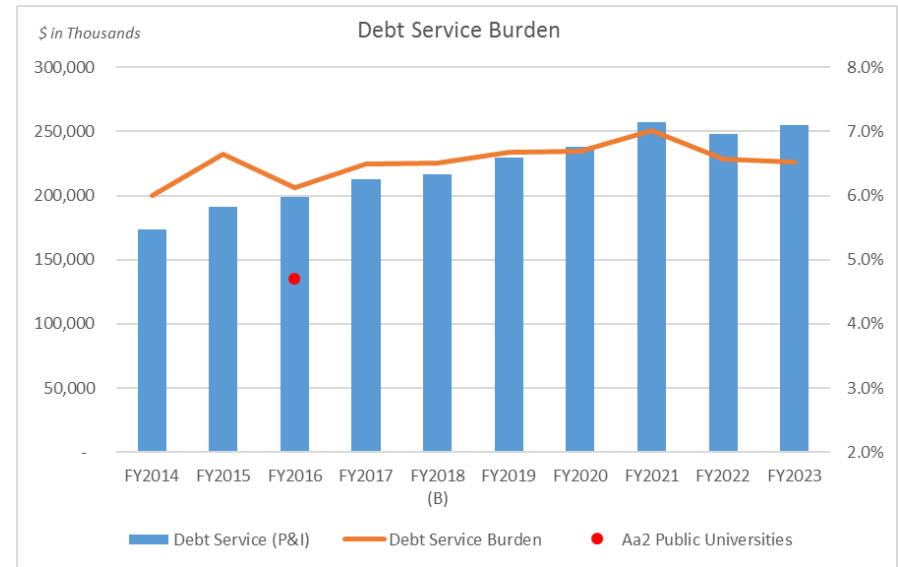
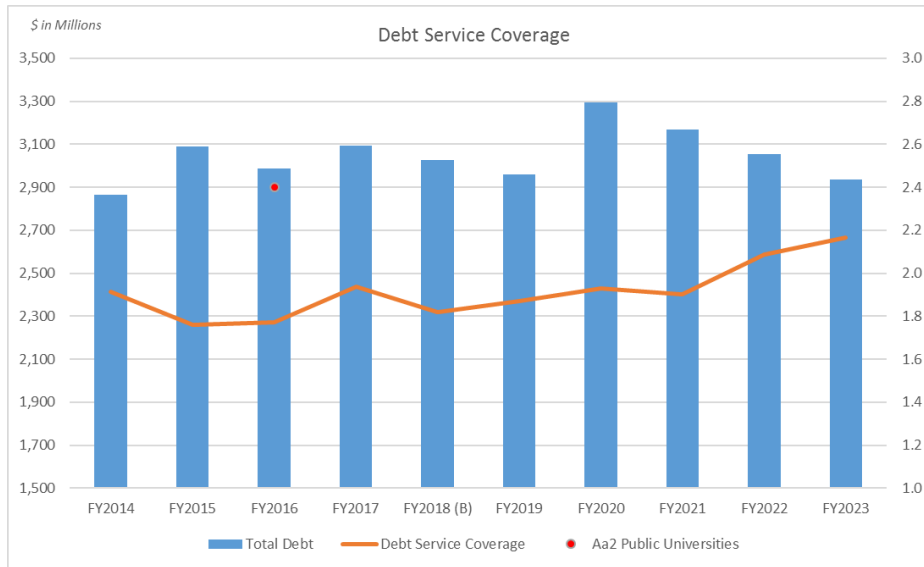
FTE	Actual			Budget			Forecast				Average
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
Amherst	5,239	5,431	5,482	5,537	5,529	5,628	5,643	5,658	5,673	5,688	
<i>Amherst Growth</i>		3.7%	0.9%	1.0%	-0.2%	1.8%	0.3%	0.3%	0.3%	0.3%	0.6%
Boston	2,149	2,108	2,197	2,176	2,087	2,046	2,046	2,046	2,046	2,046	
<i>Boston Growth</i>		-1.9%	4.2%	-1.0%	-4.1%	-2.0%	0.0%	0.0%	0.0%	0.0%	-0.4%
Dartmouth	1,187	1,185	1,194	1,207	1,207	1,207	1,213	1,231	1,250	1,270	
<i>Dartmouth Growth</i>		-0.2%	0.8%	1.0%	0.0%	0.0%	0.5%	1.5%	1.5%	1.6%	1.0%
Lowell	1,503	1,746	1,834	1,844	1,932	1,975	2,008	2,043	2,059	2,076	
<i>Lowell Growth</i>		16.2%	5.0%	0.5%	4.8%	2.2%	1.7%	1.7%	0.8%	0.8%	1.5%
Medical	3,574	3,556	3,571	3,566	3,668	3,699	3,722	3,762	3,801	3,826	
<i>Medical Growth</i>		-0.5%	0.4%	-0.1%	2.9%	0.8%	0.6%	1.1%	1.0%	0.7%	0.8%
Central	396	423	422	391	417	419	421	423	425	427	
<i>Central Growth</i>		6.6%	-0.3%	-7.2%	6.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Total	14,048	14,449	14,700	14,720	14,839	14,973	15,052	15,162	15,254	15,332	
<i>Total Growth</i>		2.9%	1.7%	0.1%	0.8%	0.9%	0.5%	0.7%	0.6%	0.5%	0.7%

Expense Drivers: Depreciation & Interest

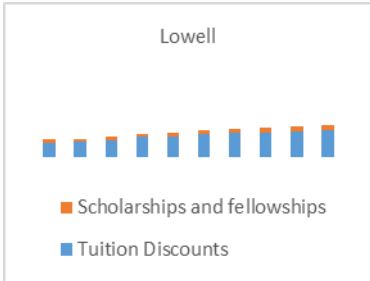
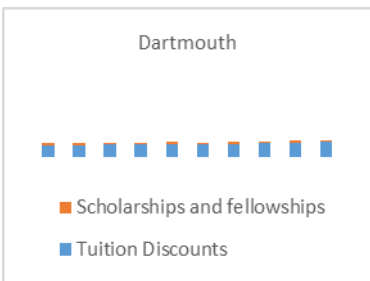
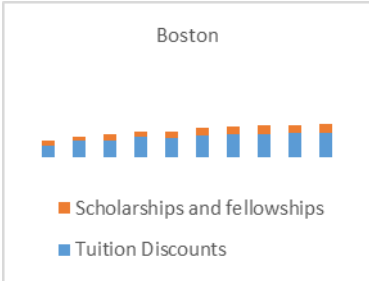
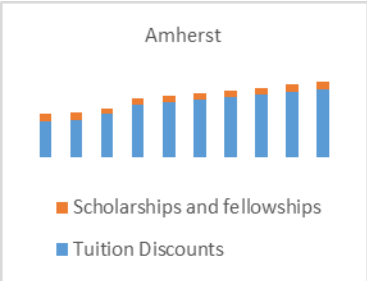
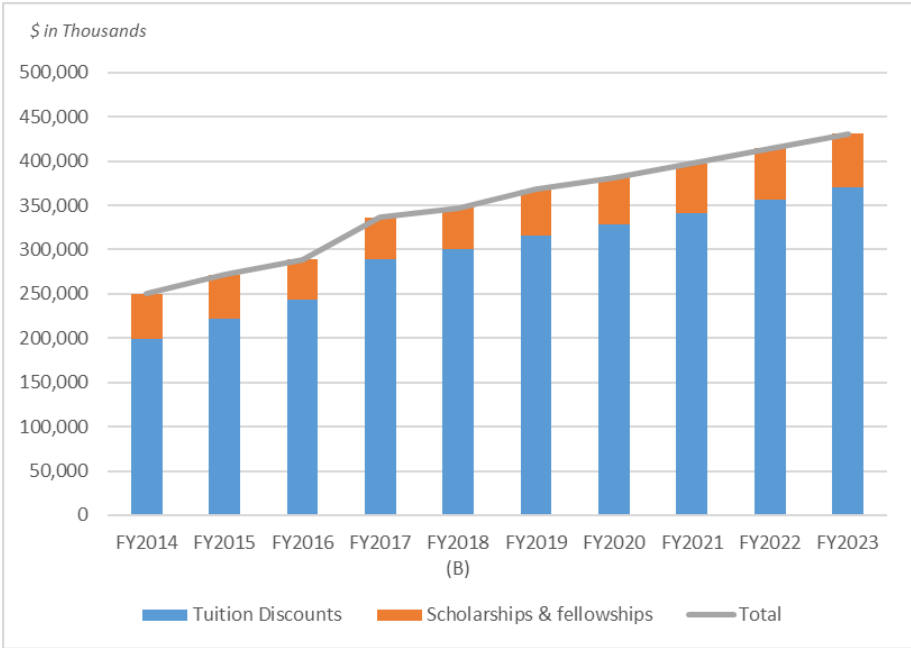
Average Annual Growth FY19-23:
\$8 million or 3.4%



