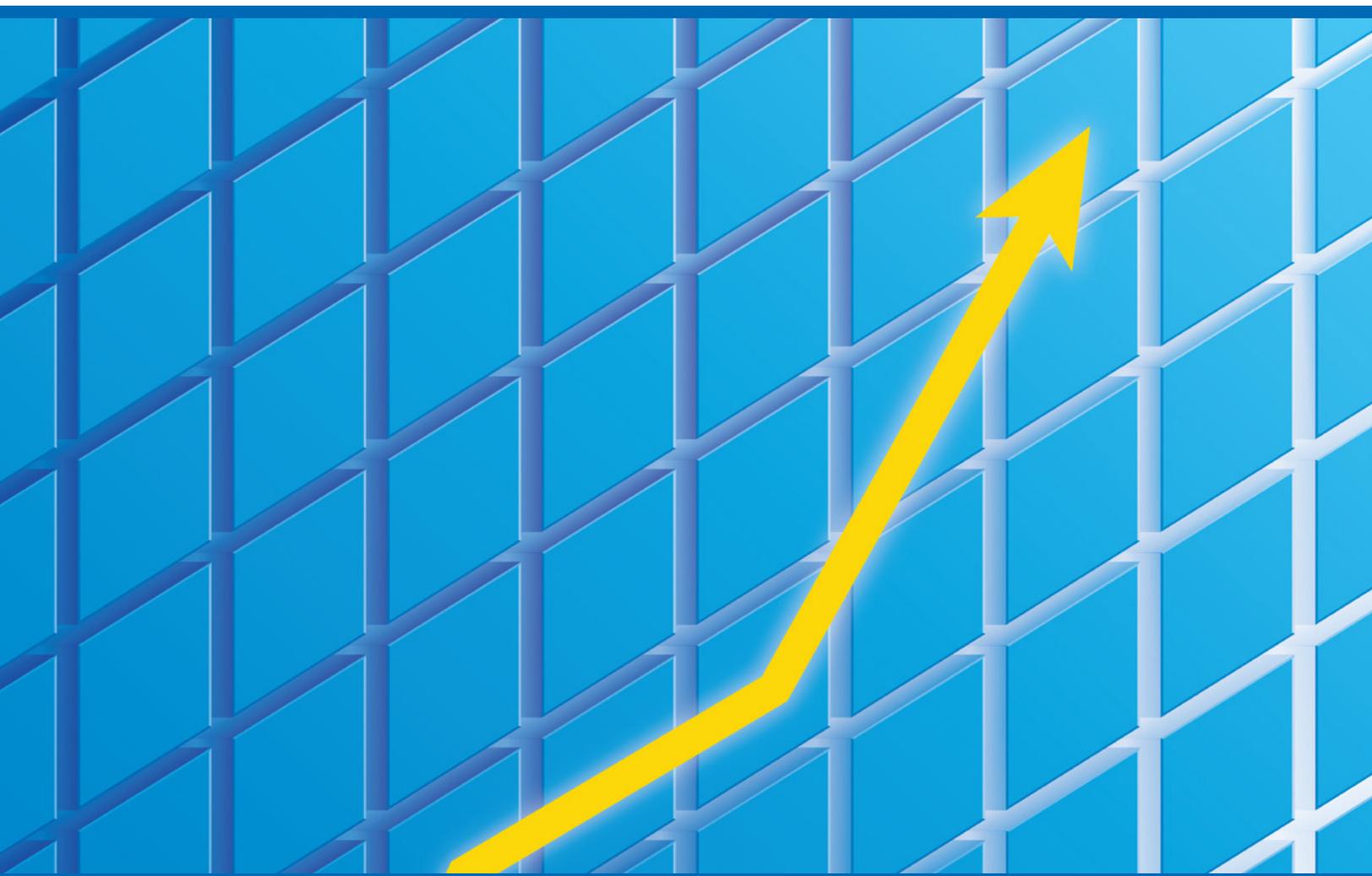


Better Ways to Plan Your Budget Using CUPA-HR Data

A CUPA-HR Research Brief

Adam Pritchard, Ph.D., Senior Survey Researcher

Jasper McChesney, M.S., Data Visualization Researcher



**College and University Professional
Association for Human Resources**

Citation for this report:

Pritchard, Adam, & McChesney, Jasper (Feb 2018). *Better Ways to Plan Your Budget Using CUPA-HR Data*. Research report. CUPA-HR. Available from: www.cupahr.org/surveys/publications.

