

# *Annual Faculty Salary and Compensation Report, 2017-2018<sup>1</sup>*

## *Committee on Priorities and Resources* **Spring 2018**

DRAFT 05-01-18

### **I. Charge**

The Faculty Handbook charges the Committee on Priorities and Resources (CPR) to report each year to the Faculty on the status of Amherst faculty salaries and compensation.<sup>2</sup> Since the late 1970s, the annual report has compared salaries and compensation at Amherst with those at 12 other colleges and universities known as the Traditional Group. Since 2003-04, the CPR has also compared salaries and compensation with a broader group of colleges and universities that includes the original 12 plus an additional 18 institutions; this is the New Group.<sup>3</sup> For this report (Spring 2018) the CPR has compared salaries and cost of living with the redefined group of 12 liberal arts colleges following procedures established in the Spring 2016 report and also used in the Spring 2017 report. The comparative data on average salaries by rank are provided by the American Association of University Professors (AAUP).

### **II. Background**

Since the 1970s the CPR has compared faculty salaries with peer institutions. A Traditional Group was used for many years. In 2003, the Board of Trustees and the Administration asked the CPR to create a New Group to better define salary benchmarks that the faculty saw as comparable. However, concern over the potential impact of high-salary professional schools that are specific to several universities in the larger New Group led to the formation of a Liberal Arts group in 2014, to allow direct comparisons with Liberal Arts peer institutions. In 2016, the CPR adopted a Liberal Arts group of 12 peers for faculty salary benchmarking, choosing the institutions we regard as peer elite liberal arts colleges and without prior consideration of salary levels: Amherst, Bowdoin, Carleton, Davidson, Haverford, Middlebury, Pomona, Smith, Swarthmore, Vassar, Wellesley, and Williams.

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<sup>1</sup> This report is submitted by the voting members of the Committee on Priorities and Resources (CPR). We would like to thank the colleagues who assisted in compiling data, especially in the Institutional Research and Human Resources offices. We thank the *ex officio* CPR members, including Thomas Dwyer, Catherine Epstein, Kevin Weinman, and Maria-Judith Rodriguez.

<sup>2</sup> Recent reports and minutes from CPR meetings are available on the Dean of the Faculty's website.

<sup>3</sup> CPR created the New Group in 2005; the process is described in the CPR's Amherst College Institutional Comparison Group Report of 2005. The CPR, in creating this New Group, was responding to a request from the Administration and the Board of Trustees to choose a definitive comparison group.

Previously, the committee compared Amherst College salaries with a “traditional group” group of research universities and liberal arts colleges. While the salary analysis in this report no longer provides a condensed comparison with the traditional group, we will provide an online appendix with tables that list the average salaries for the traditional group. This report will use the new benchmark set by the CPR in Spring 2016 that presents normalized salaries in a quartile system by rank, and it will also compare salaries with a cost of living adjustment.

*Data Resources and Limitations:*

We rely primarily on salary data compiled by the AAUP (American Association of University Professors). These tend to be crude measures of the total compensation (which include some, but not all, benefits in various degrees across institutions), and they do not reflect regional or geographical differences in the cost of living. Moreover, salary information for Amherst faculty and that compiled by the AAUP includes only tenure-line faculty who are full-time teachers; faculty with partial administrative roles or with reduced teaching loads due to phased retirement or other factors are not included in this report.

Within the salary data there are several potential sources of bias. One such bias results from the fact that the AAUP does not report by years-in-rank or years-in-service, so we cannot take those into account when making salary comparisons. An institution with a large cohort of professors serving for many years in a particular rank will have a larger average salary at that rank than an institution with proportionally more recently-promoted professors. In 1997-98 the Amherst Administration conducted a confidential time-in-rank and salary survey and it concluded that demographic differences did not have a significant effect on Amherst’s rankings in the Traditional Group. However, in recent years the college has experienced significant turnover and these shifts now do appear to contribute to changes in the current rankings, notably a drop in the average salary of full professors in 2012-13.