Expense Drivers: Debt Metrics



Expense Drivers: University Financial Aid



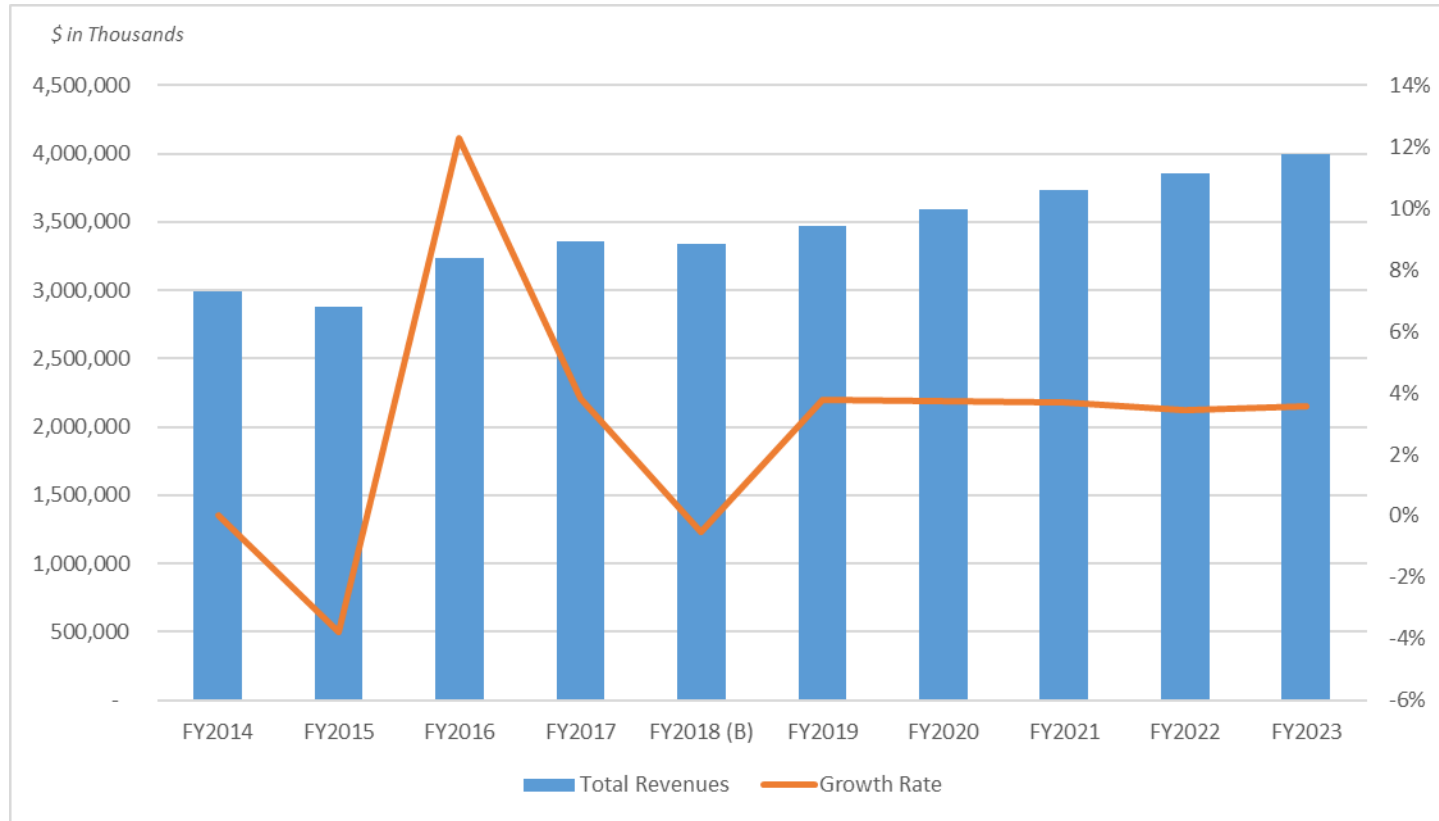


Revenue

Revenue: Modeling Assumptions

	FY2019	FY2020	FY2021	FY2022	FY2023
State Appropriation	0.0%	0.0%	0.0%	0.0%	0.0%
State Collective Bargaining	Year 2 = 2% / \$12.0M	Year 3 = 2% / \$14.1M	Year 1 = 2% / \$14.1M	Year 2 = 2% / \$14.5M	Year 3 = 2% / \$14.8M
Modeled Tuition - In State UG	No more than 2.5%	No more than 2.5%	No more than 2.5%	No more than 2.5%	No more than 2.5%
Modeled Tuition - Out of State UG	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate
Modeled Tuition - Grad	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate	3% / or higher if consistent with market rate
Non-Mandatory Fees	No more than 3%	No more than 3%	No more than 3%	No more than 3%	No more than 3%

University Revenue: Annual Changes

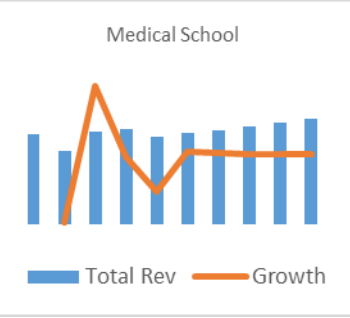
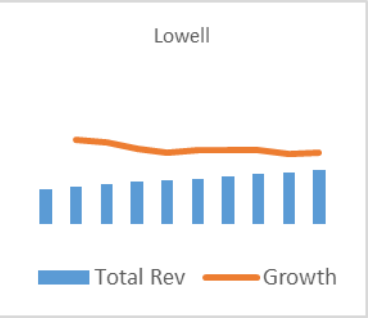
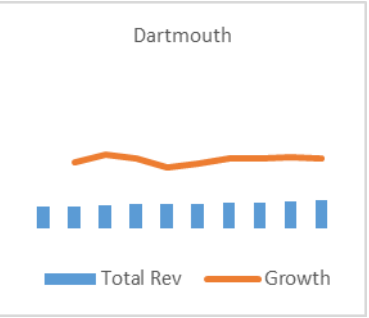
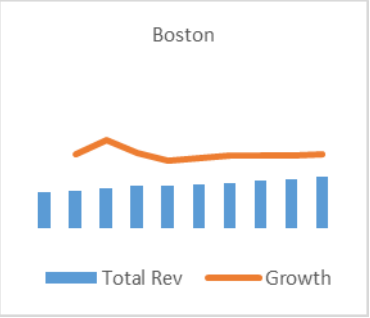
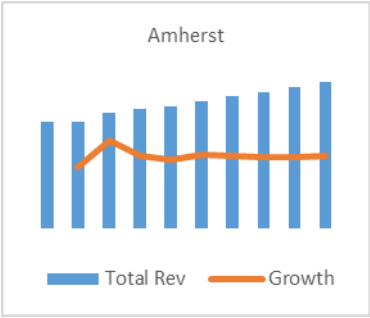
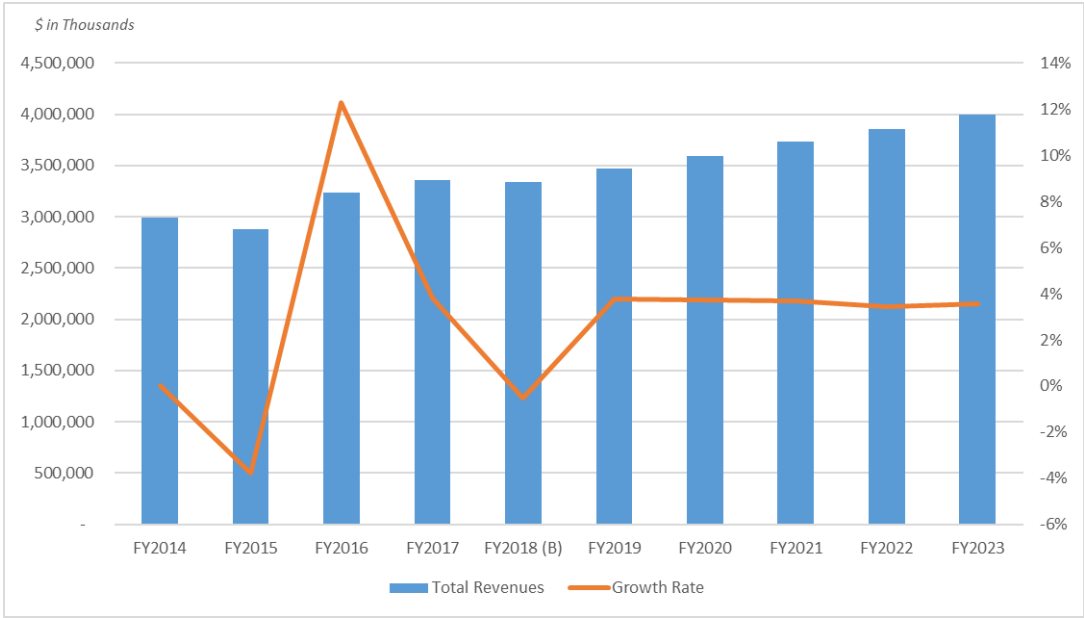


University Revenue: by Revenue Category

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\$ in Thousands	Actual				Budget	Forecast					Average
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
Gross Tuition & Fees	939,019	987,384	1,070,841	1,136,540	1,184,029	1,229,180	1,284,621	1,340,761	1,394,834	1,451,259	
<i>Gross Tuition & Fees Growth</i>		5.2%	8.5%	6.1%	4.2%	3.8%	4.5%	4.4%	4.0%	4.0%	4.2%
Tuition Discounts	(198,903)	(222,164)	(244,025)	(288,708)	(300,484)	(315,998)	(327,894)	(341,387)	(356,051)	(370,189)	
<i>Tuition Discounts Growth</i>		11.7%	9.8%	18.3%	4.1%	5.2%	3.8%	4.1%	4.3%	4.0%	4.3%
Net Tuition & Fees	740,116	765,220	826,816	847,832	883,545	913,182	956,726	999,375	1,038,783	1,081,069	
<i>Net Tuition & Fees Growth</i>		3.4%	8.0%	2.5%	4.2%	3.4%	4.8%	4.5%	3.9%	4.1%	4.1%
Grants	511,694	510,741	528,352	560,081	563,465	580,897	598,794	618,809	639,321	659,646	
<i>Grants Growth</i>		-0.2%	3.4%	6.0%	0.6%	3.1%	3.1%	3.3%	3.3%	3.2%	3.2%
Sales & Service, Educational	21,792	25,601	27,500	28,910	32,059	33,464	34,193	34,942	35,695	36,435	
<i>Sales & Service, Educational Growth</i>		17.5%	7.4%	5.1%	10.9%	4.4%	2.2%	2.2%	2.2%	2.1%	2.6%
Auxiliary Enterprises	349,485	362,193	383,281	400,822	413,397	423,897	436,687	450,246	463,728	477,245	
<i>Auxiliary Growth</i>		3.6%	5.8%	4.6%	3.1%	2.5%	3.0%	3.1%	3.0%	2.9%	2.9%
Other Operating	250,665	136,954	307,286	233,717	216,227	221,416	219,523	218,066	217,534	220,233	
<i>Other Operating Growth</i>		-45.4%	124.4%	-23.9%	-7.5%	2.4%	-0.9%	-0.7%	-0.2%	1.2%	0.4%
State	570,618	621,200	669,748	720,817	728,222	770,357	800,919	832,109	864,254	897,356	
<i>State Growth</i>		8.9%	7.8%	7.6%	1.0%	5.8%	4.0%	3.9%	3.9%	3.8%	4.3%
Other Non Operating	214,767	144,964	162,741	195,089	175,969	179,490	183,477	187,611	191,695	198,173	
<i>Other Non-Operating Growth</i>		-32.5%	12.3%	19.9%	-9.8%	2.0%	2.2%	2.3%	2.2%	3.4%	2.4%
Independent Business Lines (Med)	335,527	312,077	330,259	371,618	328,379	344,586	366,368	388,067	407,119	425,260	
<i>Independent Business Lines Growth</i>		-7.0%	5.8%	12.5%	-11.6%	4.9%	6.3%	5.9%	4.9%	4.5%	5.3%
Total	2,994,664	2,878,948	3,235,982	3,358,886	3,341,264	3,467,290	3,596,687	3,729,224	3,858,129	3,995,418	
<i>Total Growth</i>		-3.9%	12.4%	3.8%	-0.5%	3.8%	3.7%	3.7%	3.5%	3.6%	3.6%