Introduction

If you've worked in human resources long enough, you've probably received your fair share of surveys asking you to project what your salary increase pool will be for the next year. Inevitably, the results of these "projection surveys" become a part of your budgeting process for the upcoming year. But what do these surveys really measure? How do they compare to the actual increases that make it into the final budget and are passed along to employees? Should these types of projections be accepted as a best practice, or are there better data that you could use for budgeting?

All too often, campus leaders settle for a single targeted projection estimate to provide the basis for planning next year's salary increase budget request. In higher education, there is much more data readily available than what a few institutions say they are "planning" with respect to salary increases. Budget decisions that will impact every part of your role in managing the campus workforce should be based on a much sounder strategy. HR leaders should always be able to furnish campus decision-makers with clear and accurate data which will in turn bolster their case when negotiating for next year's compensation budget, whether with a board of directors, a union, a governing body, or a state legislature.

HR professionals in higher education recognize the need for quality data, and should be able to demonstrate the effectiveness of truly data-driven decision-making — and in the process further their institution's success during the budgeting process.

For over 50 years, CUPA-HR has been the definitive data source for higher education HR professionals, conducting salary surveys of administrative, professional, staff, and faculty positions. This salary data is critical to benchmarking salaries for recruitment, is an excellent resource for making pay equity adjustments to existing positions, and can aid in analyzing competitive faculty positions for retention raises.¹ Because CUPA-HR salary surveys collect information on a wide range of positions in higher education, this data has long been used to make salary projections and to budget for across-the-board annual salary increase targets for administrators, professionals, staff, and faculty.

This research brief explores why "projection estimates" are not an effective approach to budget planning by comparing past projections to CUPA-HR's database of real-world salaries. The results shed light on why data-informed and data-driven decisions are a more effective way to think about budget planning. Below you'll learn about a good, better, and best way to leverage survey data from CUPA-HR to make the most effective budget request possible. Throughout this brief, you'll see how CUPA-HR's customizable reports in DataOnDemand² can make incorporating annual salary data into your budget projections easy and accurate.

1 Bichsel, J. (2016, September). [How to Use Benchmarking to Ensure Competitive Pay for Faculty](#) (Blog). CUPA-HR.

2 Access or subscribe to DataOnDemand at <http://www.cupahr.org/surveys/dataondemand/>.

What Are Other Institutions Projecting?

What is wrong with using salary projection targets, anyway? Information about pay increase targets set by other institutions seems like an easy way to begin to budget. In prior years, CUPA-HR regularly asked survey participants if they had established targets for the next year's pay increases. This simple data point was then made available in salary survey annual reports. However, only a small proportion — less than a quarter — of participating institutions typically reported having already established these targets at the time of the data collection. Past CUPA-HR annual reports have broken down these pay increase targets by job category and institution type, and many find these results informative for getting a better sense of the “big picture” in higher education (Figure 1). However, although overview figures like these are generated to be informative, the temptation can be to also use that “one number” as the sole starting point for a budget.