A second potential source of bias comes from the inclusion of professional school faculty salaries in the AAUP data, which contributes to salaries in the Traditional Group and the New Group. Salaries at professional schools (law, medical, etc.) are usually higher than salaries at liberal arts institutions, due to market competition given opportunities available to professionals in those fields outside of academia. Moving forward the CPR will focus on the Liberal Arts groups as more relevant for purposes of salary comparisons.

A third potential source of bias is regional variation in cost of living. Therefore, we also provide graphs that apply cost of living adjustments for salaries in the Liberal Arts group based on published local living-wage estimates (<http://livingwage.mit.edu/>). In this report, we used the same cost of living adjustment values that were used in the Spring 2017 report.

Additional caveats are noted below when associated with specific analyses or comparisons.

### **III. Benchmarks**

#### *History*

Historically the Amherst College Board of Trustees has sought to raise faculty salaries to meet stated goals. As noted in the 2004-05 CPR Salary Report, in 1958 the Trustees issued a policy statement that Amherst faculty salaries should be “as high as those in any other college in the country”. In 1970, this policy was updated to indicate that faculty compensation should be “at a level no lower than that of other institutions of the highest quality”. Nevertheless, in the 1970s faculty salaries dropped significantly on a relative basis. This resulted in much discussion and a resolution by the Board in 1979 that by 1982 faculty salaries should be increased to regain Amherst’s 1968 relative competitive position, which in 1968 corresponded to 3<sup>rd</sup> in the Traditional group (see the 2004-05 CPR Salary Report for details and caveats).

The benchmark targeted to be reached by 1982 was not achieved, and by the mid-1990s Amherst faculty salaries had once again lost relative ground. This resulted in a 1998 commitment to close the gaps for associate and full professors in particular. Then, in 2003, the Administration and Board of Trustees asked the CPR to set a benchmark for a ranking within the New Group that Amherst should try to reach and maintain. The 2004-05 salary report concluded that despite several periods in which salary trends were corrected to improve the relative positions of Amherst professors and despite increases in real or inflation-corrected salaries, salaries of Amherst professors have tended to rest below both the median and the average of the Traditional Group, which includes research universities and institutions with professional schools.