Revenue: Annual Changes



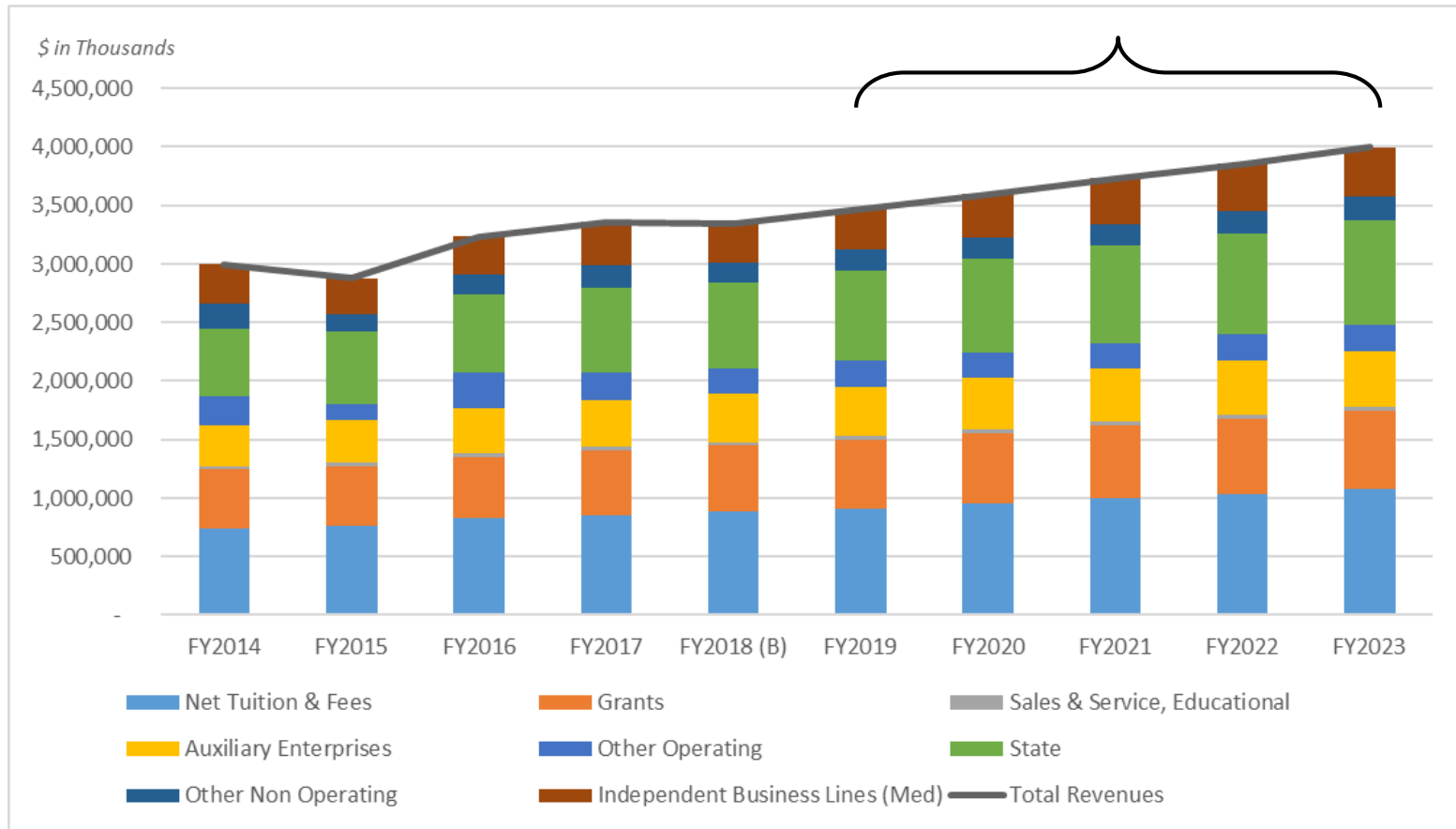
Revenue: by Campus

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\$ in Thousands	Actual				Budget	Forecast					Average
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
Amherst	1,081,421	1,082,614	1,174,441	1,216,054	1,248,270	1,300,334	1,346,486	1,393,275	1,441,903	1,492,560	
Amherst Growth		0.1%	8.5%	3.5%	2.6%	4.2%	3.5%	3.5%	3.5%	3.5%	3.6%
Boston	362,033	373,284	406,402	423,334	432,071	444,633	460,419	477,719	495,361	515,324	
Boston Growth		3.1%	8.9%	4.2%	2.1%	2.9%	3.6%	3.8%	3.7%	4.0%	3.6%
Dartmouth	227,596	231,692	241,281	248,385	249,309	252,910	260,735	269,004	278,159	286,067	
Dartmouth Growth		1.8%	4.1%	2.9%	0.4%	1.4%	3.1%	3.2%	3.4%	2.8%	2.8%
Lowell	361,901	390,156	418,400	439,843	457,034	477,952	500,507	523,718	542,181	563,268	
Lowell Growth		7.8%	7.2%	5.1%	3.9%	4.6%	4.7%	4.6%	3.5%	3.9%	4.3%
Medical	937,704	774,094	963,663	991,957	913,772	952,390	989,599	1,026,700	1,061,854	1,099,666	
Medical Growth		-17.4%	24.5%	2.9%	-7.9%	4.2%	3.9%	3.7%	3.4%	3.6%	3.8%
Central	101,757	99,843	107,621	117,659	116,634	116,413	117,830	119,274	120,748	122,251	
Central Growth		-1.9%	7.8%	9.3%	-0.9%	-0.2%	1.2%	1.2%	1.2%	1.2%	0.9%
Total	2,994,664	2,878,948	3,235,982	3,358,886	3,341,264	3,467,290	3,596,687	3,729,224	3,858,129	3,995,418	
Total Growth		-3.9%	12.4%	3.8%	-0.5%	3.8%	3.7%	3.7%	3.5%	3.6%	3.6%

University Revenue: Diverse Sources

Average Annual Growth FY19-23:
\$130 million or 3.6%



University Revenue: by Program Area

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	Actual				Budget	Forecast					Average
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
<i>\$ in Thousands</i>											
(1) E&G (ABDL)	1,514,735	1,563,696	1,673,418	1,749,548	1,787,422	1,862,859	1,937,016	2,012,568	2,086,459	2,165,532	
<i>E&G Growth</i>		3.2%	7.0%	4.5%	2.2%	4.2%	4.0%	3.9%	3.7%	3.8%	3.9%
Research (ABDL)	210,881	219,523	232,703	243,349	252,004	255,676	261,488	267,781	274,300	281,016	
<i>Research Growth</i>		4.1%	6.0%	4.6%	3.6%	1.5%	2.3%	2.4%	2.4%	2.4%	2.2%
Auxiliary (ABDL)	308,080	323,883	348,045	365,029	376,518	382,830	394,824	407,567	420,212	432,804	
<i>Auxiliary Growth</i>		5.1%	7.5%	4.9%	3.1%	1.7%	3.1%	3.2%	3.1%	3.0%	2.8%
(2) Other (Med)	629,483	511,148	722,615	657,066	645,480	670,708	686,657	703,420	719,957	740,883	
<i>Other Growth</i>		-18.8%	41.4%	-9.1%	-1.8%	3.9%	2.4%	2.4%	2.4%	2.9%	2.8%
Law School	3,781	3,401	3,430	3,280	2,816	3,388	3,330	3,481	3,470	3,845	
<i>Law School Growth</i>		-10.1%	0.9%	-4.4%	-14.1%	20.3%	-1.7%	4.5%	-0.3%	10.8%	6.7%
Independent Business Lines (Med)	371,468	348,487	349,215	391,643	345,012	361,442	383,565	405,847	425,525	444,324	
<i>Independent Business Lines Growth</i>		-6.2%	0.2%	12.1%	-11.9%	4.8%	6.1%	5.8%	4.8%	4.4%	5.2%
(3) Total	2,935,356	2,885,171	3,252,580	3,326,336	3,333,968	3,459,560	3,587,990	3,720,197	3,847,846	3,984,687	
<i>Total Growth</i>		-1.7%	12.7%	2.3%	0.2%	3.8%	3.7%	3.7%	3.4%	3.6%	3.6%

(1) *ABDL: Amherst, Boston, Dartmouth, Lowell*

(2) *Other: 85% of revenues are for the Medical School Research and Education; the remaining 15% are for ABDL revenues not reflected in other programs*

(3) *Revenue by program area excludes unrealized gains and losses consistent with the total revenue used to calculate the Operating Margin*

Revenue: Assumptions

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- ❑ **State Appropriation:** Base increase to reflect State portion of assumed collective bargaining increase starting in FY18 which is estimated at \$12-15 million annually.

- ❑ **Tuition increases:**
 - ❑ In State Undergraduate = 2.5%
 - ❑ Out of State and Graduate = 3.0%

- ❑ **Enrollment:** Increase of 6% over the projection period (1.2% annual average) based on campus plans and capacity.

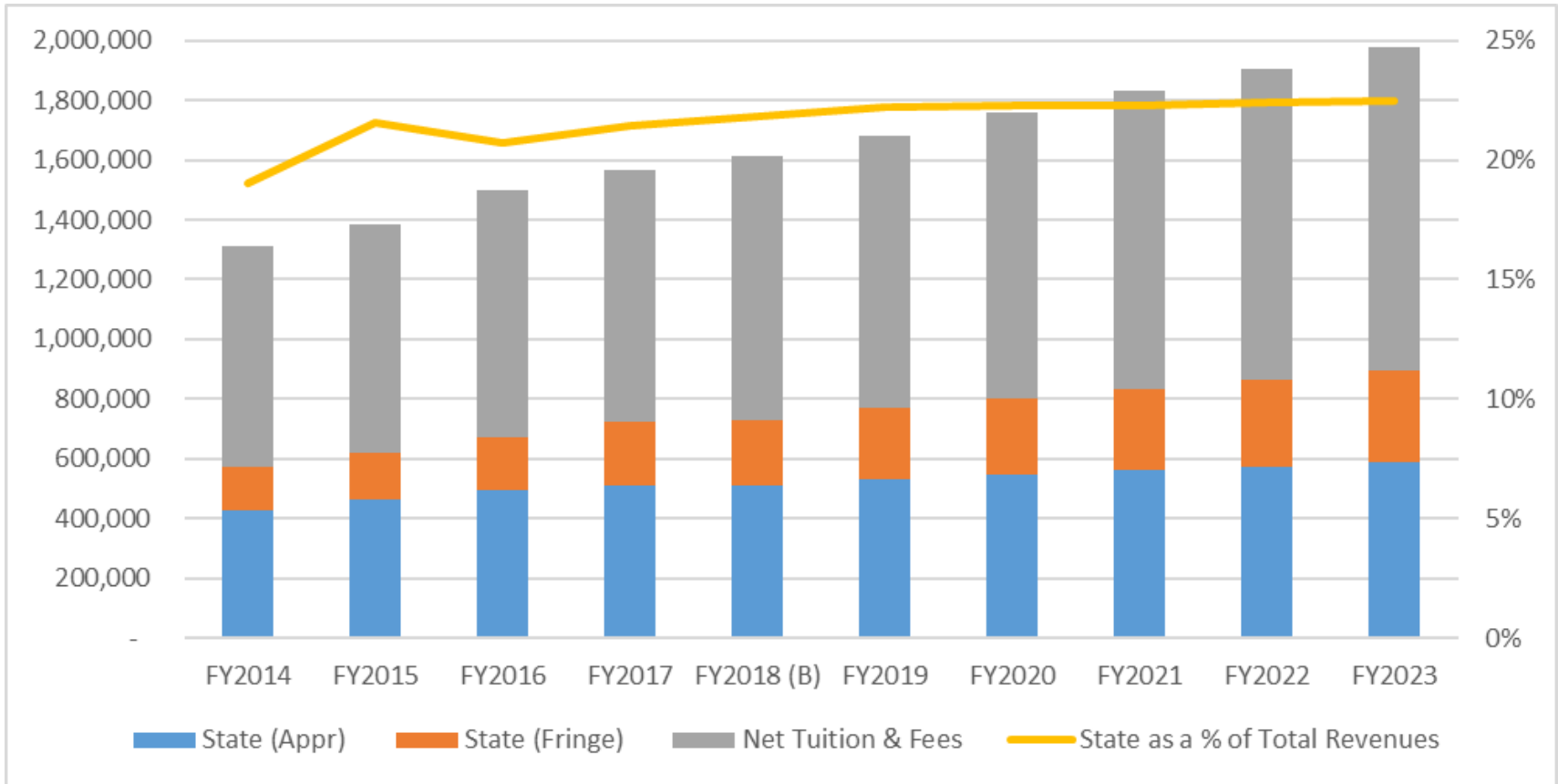
Revenue Sources: Enrollment Assumptions

FTE	Actual				Budget	Forecast					Average
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023	Annual
Amherst	27,007	27,098	27,696	28,340	28,570	28,910	29,254	29,601	29,953	30,308	
<i>Amherst Growth</i>		0.3%	2.2%	2.3%	0.8%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Boston	12,333	12,834	13,195	13,102	13,165	13,115	13,232	13,431	13,633	13,838	
<i>Boston Growth</i>		4.1%	2.8%	-0.7%	0.5%	-0.4%	0.9%	1.5%	1.5%	1.5%	1.0%
Dartmouth	7,865	7,930	7,766	7,557	7,558	7,305	7,377	7,478	7,580	7,597	
<i>Dartmouth Growth</i>		0.8%	-2.1%	-2.7%	0.0%	-3.3%	1.0%	1.4%	1.4%	0.2%	0.1%
Lowell	13,022	13,369	13,619	13,906	14,188	14,514	14,839	15,179	15,363	15,553	
<i>Lowell Growth</i>		2.7%	1.9%	2.1%	2.0%	2.3%	2.2%	2.3%	1.2%	1.2%	1.9%
Medical	1,104	1,071	1,056	1,073	1,107	1,141	1,177	1,189	1,189	1,189	
<i>Medical Growth</i>		-3.0%	-1.4%	1.6%	3.2%	3.1%	3.2%	1.0%	0.0%	0.0%	1.4%
Total	61,331	62,302	63,332	63,978	64,587	64,985	65,878	66,879	67,718	68,486	
<i>Total Growth</i>		1.6%	1.7%	1.0%	1.0%	0.6%	1.4%	1.5%	1.3%	1.1%	1.2%