HIGHER ED HR BENCHMARKING, 2017 Pay Increase Targets for 2017-18

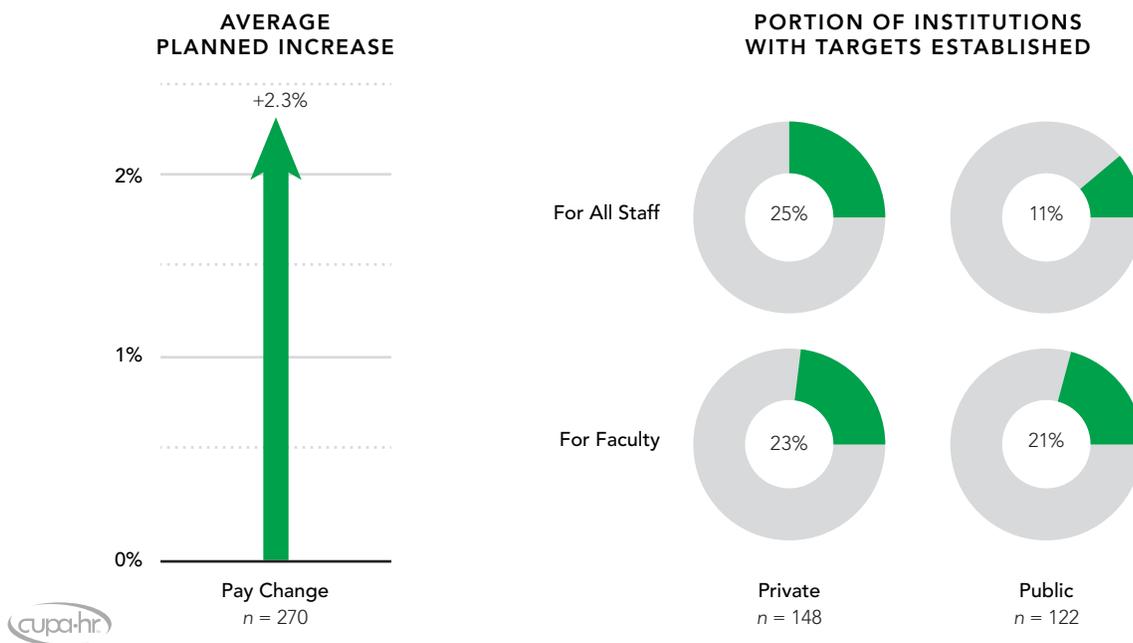


Figure 1

Although these statistics may feel like a data-informed starting point, they are often inadequate for effective benchmarking. With comparatively few institutions reporting already established pay target increases, this information may not provide a representative summary for the 75% or more participant institutions that had not set target pay increases at the time of the survey. Likewise, an analysis by CUPA-HR comparing several years of pay increase targets against real-world salaries for the subsequent

year suggests that there is little relationship between these often-sought “salary target projections” and the actual salary increases implemented across institutions, especially when considering different types of positions.

Even when we asked about targeted increase rates for administrators/professionals, non-exempt staff, and faculty separately, the reported pay target increase estimates over the past four years have projected nearly the same rates of increase for salaries in each of these groups — around 2.5%. However, actual salary trends over the same period show much more variation between these three types of employees (Figure 2).³