#### *Current Benchmarks*

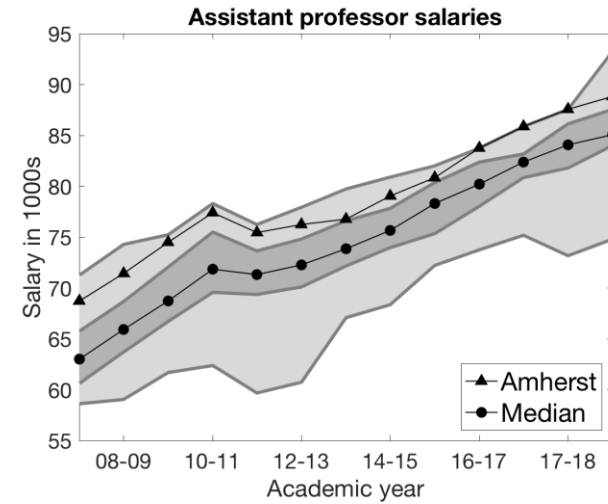
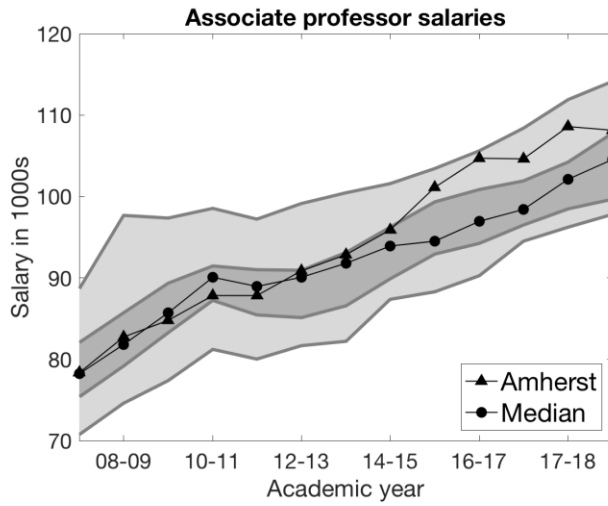
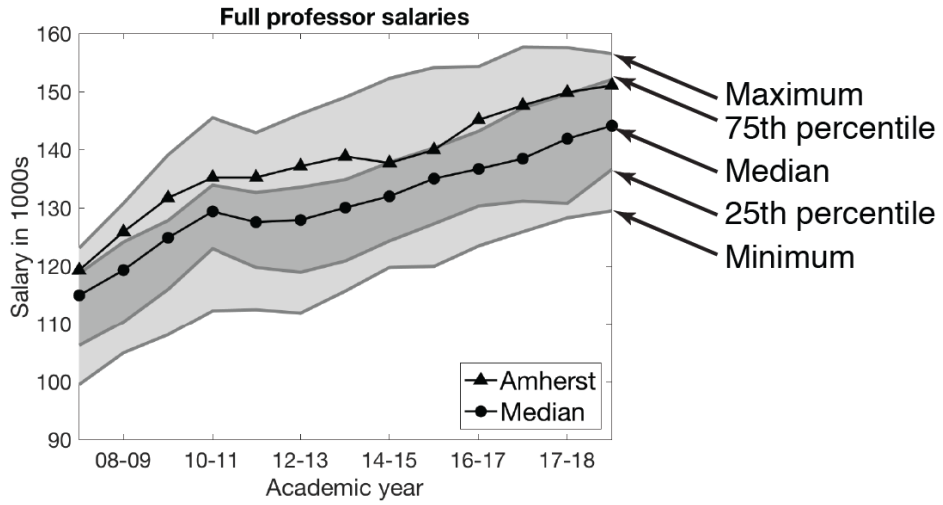
The graphs in this report focus on the Liberal Arts group of 12 colleges as the comparison group: Amherst, Bowdoin, Carleton, Davidson, Haverford, Middlebury, Pomona, Smith, Swarthmore, Vassar, Wellesley, and Williams. The CPR also examines the comparison of Amherst College to the Traditional Group. The dark gray bands are outlined by the 1<sup>st</sup> and 3<sup>rd</sup> quartiles (25<sup>th</sup> and 75<sup>th</sup> percentiles), while the minimum and maximum values bound the light gray bands. The median marks the split between the upper 6 and the lower 6 salaries from this group of 12. The upper light gray band marks the top 3 salaries; dark gray band marks the middle 6 salaries; lower gray band marks the bottom 3 salaries. The plotted Amherst values represent the mean (average) salary values within each faculty rank. *The proposed benchmark is to remain at or above the 75<sup>th</sup> percentile among this group of 12 liberal arts peers.*

### **IV. Quartile analyses**

#### *Untransformed and unadjusted data*

The historic quartile analysis shows a comparison faculty salaries among the Liberal Arts group of 12 colleges. The following graphs display salary as absolute numbers in thousands of dollars without transformation or modification. Discussion of Amherst College’s status with regard to the stated 75<sup>th</sup> percentile benchmark is presented in the following section.