Revenue Sources: Online Baseline

<i>\$ in Thousands</i>	Budget		Forecast				Change	
	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023	\$	%
Amherst	49,911	53,465	57,272	61,349	65,717	70,397	20,486	41%
Boston	19,791	19,067	20,857	22,815	24,957	27,301	7,510	38%
Dartmouth	9,799	10,821	11,903	13,093	14,402	15,843	6,044	62%
Lowell	37,761	40,026	42,628	45,399	48,350	51,735	13,974	37%
Medical	55	55	55	55	55	55	-	0
Total	117,317	123,434	132,715	142,711	153,481	165,330	48,013	41%

Revenue Sources: State Appropriation

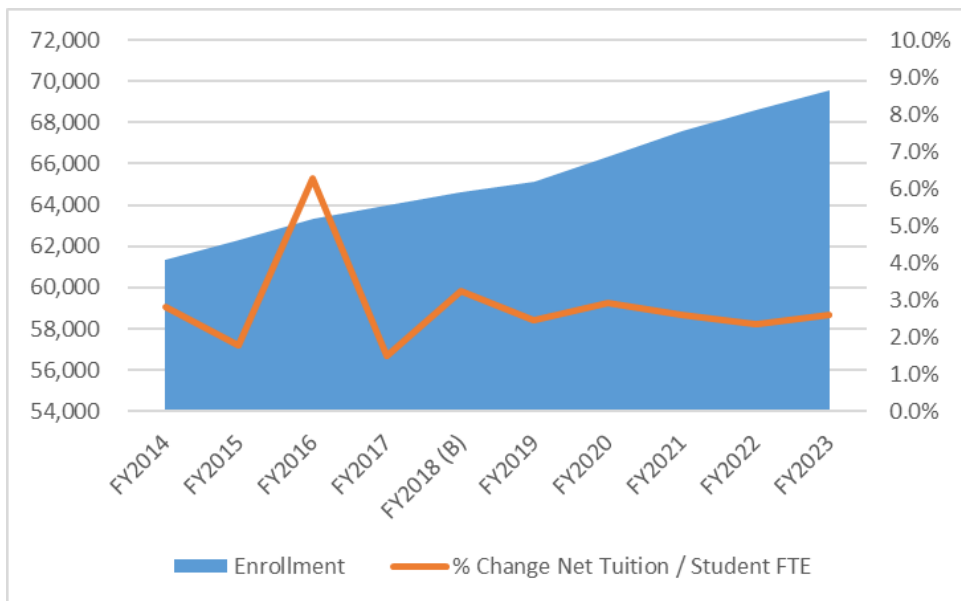




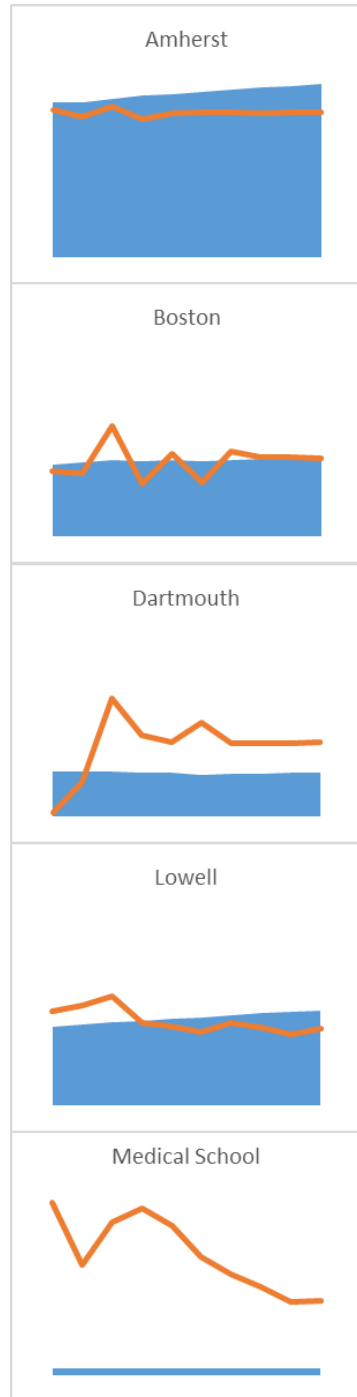
Ratios

Enrollment & Percent Change in Net Tuition

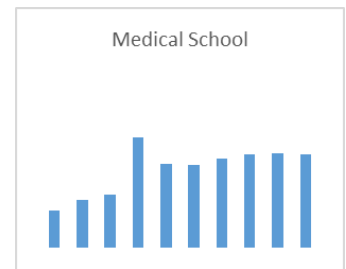
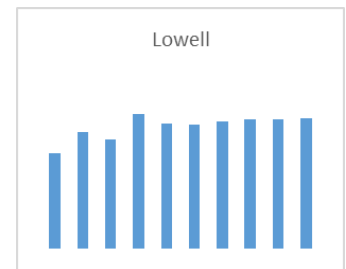
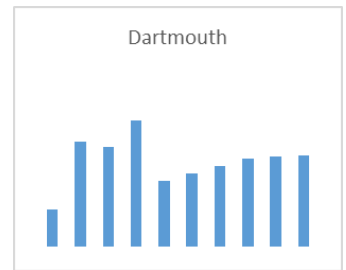
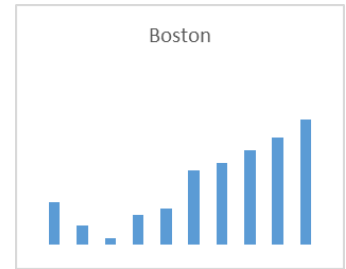
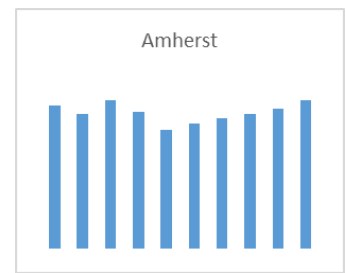
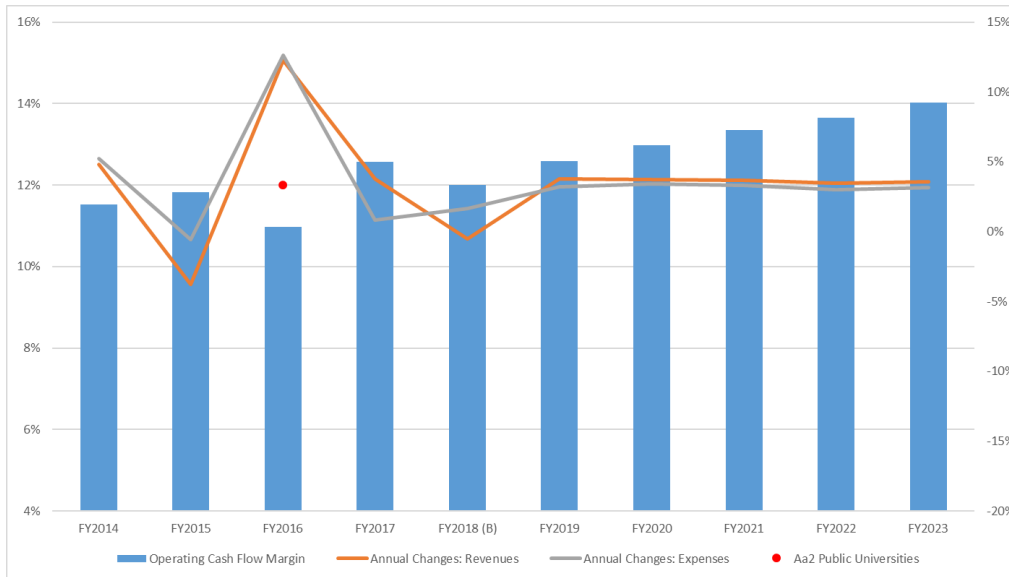
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	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023
Amherst	3.5%	0.8%	4.9%	-0.2%	2.3%	2.8%	2.7%	2.5%	2.5%	2.6%
Boston	1.9%	1.7%	7.1%	0.5%	3.5%	0.6%	4.2%	3.5%	3.5%	3.4%
Dartmouth	-5.1%	-1.7%	8.1%	3.8%	3.8%	5.3%	2.9%	2.9%	2.9%	3.1%
Lowell	4.7%	5.3%	6.3%	3.5%	2.9%	2.4%	3.4%	3.0%	2.1%	2.8%
Medical	14.2%	7.0%	11.9%	13.5%	12.3%	8.0%	6.0%	4.6%	2.9%	3.0%
University	2.8%	1.8%	6.3%	1.5%	3.3%	2.4%	2.9%	2.6%	2.3%	2.6%



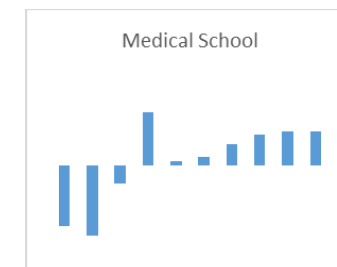
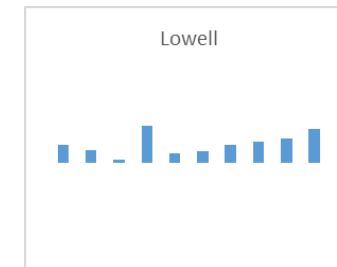
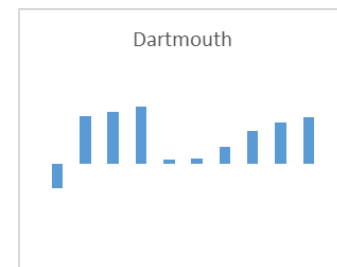
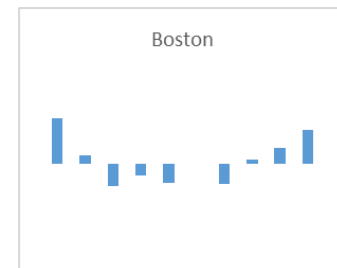
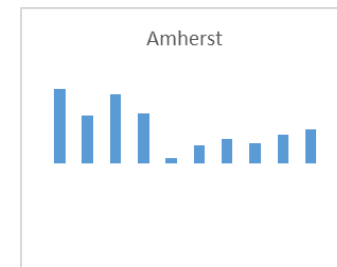
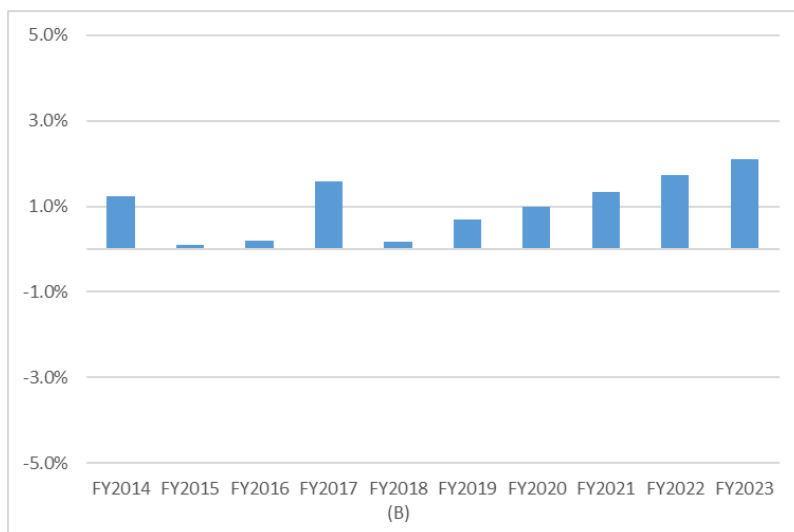
Operating Cash Flow Margin