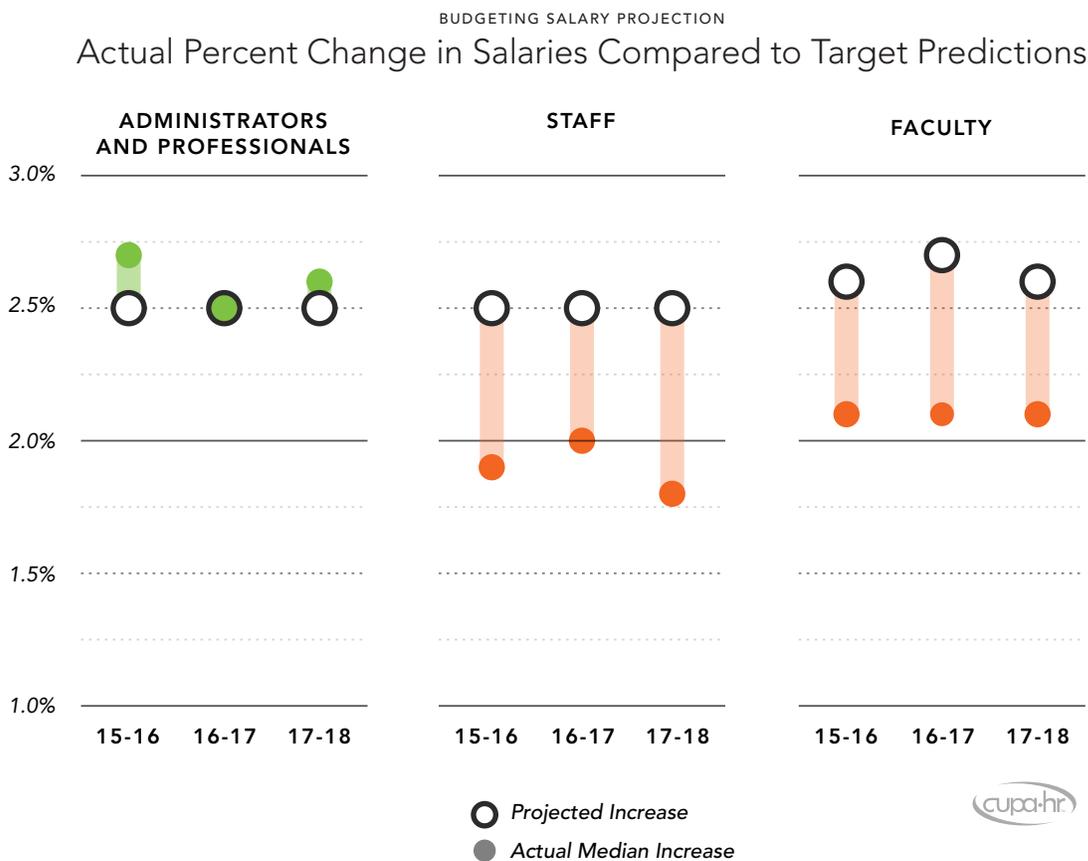


Figure 2

Within each category (administrators/professionals, staff, faculty) the annual increase did not vary much from year to year. Between categories, however, the average salary increase consistently differs. For instance, between 2014-15 and 2016-17, faculty salaries on average increased by 2.1% each year, staff salaries increased 1.9% on average each year, and administrator/professional salaries increased by 2.6% on average each year. The pay increase target projections have consistently predicted an increase of around 2.5% for each of these employee groups over the past three years, which does not match the actual data. The pay increase target projections typically underestimate administrator salaries and significantly overestimate staff and faculty salary increases.

³ CUPA-HR collects actual salaries of administrators and professionals separately, but historical data on salary target projections is available only for these two groups combined.

Human resources professionals should seek out more sophisticated and accurate information that considers real-world data trends rather than relying only on these targeted estimates or projections. One important strategy is to consider the variations between higher education categories like faculty, staff, professionals, and administrators. This is necessary because not only do salary change rates differ for these groups, but each institution has a different ratio of faculty, staff, administrators, and professionals. In other words, even when matching the broader market trends, each institution's "overall" salary change rate will be unique based on the proportions of employees within each group. The best way to ensure that faculty, staff, administrative, and professional salaries are benchmarked correctly is to consider each of these groups independently in the early stages of the planning process before setting your own overall salary increase rate.

The Basics of Data-Informed Decisions

Rather than settling for a single (inaccurate) targeted increase projection figure as the basis for budget planning, human resources professionals should instead use the most accurate, comprehensive, and recent salary data available. That means making comparisons that account for the different salary needs and different proportions of key employee groups on campus. High-quality historical salary data can be used to analyze actual trends in compensation rather than mere intentions. As the saying goes, “the best predictor of future behavior is past behavior.” Salary data can also be sliced into more narrow comparisons that can be tailored to the unique needs of an institution. Finally, the regular use of salary data can facilitate continuing review of key positions that may require special attention to remain competitive on an annual basis.

Making decisions using real-world data can help institutions accurately benchmark against the job market, avoid budgetary surprises, and prevent the discontent created on campus when salary decisions appear to lack transparency. A *data-informed decision* considers the best available information as part of the budget development process without going into specifics, while a *data-driven decision* uses data to make specific recommendations within a budget plan, for example, allocating a specific amount to targeted equity raises for a certain unit (e.g., information technology professionals).

HOW DO I EFFECTIVELY USE SALARY DATA?

Salary surveys can be an effective tool in data-informed or data-driven decision-making about compensation. Some considerations in using salary data include the quality and reputation of the data source, the methodology used to collect data, which positions are benchmarked, and the ability to explore subsets of data.⁴ For higher education, the ability to explore subsets and slice the data by different criteria is important because institutions of varying size, classification, affiliation, region, etc. pay differently and must therefore benchmark against their peers. Human resources professionals in higher education must also meet the unique salary expectations of administrators, professionals, staff, and faculty. These employee groups are often compensated in different ways, exist in different proportions at each institution, and may be compensated differently depending on institutional characteristics (e.g., a public research-oriented institution versus a private teaching-oriented institution). Depending on your institution, each of these categories (and even sub-groups of these) may require a different salary target. To make the best use of appropriate salary data, consider which of the following might apply to your institution:

⁴ Society for Human Resource Management (2013). Obtaining and Using Relevant Salary Survey Data (Toolkit). SHRM.