# Salary Data

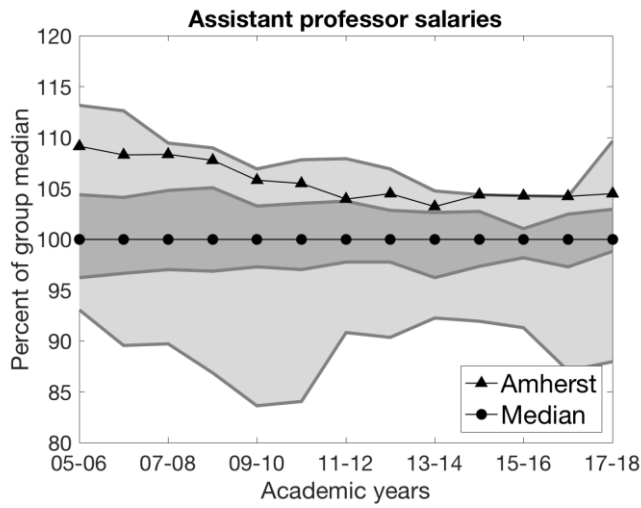
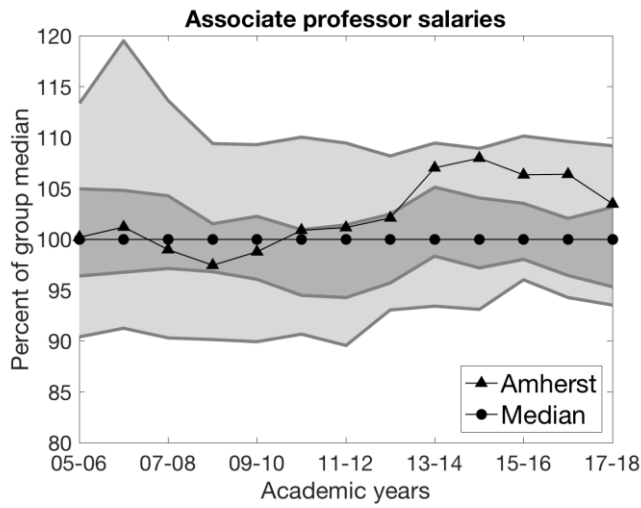
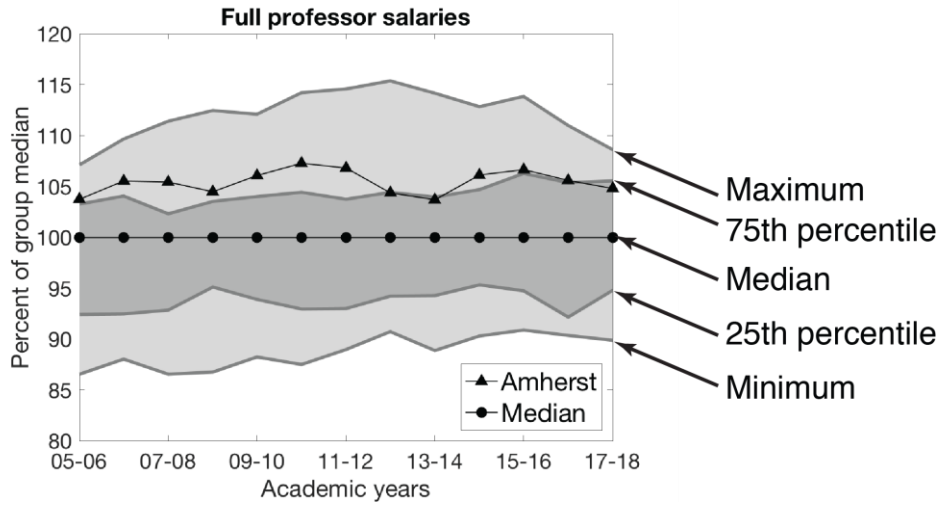


### *Normalized data*

For easier comparison over time, we normalized the salaries by dividing each salary by the group median for that time point.

If the goal is to keep Amherst's salaries among the top 3 (top quarter) in this group of peers (top light gray band) in order to remain competitive, then we are in the acceptable range for assistant professors, and marginally so for associate professors. The full professor salaries are more complicated, as this group has dropped below the 75th percentile in the current year. Each of the three professor categories shows a slight worsening in ranking among the Liberal Arts group of 12 colleges. Potential explanations may be advanced for the patterns within each professor category. For example, full professors span a wider range of salary level, from newly promoted faculty to several decades at the college. A spate of retiring senior faculty, replaced by new promotions to full professor, may have caused a drop in full professor average salaries. Similarly, new hires at the assistant professor level may affect the average of that category. These possibilities will require investigation, but the common trend across professor categories, negative trends over the last couple years relative to the 75<sup>th</sup> percentile, and the same worsening in ranking seen compared to the Traditional Group in each of the last two years (data not shown) suggest a trajectory that currently has Amherst College at the cusp of failing to meet the salary benchmark.