	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023
Amherst	15.2%	14.6%	15.6%	14.8%	13.4%	13.9%	14.3%	14.6%	15.0%	15.5%
Boston	8.0%	6.4%	5.4%	7.1%	7.6%	10.3%	10.8%	11.7%	12.6%	13.9%
Dartmouth	7.6%	12.5%	12.1%	13.9%	9.7%	10.2%	10.7%	11.3%	11.4%	11.5%
Lowell	11.8%	13.3%	12.8%	14.6%	13.9%	13.8%	14.0%	14.2%	14.1%	14.3%
Medical	7.6%	8.4%	8.7%	12.8%	11.0%	10.9%	11.3%	11.6%	11.7%	11.6%
Central	19.4%	14.6%	17.0%	17.7%	10.7%	11.5%	12.5%	13.0%	13.4%	13.7%
University	11.5%	11.8%	11.0%	12.6%	12.0%	12.6%	13.0%	13.4%	13.7%	14.0%

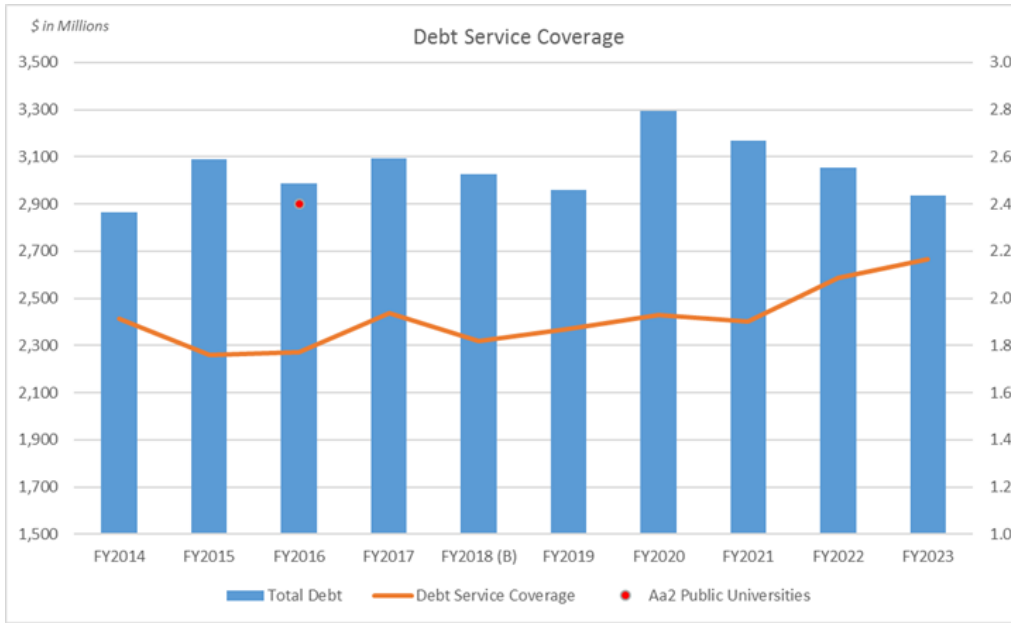
Operating Margin

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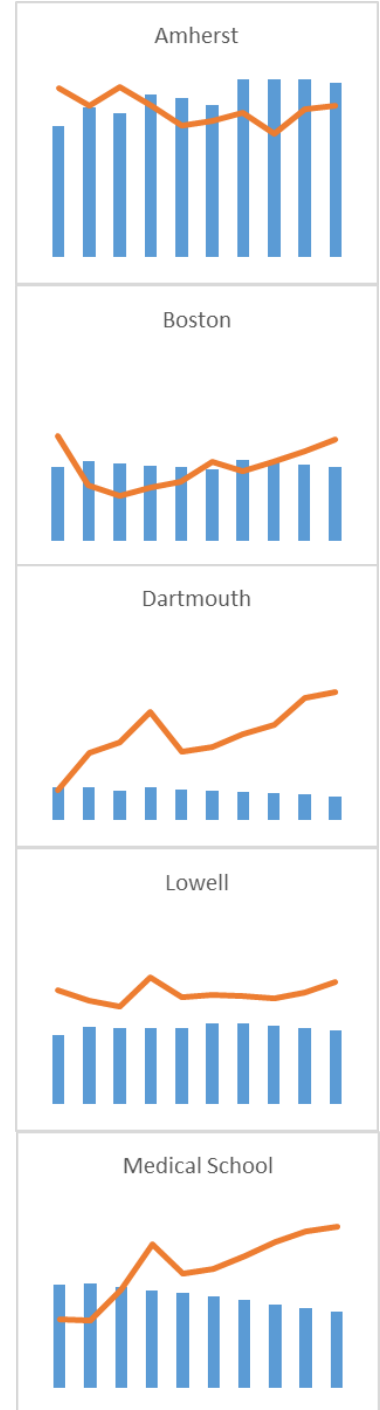


	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023
Amherst	4.4%	2.8%	4.1%	3.0%	0.3%	1.1%	1.5%	1.2%	1.7%	2.0%
Boston	2.7%	0.5%	-1.3%	-0.7%	-1.2%	0.0%	-1.2%	0.3%	0.9%	2.0%
Dartmouth	-1.5%	2.8%	3.1%	3.4%	0.2%	0.3%	1.0%	2.0%	2.5%	2.8%
Lowell	1.0%	0.8%	0.2%	2.2%	0.6%	0.7%	1.0%	1.2%	1.4%	2.0%
Medical	-3.6%	-4.2%	-1.1%	3.2%	0.2%	0.5%	1.2%	1.8%	2.0%	2.0%
Central	14.7%	-1.5%	0.7%	6.4%	1.1%	1.3%	1.5%	1.8%	2.0%	2.0%
University	1.2%	0.1%	0.2%	1.6%	0.2%	0.7%	1.0%	1.3%	1.7%	2.1%

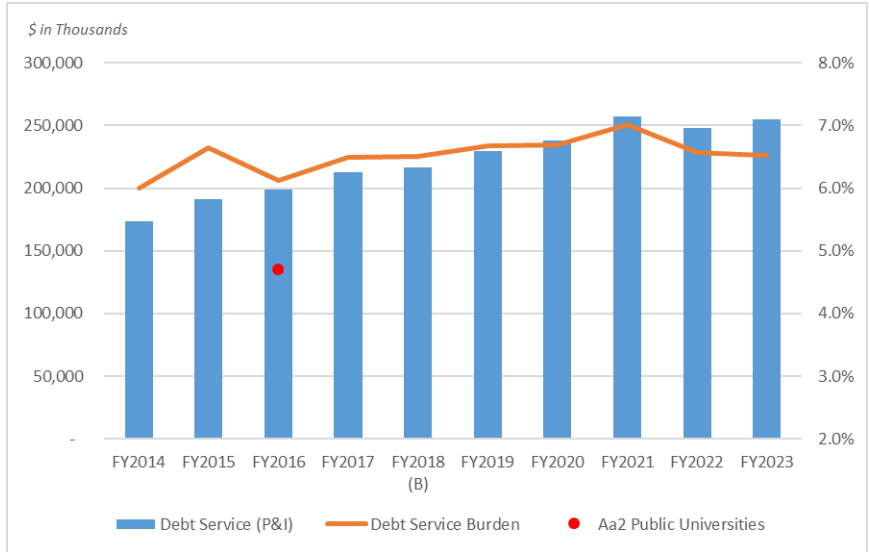
Debt Service Coverage



	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023
Amherst	2.5	2.3	2.5	2.3	2.1	2.1	2.2	2.0	2.3	2.3
Boston	1.7	1.2	1.0	1.1	1.2	1.4	1.3	1.4	1.6	1.7
Dartmouth	0.8	1.3	1.4	1.8	1.3	1.4	1.5	1.6	1.9	2.0
Lowell	1.8	1.7	1.7	2.0	1.8	1.8	1.8	1.8	1.8	1.9
Medical	1.3	1.3	1.7	2.2	1.9	1.9	2.1	2.2	2.4	2.4
Central	N/A	4.7	4.6	5.6	2.4	1.7	1.7	1.8	1.9	1.9
University	1.9	1.8	1.8	1.9	1.8	1.9	1.9	1.9	2.1	2.2



Debt Service Burden



	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023
Amherst	6.2%	6.4%	6.4%	6.6%	6.5%	6.6%	6.5%	7.4%	6.7%	6.8%
Boston	4.5%	5.2%	4.9%	5.9%	5.9%	6.8%	7.6%	7.7%	7.7%	7.9%
Dartmouth	8.5%	9.3%	8.4%	7.8%	7.1%	7.2%	6.9%	6.8%	5.8%	5.7%
Lowell	6.3%	7.6%	7.5%	7.3%	7.7%	7.6%	7.8%	8.0%	7.7%	7.3%
Medical	5.6%	6.2%	5.2%	6.0%	5.9%	5.7%	5.5%	5.3%	5.1%	4.9%
Central	0.1%	3.1%	3.7%	3.4%	3.4%	5.1%	5.1%	5.2%	5.2%	5.2%
University	6.0%	6.6%	6.1%	6.5%	6.5%	6.7%	6.7%	7.0%	6.6%	6.5%

Amherst

Boston

Dartmouth

Lowell

Medical School

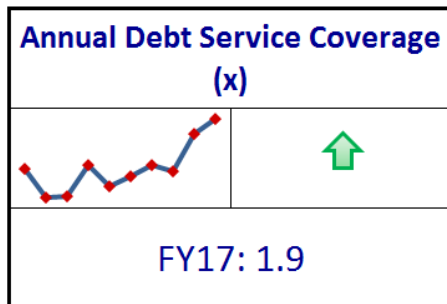
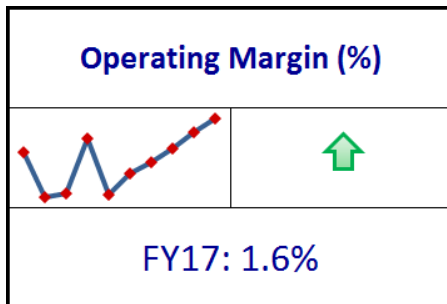
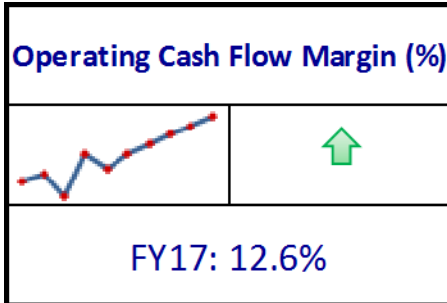


Take Aways

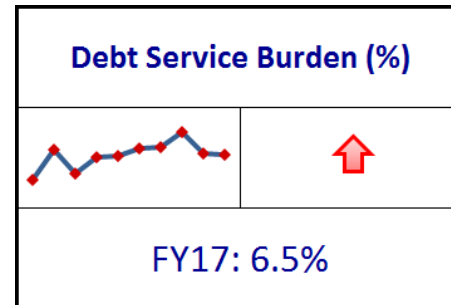
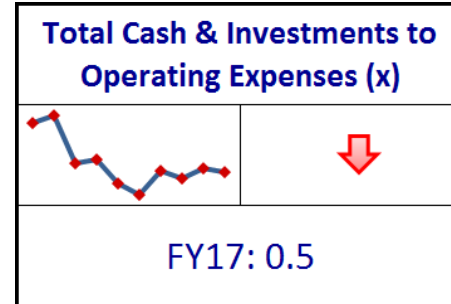
Key Take Aways

43

Improving



On Watch





Campus Data

Amherst: Revenue & Expenses

45

(\$ in Thousands)

AMHERST

Revenues	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Gross Tuition & Fees	433,244	440,723	481,072	513,450	531,480	552,679	574,886	597,628	621,321	646,009
Tuition Discounts	(95,477)	(99,261)	(114,881)	(139,441)	(145,412)	(151,028)	(157,289)	(164,631)	(172,059)	(179,440)
Net Tuition & Fees	337,767	341,462	366,191	374,009	386,068	401,652	417,597	432,997	449,263	466,569
Grants	145,206	137,136	145,217	148,554	153,142	157,607	162,207	166,944	171,824	176,850
Sales & Service, Educational	8,089	8,908	8,935	9,137	9,509	9,796	10,092	10,397	10,710	11,033
Auxiliary Enterprises	214,759	223,784	241,428	256,110	259,773	267,970	276,526	285,353	294,460	303,856
Other Operating	16,137	19,010	22,413	16,575	19,072	19,346	19,625	19,907	20,194	20,484
State appropriations	272,676	298,423	319,541	345,411	350,009	370,475	385,266	400,375	415,967	432,046
Other NonOperating	86,787	53,891	70,716	66,258	70,697	73,487	75,173	77,302	79,485	81,721
Total Revenues	1,081,421	1,082,614	1,174,441	1,216,054	1,248,270	1,300,334	1,346,486	1,393,275	1,441,903	1,492,560
% Growth		0.1%	8.5%	3.5%	2.6%	4.2%	3.5%	3.5%	3.5%	3.5%
Expenses	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Salaries & Fringe	591,485	621,583	676,474	712,315	731,274	769,780	795,130	821,220	848,085	875,729
Non-personnel	289,728	295,012	308,850	306,743	334,783	334,658	344,471	353,838	363,058	370,589
Scholarships and fellowships	20,991	20,215	14,452	17,378	16,157	16,781	17,477	18,292	19,118	19,938
Depreciation	82,687	89,442	96,614	100,409	118,802	119,981	124,549	128,991	132,190	138,056
Interest	25,609	29,820	32,417	36,250	38,361	40,213	39,971	49,612	50,262	53,451
Total Expenses	1,010,500	1,056,072	1,128,807	1,173,095	1,239,377	1,281,414	1,321,598	1,371,955	1,412,713	1,457,763
% Growth		4.5%	6.9%	3.9%	5.7%	3.4%	3.1%	3.8%	3.0%	3.2%

Amherst: Enrollment

46

Students (FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Undergraduate (In State)	16,557	16,612	17,003	17,412	17,492	17,592	17,692	17,792	17,892	17,992
Undergraduate (Out of State)	4,937	5,012	5,166	5,176	5,226	5,276	5,326	5,376	5,426	5,476
Total Undergraduate	21,494	21,624	22,169	22,588	22,718	22,868	23,018	23,168	23,318	23,468
Graduate (In State)	1,120	1,092	1,040	1,052	1,077	1,102	1,127	1,152	1,177	1,202
Graduate (Out of State)	2,469	2,365	2,377	2,444	2,519	2,594	2,669	2,744	2,819	2,894
Total Graduate	3,589	3,457	3,417	3,497	3,597	3,697	3,797	3,897	3,997	4,097
Total Continuing Ed.	1,924	2,017	2,111	2,256	2,256	2,346	2,440	2,537	2,639	2,744
Total Enrollment	27,007	27,098	27,696	28,340	28,570	28,910	29,254	29,601	29,953	30,308
% Growth		0.3%	2.2%	2.3%	0.8%	1.2%	1.2%	1.2%	1.2%	1.2%

Amherst: Staffing

47

Faculty & Staff (Employee FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Restricted										
Faculty	31.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0
Professional	312.2	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0	170.0
Classified	66.9	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
Total Restricted	410.1	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0	289.0
Unrestricted										
Faculty	1,406.5	1,429.0	1,467.0	1,488.9	1,512.1	1,526.9	1,541.9	1,556.9	1,571.9	1,586.9
Professional	1,409.1	1,593.0	1,600.2	1,620.7	1,600.3	1,644.7	1,644.7	1,644.7	1,644.7	1,644.7
Classified	2,013.2	2,120.0	2,125.5	2,138.6	2,127.4	2,167.0	2,167.0	2,167.0	2,167.0	2,167.0
Total Unrestricted	4,828.8	5,142.0	5,192.7	5,248.2	5,239.8	5,338.6	5,353.6	5,368.6	5,383.6	5,398.6
Total Faculty & Staff	5,238.9	5,431.0	5,481.7	5,537.2	5,528.8	5,627.6	5,642.6	5,657.6	5,672.6	5,687.6
% Growth		3.7%	0.9%	1.0%	-0.2%	1.8%	0.3%	0.3%	0.3%	0.3%

Amherst: Key Ratios

48

Key Ratios	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Margin (%)	4.4%	2.8%	4.1%	3.0%	0.3%	1.1%	1.5%	1.2%	1.7%	2.0%
Operating Margin (\$)	46,270	30,624	48,150	36,052	4,006	13,796	19,722	16,111	23,937	29,500
Operating Cash Flow Margin (%)	15.2%	14.6%	15.6%	14.8%	13.4%	13.9%	14.3%	14.6%	15.0%	15.5%
Operating Cash Flow Margin (\$)	157,934	156,493	181,720	176,745	165,582	178,975	189,776	200,484	213,319	229,475
Debt Service Burden (%)	6.2%	6.4%	6.4%	6.6%	6.5%	6.6%	6.5%	7.4%	6.7%	6.8%
Annual Debt Service Coverage (x)	2.5	2.3	2.5	2.3	2.1	2.1	2.2	2.0	2.3	2.3

Boston: Revenue & Expenses

49

(\$ in Thousands)

BOSTON

Revenues	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Gross Tuition & Fees	193,337	213,968	232,355	240,235	247,723	254,648	266,204	278,022	290,441	303,497
Tuition Discounts	(33,020)	(44,311)	(45,471)	(53,820)	(53,202)	(59,668)	(61,167)	(62,712)	(64,323)	(66,079)
Net Tuition & Fees	160,317	169,657	186,884	186,415	194,521	194,980	205,037	215,309	226,118	237,418
Grants	47,435	48,561	53,927	58,201	58,847	58,201	58,201	58,201	58,201	58,201
Sales & Service, Educational	3,433	4,197	3,709	3,979	3,957	3,979	3,979	3,979	3,979	3,979
Auxiliary Enterprises	9,981	9,211	5,965	6,167	6,116	9,659	9,670	9,681	9,692	9,703
Other Operating	998	854	2,837	1,818	1,296	3,293	2,864	2,879	2,896	2,912
State appropriations	100,553	110,295	117,987	130,157	131,773	139,204	144,779	150,462	156,338	162,384
Other NonOperating	39,316	33,347	35,093	36,597	35,561	35,317	35,889	37,208	38,137	40,726
Total Revenues	362,033	376,122	406,402	423,334	432,071	444,633	460,419	477,719	495,361	515,324
% Growth		3.9%	8.1%	4.2%	2.1%	2.9%	3.6%	3.8%	3.7%	4.0%
Expenses	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Salaries & Fringe	229,512	244,755	266,100	275,330	277,084	273,827	281,628	289,725	297,963	306,426
Non-personnel	86,312	95,721	101,713	98,250	104,861	103,960	107,483	110,019	112,599	115,253
Scholarships and fellowships	11,654	12,254	16,047	16,161	15,201	19,728	20,420	21,139	21,892	22,706
Depreciation	13,284	16,572	18,988	22,246	25,711	29,474	34,014	33,460	34,900	35,968
Interest	6,665	8,133	9,064	12,476	13,278	17,175	22,016	21,679	22,875	24,200
Total Expenses	347,427	377,435	411,912	424,463	436,135	444,164	465,561	476,022	490,229	504,553
% Growth		8.6%	9.1%	3.0%	2.7%	1.8%	4.8%	2.2%	3.0%	2.9%



Boston: Enrollment

50

Students (FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Undergraduate (In State)	7,349	7,454	7,681	7,625	7,644	8,031	8,102	8,193	8,316	8,441
Undergraduate (Out of State)	1,208	1,372	1,470	1,403	1,410	1,382	1,394	1,424	1,446	1,467
Total Undergraduate	8,557	8,826	9,151	9,028	9,054	9,413	9,497	9,617	9,761	9,908
Graduate (In State)	1,232	1,209	1,083	993	1,008	1,021	1,030	1,052	1,068	1,084
Graduate (Out of State)	565	629	663	671	681	624	630	643	653	663
Total Graduate	1,797	1,838	1,746	1,664	1,689	1,645	1,660	1,695	1,721	1,747
Total Continuing Ed.	1,979	2,170	2,298	2,410	2,422	2,057	2,075	2,119	2,151	2,184
Total Enrollment	12,333	12,834	13,195	13,102	13,165	13,115	13,232	13,431	13,633	13,838
% Growth		4.1%	2.8%	-0.7%	0.5%	-0.4%	0.9%	1.5%	1.5%	1.5%

Boston: Staffing

51

Faculty & Staff (Employee FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Restricted										
Faculty	12.6	13.0	12.0	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Professional	149.0	131.0	130.0	108.6	108.6	108.6	108.6	108.6	108.6	108.6
Classified	11.5	11.0	12.0	17.6	17.6	17.6	17.6	17.6	17.6	17.6
Total Restricted	173.1	155.0	154.0	142.0	142.0	142.0	142.0	142.0	142.0	142.0
Unrestricted										
Faculty	903.6	892.0	934.0	892.9	864.0	892.9	892.9	892.9	892.9	892.9
Professional	701.4	709.0	760.0	794.2	734.6	684.2	684.2	684.2	684.2	684.2
Classified	371.3	352.0	349.0	346.8	346.8	326.8	326.8	326.8	326.8	326.8
Total Unrestricted	1,976.3	1,953.0	2,043.0	2,033.9	1,945.4	1,903.9	1,903.9	1,903.9	1,903.9	1,903.9
Total Faculty & Staff	2,149.4	2,108.0	2,197.0	2,175.9	2,087.4	2,045.9	2,045.9	2,045.9	2,045.9	2,045.9
% Growth		-1.9%	4.2%	-1.0%	-4.1%	-2.0%	0.0%	0.0%	0.0%	0.0%