# Normalized Salary Data



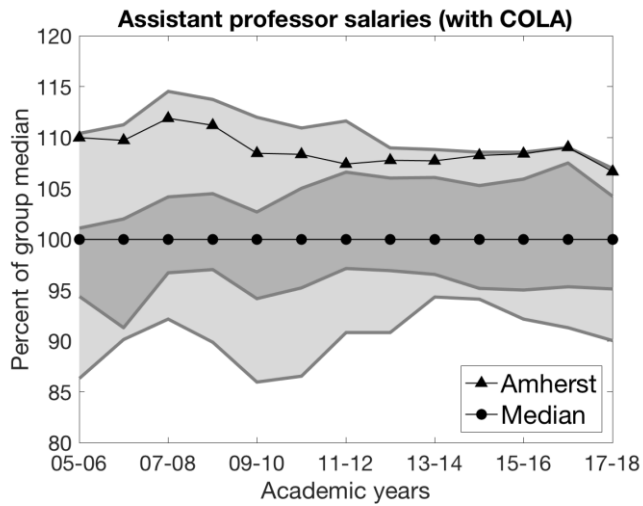
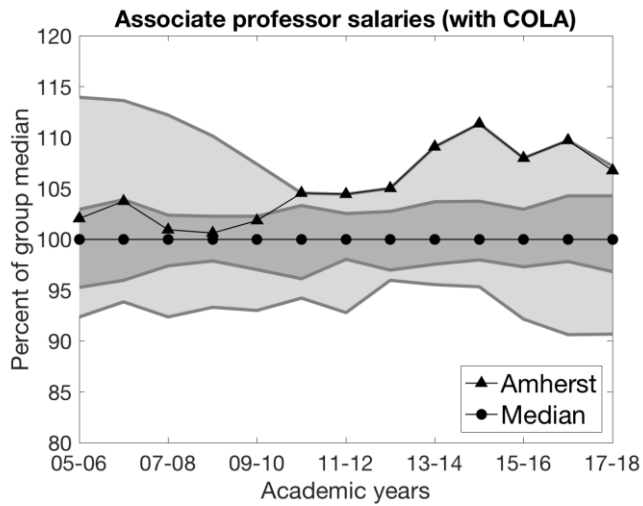
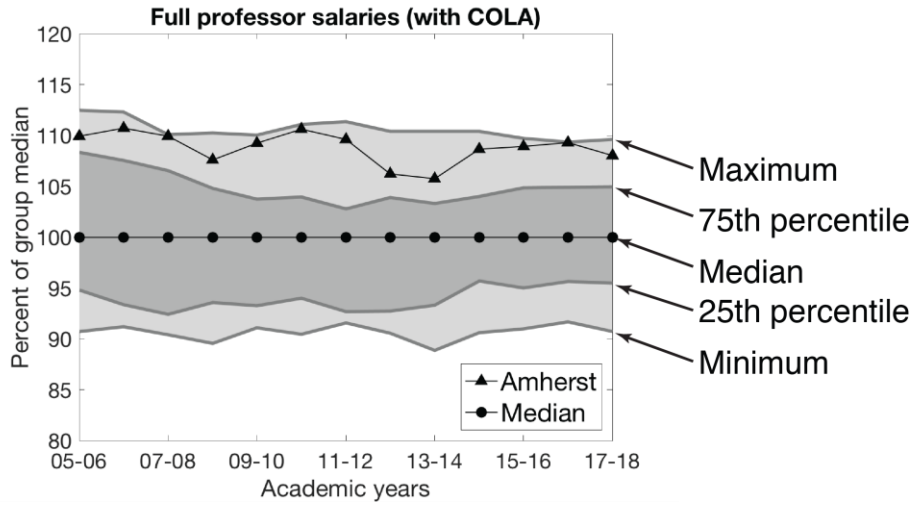
### *Cost of living adjusted data*

We adjusted the salaries in an effort to take cost of living into account. The cost of living adjustments (COLA) in the following figures were generated from the MIT living wage calculations: <http://livingwage.mit.edu/>. The living wage is a measure of the cost of living of basics for a family of 4 with 1 worker (2 adults, 2 children, and only 1 adult working), and the website provides values for each county in the US. We adjusted the salaries relative to the cost of living in Hampshire County. For example, Pomona's salaries tend to be higher than other peer institutions because of the high cost of living in that region. Since Los Angeles County's cost of basics is about 12.8% in excess of Hampshire County's, we divide Pomona's mean salary by 1.128 to calculate the COLA salary.