Boston: Key Ratios

52

Key Ratios	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018 (B)	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Margin (%)	2.7%	0.5%	-1.3%	-0.7%	-1.2%	0.0%	-1.2%	0.3%	0.9%	2.0%
Operating Margin (\$)	9,547	1,822	(5,369)	(3,001)	(5,000)	-	(5,611)	1,228	4,663	10,302
Operating Cash Flow Margin (%)	8.0%	6.4%	5.4%	7.1%	7.6%	10.3%	10.8%	11.7%	12.6%	13.9%
Operating Cash Flow Margin (\$)	27,509	23,220	21,192	28,684	31,310	43,411	47,313	52,882	59,249	67,984
Debt Service Burden (%)	4.5%	5.2%	4.9%	5.9%	5.9%	6.8%	7.6%	7.7%	7.7%	7.9%
Annual Debt Service Coverage (x)	1.7	1.2	1.0	1.1	1.2	1.4	1.3	1.4	1.6	1.7

Dartmouth: Revenue & Expenses

(\$ in Thousands)

DARTMOUTH

Revenues	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Gross Tuition & Fees	106,046	108,033	112,467	115,421	118,478	119,009	123,689	129,043	134,563	138,989
Tuition Discounts	(33,161)	(35,764)	(35,987)	(38,179)	(38,957)	(38,083)	(39,581)	(41,294)	(43,060)	(44,476)
Net Tuition & Fees	72,885	72,269	76,480	77,242	79,521	80,926	84,109	87,749	91,503	94,512
Grants	18,892	17,761	18,511	19,534	20,009	20,209	20,411	20,615	20,821	21,029
Sales & Service, Educational	125	40	71	45	71	71	71	71	71	71
Auxiliary Enterprises	48,220	47,374	48,835	48,349	49,918	46,532	47,643	48,714	50,312	51,304
Other Operating	5,932	6,447	5,016	6,237	3,550	3,550	3,550	3,550	3,550	3,550
State appropriations	64,633	70,006	75,971	80,436	81,429	86,271	89,652	93,096	96,658	100,323
Other NonOperating	16,909	17,795	16,397	16,542	14,812	15,351	15,300	15,210	15,244	15,279
Total Revenues	227,596	231,692	241,281	248,385	249,309	252,910	260,735	269,004	278,159	286,067
% Growth		1.8%	4.1%	2.9%	0.4%	1.4%	3.1%	3.2%	3.4%	2.8%
Expenses	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Salaries & Fringe	134,040	138,028	142,174	142,247	145,900	150,494	155,003	159,648	164,445	169,400
Non-personnel	66,745	54,923	63,166	64,262	72,950	70,042	71,370	72,762	75,694	77,605
Scholarships and fellowships	6,659	7,442	5,001	4,821	5,080	4,951	5,027	5,244	5,469	5,649
Depreciation	15,064	16,663	17,904	18,647	19,391	20,379	20,690	20,242	20,172	20,172
Interest	8,617	8,252	7,968	8,786	7,853	8,277	8,009	7,760	7,474	7,199
Total Expenses	231,125	225,308	236,213	238,763	251,175	254,142	260,099	265,657	273,253	280,024
% Growth		-2.5%	4.8%	1.1%	5.2%	1.2%	2.3%	2.1%	2.9%	2.5%

Dartmouth: Enrollment

54

Students (FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Undergraduate (In State)	5,873	5,820	5,699	5,433	5,433	5,117	5,168	5,246	5,324	5,324
Undergraduate (Out of State)	463	459	449	428	428	465	470	477	484	484
Total Undergraduate	6,336	6,279	6,149	5,861	5,861	5,582	5,638	5,722	5,808	5,808
Graduate (In State)	476	521	506	503	503	480	483	487	491	495
Graduate (Out of State)	386	431	418	417	417	408	411	414	416	419
Total Graduate	863	952	924	920	920	888	894	901	907	914
Total Continuing Ed.	666	698	693	776	776	835	845	855	865	875
Total Enrollment	7,865	7,930	7,766	7,557	7,558	7,305	7,377	7,478	7,580	7,597
% Growth		0.8%	-2.1%	-2.7%	0.0%	-3.3%	1.0%	1.4%	1.4%	0.2%

Dartmouth: Staffing

55

Faculty & Staff (Employee FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Restricted										
Faculty	8.7	2.0	5.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Professional	19.7	18.0	21.0	22.8	22.8	22.8	22.8	22.8	22.8	22.8
Classified	2.1	2.0	2.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Total Restricted	30.5	22.0	28.0	28.7	28.7	28.7	28.7	28.7	28.7	28.7
Unrestricted										
Faculty	434.5	449.1	465.6	472.0	472.0	472.0	474.0	492.3	511.3	531.4
Professional	350.4	340.8	328.2	351.1	351.1	351.1	354.0	354.0	354.0	354.0
Classified	371.6	373.2	372.6	354.7	354.7	354.7	356.0	356.0	356.0	356.0
Total Unrestricted	1,156.5	1,163.1	1,166.4	1,177.9	1,177.9	1,177.9	1,184.0	1,202.3	1,221.3	1,241.4
Total Faculty & Staff	1,187.0	1,185.1	1,194.4	1,206.5	1,206.5	1,206.5	1,212.7	1,230.9	1,249.9	1,270.0
% Growth		-0.2%	0.8%	1.0%	0.0%	0.0%	0.5%	1.5%	1.5%	1.6%

Dartmouth: Key Ratios

56

Key Ratios	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Margin (%)	-1.5%	2.8%	3.1%	3.4%	0.2%	0.3%	1.0%	2.0%	2.5%	2.8%
Operating Margin (\$)	(3,351)	6,484	7,434	8,442	542	799	2,642	5,328	6,872	7,994
Operating Cash Flow Margin (%)	7.6%	12.5%	12.1%	13.9%	9.7%	10.2%	10.7%	11.3%	11.4%	11.5%
Operating Cash Flow Margin (\$)	16,549	27,482	28,208	33,475	23,423	25,142	27,245	29,538	30,947	32,141
Debt Service Burden (%)	8.5%	9.3%	8.4%	7.8%	7.1%	7.2%	6.9%	6.8%	5.8%	5.7%
Annual Debt Service Coverage (x)	0.8	1.3	1.4	1.8	1.3	1.4	1.5	1.6	1.9	2.0

Lowell: Revenue & Expenses

57

(\$ in Thousands)

LOWELL

Revenues	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Gross Tuition & Fees	189,808	205,731	224,065	243,228	254,741	269,689	283,967	298,384	309,852	323,055
Tuition Discounts	(37,245)	(40,768)	(45,417)	(54,517)	(56,435)	(61,884)	(64,267)	(66,945)	(70,633)	(74,038)
Net Tuition & Fees	152,563	164,963	178,648	188,711	198,306	207,804	219,700	231,439	239,218	249,016
Grants	40,013	44,186	41,346	42,190	43,080	45,616	47,704	49,890	52,181	54,581
Sales & Service, Educational	33	66	89	767	129	814	838	863	889	916
Auxiliary Enterprises	45,101	52,725	57,782	60,570	66,948	68,328	70,655	73,500	75,440	77,645
Other Operating	6,726	8,205	7,984	7,008	9,140	7,435	7,658	7,887	8,124	8,368
State appropriations	88,136	96,633	104,725	111,859	113,389	121,663	127,339	133,149	139,088	145,223
Other NonOperating	29,329	23,378	27,826	28,738	26,042	26,293	26,613	26,989	27,241	27,520
Total Revenues	361,901	390,156	418,400	439,843	457,034	477,952	500,507	523,718	542,181	563,268
% Growth		7.8%	7.2%	5.1%	3.9%	4.6%	4.7%	4.6%	3.5%	3.9%
Expenses	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Salaries & Fringe	203,762	219,200	239,536	249,312	259,142	273,776	287,340	301,081	311,418	322,402
Non-personnel	101,991	111,693	114,923	116,761	125,868	129,183	133,387	137,898	142,859	148,616
Scholarships and fellowships	9,932	9,383	9,134	9,316	10,351	10,501	10,905	11,360	11,986	12,564
Depreciation	23,926	28,666	32,985	34,127	37,812	38,877	39,852	42,162	44,019	44,838
Interest	12,311	18,371	21,272	18,790	21,176	22,407	23,810	24,720	24,119	23,488
Total Expenses	351,922	387,313	417,850	428,306	454,350	474,744	495,294	517,221	534,401	551,908
% Growth		10.1%	7.9%	2.5%	6.1%	4.5%	4.3%	4.4%	3.3%	3.3%

Lowell: Enrollment

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Students (FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Undergraduate (In State)	8,000	8,134	8,411	8,481	8,726	8,978	9,229	9,488	9,582	9,678
Undergraduate (Out of State)	982	1,184	1,238	1,381	1,421	1,461	1,502	1,544	1,560	1,576
Total Undergraduate	8,982	9,318	9,649	9,862	10,147	10,439	10,731	11,032	11,142	11,254
Graduate (In State)	1,291	1,244	1,205	1,338	1,386	1,428	1,470	1,513	1,547	1,582
Graduate (Out of State)	954	1,072	1,040	1,010	1,046	1,078	1,109	1,142	1,167	1,193
Total Graduate	2,245	2,316	2,245	2,348	2,432	2,506	2,579	2,655	2,714	2,775
Total Continuing Ed.	1,795	1,735	1,725	1,696	1,609	1,569	1,529	1,492	1,507	1,524
Total Enrollment	13,022	13,369	13,619	13,906	14,188	14,514	14,839	15,179	15,363	15,553
% Growth		2.7%	1.9%	2.1%	2.0%	2.3%	2.2%	2.3%	1.2%	1.2%

Lowell: Staffing

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Faculty & Staff (Employee FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Restricted										
Faculty	7.3	10.2	9.3	10.2	10.2	10.7	11.2	11.7	12.3	13.0
Professional	141.2	101.5	104.5	92.6	106.6	111.0	115.0	119.0	123.0	127.0
Classified	3.8	-	-	-	-	-	-	-	-	-
Total Restricted	152.3	111.7	113.8	102.8	116.8	121.7	126.2	130.7	135.3	140.0
Unrestricted										
Faculty	549.3	710.9	745.7	752.9	790.0	809.0	828.0	847.0	854.0	861.0
Professional	565.9	695.6	752.5	768.9	788.0	804.8	812.5	821.0	825.0	829.0
Classified	235.0	228.0	222.0	219.0	237.0	239.3	241.5	244.0	245.0	246.0
Total Unrestricted	1,350.2	1,634.5	1,720.2	1,740.7	1,815.0	1,853.0	1,882.0	1,912.0	1,924.0	1,936.0
Total Faculty & Staff	1,502.5	1,746.2	1,834.0	1,843.5	1,931.8	1,974.7	2,008.2	2,042.7	2,059.3	2,076.0
% Growth		16.2%	5.0%	0.5%	4.8%	2.2%	1.7%	1.7%	0.8%	0.8%

Lowell: Key Ratios

Key Ratios	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Margin (%)	1.0%	0.8%	0.2%	2.2%	0.6%	0.7%	1.0%	1.2%	1.4%	2.0%
Operating Margin (\$)	3,671	2,928	696	9,424	2,584	3,108	5,113	6,397	7,680	11,261
Operating Cash Flow Margin (%)	11.8%	13.3%	12.8%	14.6%	13.9%	13.8%	14.0%	14.2%	14.1%	14.3%
Operating Cash Flow Margin (\$)	40,839	50,613	51,839	62,350	61,937	64,566	68,408	72,502	74,714	78,383
Debt Service Burden (%)	6.3%	7.6%	7.5%	7.3%	7.7%	7.6%	7.8%	8.0%	7.7%	7.3%
Annual Debt Service Coverage (x)	1.8	1.7	1.7	2.0	1.8	1.8	1.8	1.8	1.8	1.9