A strong caveat of this approach is that living costs near to the institution may differ substantially from the surrounding county on which the COLA is based. For example in the town of Amherst, surrounded by the more rural environment, housing costs are 126% of the county average. Other colleges may also differ, being higher or lower than their surrounding counties. Therefore, caution is needed when using this COLA in assessing whether Amherst College is meeting modified benchmarks, and more investigation on this adjustment is warranted across the comparison group.

If the goal is to keep Amherst's salaries among the top 3 (top quarter) in the Liberal Arts group of 12 colleges (top light gray band), then the COLA-controlled comparison suggests we have remained competitive.

# COLA Salary Data





## **V. Summary of Salary Comparisons with Peer Liberal Arts Colleges**

As usual, we caution faculty members not to read these mean (average) data for comparison with their individual increases because the mean data as reported by the AAUP include salary increases at the time of promotion or tenure in the more junior ranks, thus overstating the actual salary increases for most members of the Assistant and Associate Professor groups. We also reiterate that overall trends are more significant than single-year or single-category movements that may be due to demographic variations in rank that result from hiring, promotion and retirement.

This year we are at the border of the benchmark criterion with slightly negative trends across categories, potentially extending back a couple years compared to the rate of increase at the 75<sup>th</sup> percentile among the peer group. We include median salary values in the summary tables below as an alternative measure that is less sensitive to outliers than the mean.

### *Full Professors*

For the 2017-18 academic year, the average salary for full professors at Amherst was \$151,032 and was 5<sup>th</sup> among the 12 peer institutions. Full professor salaries at Amherst have been near the 75<sup>th</sup> percentile for the past 5 years. When adjusted for cost of living expenses, the full professor salary at Amherst has consistently remained above the 75<sup>th</sup> percentile, noting the caveat above on this relativized comparison.

### *Associate Professors*

This is typically the most volatile group because the number of people in this category is usually small, and there tends to be fairly rapid promotion out of the category at Amherst College. Over the last decade, promotion from Associate to Full Professor at Amherst in most cases occurred six years post-tenure, contributing to a lower percentage of total faculty at the Associate rank at Amherst (about 20% of the faculty). Moreover, the rapid promotion from Assistant to Associate (relative to many peer institutions) means that Associate Professors at Amherst tend to have fewer years-in-service than do Associate Professors at some comparative institutions (and so fewer years to have accumulated incremental salary increases). It is likely that those individuals at other institutions who remain at the Associate Professor rank for more than six years continue to receive salary increases; if true, this would mean that the average salary for Associate Professors at those institutions would be skewed higher. However, these promotion practices at Amherst and elsewhere are not new, and thus do not explain this year's negative movement observed for this group.

For the 2017-18 academic year, the average salary for associate professors at Amherst was \$108,152 and 3<sup>rd</sup> among the 12 peer institutions. Over the past decade, salary for Associate Professors at Amherst has generally improved relative to that of our peers, so that it has recently been quite competitive. With the cost of living adjustment, it has been at the top for several years. Note that there was a small drop in the average Amherst associate professor salary, which could be due to more recently tenured faculty entering this group combined with some who have been associates for five or more years getting promoted to full.

### *Assistant Professors*

This is the category where the most direct competition among academic institutions takes place: when candidates are hired at the Assistant Professor level they may negotiate their salaries relative to other offers they have received, whereas few tenured professors are actively on the job market in any given year and thus receiving competitive offers.

For the 2017-18 academic year, the assistant professor median salary was \$88,857 and 3<sup>rd</sup> among the 12 peer institutions, after having been 1<sup>st</sup> for the previous 3 years. The normalized data demonstrates that the assistant professor median salary has remained above the 75<sup>th</sup> percentile since 2002-03. The cost of living adjusted data shows that the median assistant professor salary has been effectively fluctuating between 105% and 110% of the group median.

## **VI. Additional Salary Data**

### *Tables with comparisons to other peer institution groups*

The following 3 tables give salaries in *thousands of dollars*. For complete tables, see the spreadsheet posted online:

[https://www.amherst.edu/academiclife/dean\\_faculty/faccommittees/cpr](https://www.amherst.edu/academiclife/dean_faculty/faccommittees/cpr)

**Liberal Arts College Group salary data** (Amherst, Bowdoin, Carleton, Davidson, Haverford, Mount Holyoke, Pomona, Smith, Swarthmore, Vassar, Wellesley, Wesleyan, Williams)<sup>4</sup>

	FY2015-16		FY2016-17		FY2017-18
<b>FULL</b>		<b>FULL</b>		<b>FULL</b>	
AC Mean	147.7	AC Mean	149.9	AC Mean	151.0
AC Median	144.2	AC Median	144.6	AC Median	146.8
Group Median	138.5	Group Median	142.5	Group Median	146.6
Group Mean	138.5	Group Mean	141.3	Group Mean	143.3
<b>ASSOCIATE</b>		<b>ASSOCIATE</b>		<b>ASSOCIATE</b>	
AC Mean	104.6	AC Mean	108.6	AC Mean	108.2
AC Median	98.9	AC Median	101.0	AC Median	101.6
Group Median	99.0	Group Median	102.4	Group Median	105.0
Group Mean	99.3	Group Mean	102.2	Group Mean	104.1
<b>ASSISTANT</b>		<b>ASSISTANT</b>		<b>ASSISTANT</b>	
AC Mean	85.9	AC Mean	87.6	AC Mean	88.9
AC Median	83.5	AC Median	86.1	AC Median	87.4
Group Median	82.6	Group Median	83.9	Group Median	84.9
Group Mean	81.3	Group Mean	82.9	Group Mean	85.0

**Traditional Group salary data** (Harvard, Yale, Dartmouth, Wellesley, U Michigan-Ann Arbor, U Virginia, Amherst College, Williams, Wesleyan, Smith, Indiana U-Bloomington, UMass-Amherst, Mount Holyoke)

	FY2015-16		FY2016-17		FY2017-18
<b>FULL</b>		<b>FULL</b>		<b>FULL</b>	
AC Mean	147.7	AC Mean	149.9	AC Mean	151.0
AC Median	144.2	AC Median	144.6	AC Median	146.8
Group Median	147.7	Group Median	150.3	Group Median	153.4
Group Mean	159.2	Group Mean	163.2	Group Mean	167.2
<b>ASSOCIATE</b>		<b>ASSOCIATE</b>		<b>ASSOCIATE</b>	
AC Mean	104.6	AC Mean	108.6	AC Mean	108.2
AC Median	98.9	AC Median	101.0	AC Median	101.6
Group Median	104.0	Group Median	107.1	Group Median	108.2
Group Mean	106.1	Group Mean	109.3	Group Mean	113.2
<b>ASSISTANT</b>		<b>ASSISTANT</b>		<b>ASSISTANT</b>	
AC Mean	85.9	AC Mean	87.6	AC Mean	88.9
AC Median	83.5	AC Median	86.1	AC Median	87.4
Group Median	85.9	Group Median	89.5	Group Median	90.6
Group Mean	90.0	Group Mean	93.5	Group Mean	95.9

<sup>4</sup> Note that this is a slightly different group of liberal arts colleges than used in the earlier graphs. Mount Holyoke and Wesleyan are included here, and Middlebury is not.

**New Group salary data (31 institutions)**

	<b>FY2015-16</b>		<b>FY2016-17</b>		<b>FY2017-18</b>
<b>FULL</b>		<b>FULL</b>		<b>FULL</b>	
AC Mean	147.7	AC Mean	149.9	AC Mean	151.0
AC Median	144.2	AC Median	144.6	AC Median	146.8
Group Median	157.6	Group Median	162.8	Group Median	164.8
Group Mean	167.7	Group Mean	173.0	Group Mean	177.9
<b>ASSOCIATE</b>		<b>ASSOCIATE</b>		<b>ASSOCIATE</b>	
AC Mean	104.6	AC Mean	108.6	AC Mean	108.2
AC Median	98.9	AC Median	101.0	AC Median	101.6
Group Median	106.5	Group Median	111.7	Group Median	113.7
Group Mean	109.0	Group Mean	116.6	Group Mean	120.2
<b>ASSISTANT</b>		<b>ASSISTANT</b>		<b>ASSISTANT</b>	
AC Mean	85.9	AC Mean	87.6	AC Mean	88.9
AC Median	83.5	AC Median	86.1	AC Median	87.4
Group Median	91.8	Group Median	94.2	Group Median	95.7
Group Mean	95.4	Group Mean	97.9	Group Mean	100.5