Medical School: Revenue & Expenses

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(\$ in Thousands)

MEDICAL SCHOOL

Revenues	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Gross Tuition & Fees	-	18,929	20,881	24,206	31,157	32,809	35,636	37,553	38,635	39,801
Tuition Discounts	-	(2,060)	(2,269)	(2,751)	(6,478)	(5,335)	(5,592)	(5,805)	(5,975)	(6,156)
Net Tuition & Fees	16,245	16,869	18,612	21,455	24,679	27,474	30,044	31,748	32,660	33,645
Grants	250,994	254,296	258,499	275,662	270,389	282,865	293,933	306,883	320,082	332,838
Sales & Service, Educational	8,045	10,261	12,443	12,790	15,959	16,358	16,767	17,186	17,600	17,990
Auxiliary Enterprises	31,424	29,099	29,271	29,626	30,642	31,408	32,193	32,998	33,824	34,738
Other Operating	216,998	91,425	258,246	190,611	168,305	172,974	170,971	168,950	167,839	169,949
State appropriations	44,620	45,843	50,634	52,250	51,623	52,744	53,882	55,027	56,203	57,380
Other NonOperating	33,851	14,224	5,699	37,945	23,796	23,981	25,441	25,841	26,527	27,866
Independent Business Lines	335,527	312,077	330,259	371,618	328,379	344,586	366,368	388,067	407,119	425,260
Total Revenues	937,704	774,094	963,663	991,957	913,772	952,390	989,599	1,026,700	1,061,854	1,099,666
% Growth		-17.4%	24.5%	2.9%	-7.9%	4.2%	3.9%	3.7%	3.4%	3.6%
Expenses	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Salaries & Fringe	370,686	383,248	407,159	407,304	450,923	462,884	473,861	487,536	502,211	515,582
Non-personnel	477,282	331,473	484,916	439,960	358,129	381,219	398,925	414,978	430,204	451,289
Scholarships and fellowships	1,935	-	-	-	-	-	-	-	-	-
Depreciation	63,285	63,166	65,133	64,801	66,115	67,692	69,270	71,471	73,956	77,577
Interest	36,191	34,009	30,658	30,067	32,765	31,810	30,554	29,188	27,993	26,483
Total Expenses	949,379	811,896	987,866	942,132	907,932	943,605	972,610	1,003,173	1,034,364	1,070,931
% Growth		-14.5%	21.7%	-4.6%	-3.6%	3.9%	3.1%	3.1%	3.1%	3.5%



Medical School: Enrollment

Students (FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Graduate (In State)	823	806	788	772	769	767	767	765	765	765
Graduate (Out of State)	281	265	268	300	337	373	409	423	423	423
Total Graduate	1,104	1,071	1,056	1,073	1,107	1,141	1,177	1,189	1,189	1,189
Total Enrollment	1,104	1,071	1,056	1,073	1,107	1,141	1,177	1,189	1,189	1,189
% Growth		-3.0%	-1.4%	1.6%	3.2%	3.1%	3.2%	1.0%	0.0%	0.0%

Medical School: Staffing

Faculty & Staff (Employee FTEs)	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Restricted										
Faculty	241.0	228.0	244.0	237.0	261.0	268.0	273.0	282.0	291.0	297.0
Professional	635.0	595.0	681.0	706.0	772.0	792.0	807.0	833.0	858.0	874.0
Classified	180.0	131.0	142.0	154.0	155.0	159.0	162.0	167.0	172.0	175.0
Total Restricted	1,056.0	954.0	1,067.0	1,097.0	1,188.0	1,219.0	1,242.0	1,282.0	1,321.0	1,346.0
Unrestricted										
Faculty	245.0	245.0	258.0	258.0	248.0	248.0	248.0	248.0	248.0	248.0
Professional	1,520.0	1,616.0	1,574.0	1,528.0	1,552.0	1,552.0	1,552.0	1,552.0	1,552.0	1,552.0
Classified	753.0	741.0	672.0	683.0	680.0	680.0	680.0	680.0	680.0	680.0
Total Unrestricted	2,518.0	2,602.0	2,504.0	2,469.0	2,480.0	2,480.0	2,480.0	2,480.0	2,480.0	2,480.0
Total Faculty & Staff	3,574.0	3,556.0	3,571.0	3,566.0	3,668.0	3,699.0	3,722.0	3,762.0	3,801.0	3,826.0
% Growth		-0.5%	0.4%	-0.1%	2.9%	0.8%	0.6%	1.1%	1.0%	0.7%

Medical School: Key Ratios

Key Ratios	Actual				Budget	Forecast				
	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Margin (%)	-3.6%	-4.2%	-1.1%	3.2%	0.2%	0.5%	1.2%	1.8%	2.0%	2.0%
Operating Margin (\$)	(33,230)	(32,614)	(10,599)	30,671	2,059	4,717	12,021	18,298	21,063	21,919
Operating Cash Flow Margin (%)	7.6%	8.4%	8.7%	12.8%	11.0%	10.9%	11.3%	11.6%	11.7%	11.6%
Operating Cash Flow Margin (\$)	70,088	65,287	85,444	124,814	99,763	103,321	111,616	118,608	123,815	126,963
Debt Service Burden (%)	5.6%	6.2%	5.2%	6.0%	5.9%	5.7%	5.5%	5.3%	5.1%	4.9%
Annual Debt Service Coverage (x)	1.3	1.3	1.7	2.2	1.9	1.9	2.1	2.2	2.4	2.4

Note: Debt Service Burden does not include borrowing for the VA Capital Project. If the project is federally approved, this ratio is expected to grow 0.1-0.2% per year over the forecast as follows:

	FY2019	FY2020	FY2021	FY2022	FY2023
As Reflected in Plan	5.7%	5.5%	5.3%	5.1%	4.9%
With Additional Borrowing	5.8%	5.7%	5.5%	5.3%	5.1%



FY17 Audited Financials

FY17 Audited Financials: Highlights

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- ❑ Enrollment: Increased by 1% to 63,977 FTEs

- ❑ Revenue: Increased by a total of \$122.9 million or 3.8%
 - ▣ Operating Revenue increased by \$39.5 million or 1.6%; of which online revenue increased by 9.2% to \$104 million
 - ▣ Non Operating Revenue increased by \$83.4 million or 10%

- ❑ Expenses: Increased by \$27.3 million or 0.8%

- ❑ Net Position: Increased by \$250 million to \$3 billion

Revenue

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\$ in Thousands	Actual			FY16-17
	FY2015	FY2016	FY2017	Change
Net Tuition & Fees	765,220	826,816	847,832	21,016
<i>Net Tuition & Fees Growth</i>	3.4%	8.0%	2.5%	2.5%
Grants	510,741	528,352	560,081	31,729
<i>Grants Growth</i>	-0.2%	3.4%	6.0%	6.0%
Sales & Service, Educational	25,601	27,500	28,910	1,410
<i>Sales & Service, Educational Growth</i>	17.5%	7.4%	5.1%	5.1%
Auxiliary Enterprises	362,193	383,281	400,822	17,541
<i>Auxiliary Growth</i>	3.6%	5.8%	4.6%	4.6%
Other Operating	136,954	307,286	233,717	(73,569)
<i>Other Operating Growth</i>	-45.4%	124.4%	-23.9%	-23.9%
Independent Business Lines (Med)	312,077	330,259	371,618	41,359
<i>Independent Business Lines Growth</i>	-7.0%	5.8%	12.5%	12.5%
Subtotal: Operating Revenue	2,112,786	2,403,493	2,442,980	39,487
<i>Subtotal: Operating Revenue</i>	-4.4%	13.8%	1.6%	1.6%
State	621,200	669,748	720,817	51,069
<i>State Growth</i>	8.9%	7.8%	7.6%	7.6%
Other Non Operating	144,964	162,741	195,089	32,348
<i>Other Non-Operating Growth</i>	-32.5%	12.3%	19.9%	19.9%
(1) Subtotal: Non Operating Revenue	766,164	832,489	915,906	83,417
<i>Subtotal: Non Operating Revenue</i>	-2.4%	8.7%	10.0%	10.0%
(2) Total	2,878,948	3,235,982	3,358,886	122,904
<i>Total Growth</i>	-3.9%	12.4%	3.8%	3.8%

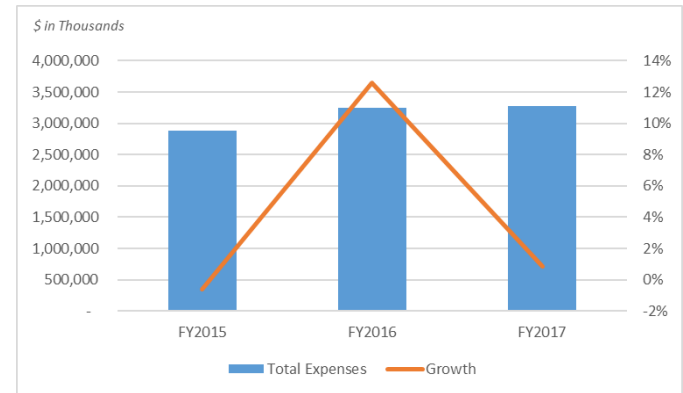


(1) Non Operating revenue excludes interest which is shown with expenses.

(2) The FY16 change to revenue and expenses is primarily related to activity at the independent business lines of the Medical School.

Expenses

<i>\$ in Thousands</i>	Actual			FY16-17
	FY2015	FY2016	FY2017	Change
Salaries & Fringe	1,659,054	1,788,018	1,847,346	59,328
<i>Salaries & Fringe Growth</i>	5.0%	7.8%	3.3%	3.3%
Non-personnel	852,900	1,067,226	1,018,596	(48,630)
<i>Non-personnel Growth</i>	-12.5%	25.1%	-4.6%	-4.6%
Scholarships and fellowships	49,300	44,645	47,710	3,065
<i>Scholarships & fellowships Growth</i>	-3.7%	-9.4%	6.9%	6.9%
Depreciation	221,043	240,864	249,669	8,805
<i>Depreciation Growth</i>	8.3%	9.0%	3.7%	3.7%
Subtotal: Operating Expenses	2,782,297	3,140,753	3,163,322	22,568
<i>Subtotal: Operating Expenses</i>	-1.0%	12.9%	0.7%	0.7%
Interest	100,332	105,276	110,069	4,793
<i>Interest Growth</i>	12.1%	4.9%	4.6%	4.6%
(1) Total Expenses	2,882,629	3,246,029	3,273,391	27,361
<i>Total Growth</i>	-0.6%	12.6%	0.8%	0.8%



(1) The FY16 change to revenue and expenses is primarily related to activity at the independent business lines of the Medical School.

Enrollment

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<i>FTE</i>	Actual		
	FY2015	FY2016	FY2017
Amherst	27,098	27,696	28,340
<i>Amherst Growth</i>	0.3%	2.2%	2.3%
Boston	12,834	13,195	13,102
<i>Boston Growth</i>	4.1%	2.8%	-0.7%
Dartmouth	7,930	7,766	7,557
<i>Dartmouth Growth</i>	0.8%	-2.1%	-2.7%
Lowell	13,369	13,619	13,906
<i>Lowell Growth</i>	2.7%	1.9%	2.1%
Medical	1,071	1,056	1,073
<i>Medical Growth</i>	-3.0%	-1.4%	1.6%
Total	62,302	63,332	63,978
<i>Total Growth</i>	1.6%	1.7%	1.0%