*Comparisons across Disciplines and by Gender at Amherst College*

In light of national conversations about inequalities between disciplines and by gender the CPR began to analyze these aspects Amherst salaries in 2013-14. We find no concerning trends by discipline or gender; full professor differences by gender are likely due to the historic factor of age/years-in-rank, while market conditions for specific fields likely drive some variation among disciplines. Further disaggregation by race, rank, and gender would yield cohort sizes so small that they would raise privacy concerns, so we did not test further hypotheses.

**Analysis by Discipline, FY 2017-18**

<i>Discipline/Rank</i>	<i>Mean</i>	<i>Median</i>	<i>Count</i>
<b>Humanities</b>			
Professor	\$151,880	\$146,800	45
Associate Professor	\$104,637	\$100,700	19
Assistant Professor	\$87,117	\$86,000	23
<b>Social Sciences</b>			
Professor	\$145,012	\$144,500	17
Associate Professor	\$123,925	\$128,550	4
Assistant Professor	\$90,255	\$88,300	11
<b>Physical &amp; Life Sciences</b>			
Professor	\$153,822	\$146,800	23
Associate Professor	\$108,767	\$107,000	6
Assistant Professor	\$90,908	\$88,500	12

### Analysis by Gender, FY 2017-18

<u>Rank</u>	<u>Female</u>			<u>Male</u>		
	<i>Median</i>	<i>Mean</i>	<i>Count</i>	<i>Median</i>	<i>Mean</i>	<i>Count</i>
Full	\$144,500	\$143,977	35	\$150,000	\$155,970	50
Associate	\$113,000	\$113,550	14	\$100,700	\$103,113	15
Assistant	\$88,300	\$89,500	25	\$87,100	\$88,090	21
All	\$117,250	\$119,816	74	\$120,200	\$130,176	86

#### *Note on How Salaries Are Set*

Each year, the Administration, with the advice of the CPR and the approval of the Trustees, establishes a “pool” for faculty salary increases. This “pool” represents a percentage of the total salary budget for the teaching staff.<sup>5</sup> A similar “pool” is established for staff and administrators. The amount of this percentage increase, previously in the 3%-5% range, results in the dollars which the Administration then allots to salaries. A 3% percentage increase in the “pool,” however, does not mean that everyone receives a 3% salary increase, for from that “pool” must come adjustments for promotions, for equity across ranks, and for other one-time increases. Generally speaking, those promoted from assistant to associate professor, and then to full, have received a raise equal to approximately twice the pool for that year, with corrections made in years when the pool is larger or smaller than normal, to ensure equity among cohorts promoted in different years.

Members of the Faculty have noted that salary notices are often not provided until only a few weeks or days before that new salary takes effect (July 1<sup>st</sup>). This has much to do with the timing of Board of Trustee meetings. Waiting as late as possible to finalize the pool often allows the Administration to make positive adjustments to salaries as the budget plays itself out at the end of the fiscal year.

## **VII. Conclusions and Recommendations**

This year the CPR evaluated salary data across a comparison group of 12 peer liberal arts colleges, the set used in this report since 2016. We compared salary data in a quartile system by rank and consider adjustment for cost of living. In sum, the historic quartile analysis in absolute numbers, the normalized data of median salaries, and the cost of living adjusted data demonstrate that the Amherst salary at ranks near or above our set benchmark of the 75<sup>th</sup> percentile. The data suggest that the 2017-18 Amherst salaries remain competitive with those of our peer liberal arts colleges. However, the past couple years have seen a lower rate of increase compared to the moving 75<sup>th</sup> percentile benchmark derived from among our peers, and the CPR recommends close scrutiny of these patterns in the near-term budgeting cycles.

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<sup>5</sup>Teaching staff includes tenured and tenure-track faculty, coaches, lecturers and visitors.