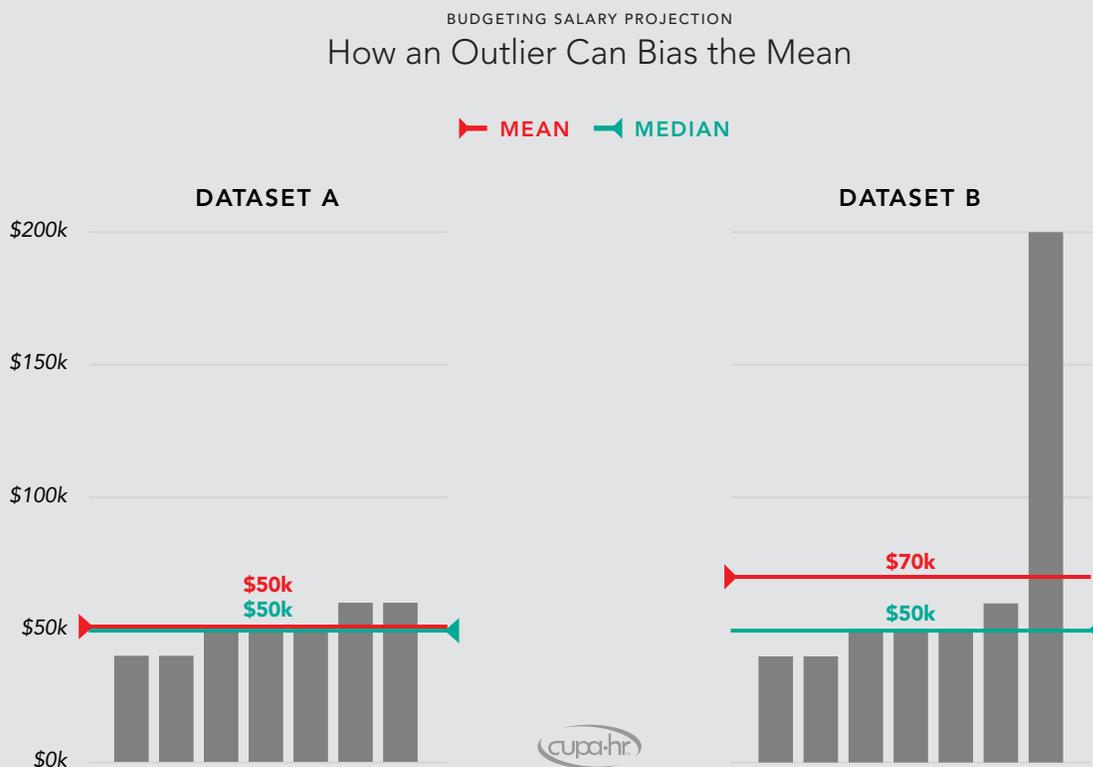
- **There are many ways to define peers for comparison.** Who should your institution's salaries be benchmarked against? Making the right comparisons — position-specific data and carefully selected peer comparisons⁵ — can make all the difference when planning salaries that will make your institution competitive in the labor market. Your peer institutions can be narrowed down by one or several institution-level criteria such as affiliation (public, private independent, or private religious), Carnegie classification, enrollment size, faculty-to-student ratio, geographic region, overall operating expenses, or similarities in programs of study offered. Balance is key: a larger comparison group gets you more robust data for comparison, but you must also make sure you are comparing to the right types of institutions that make sense for your goals.
- **Not all faculty are the same.** Tenure track faculty, non-tenure track teaching faculty, non-tenure track research faculty, and adjunct faculty may each require unique compensation strategies, as do faculty members from different disciplines and ranks. Will the same salary increase retain both tenured and non-tenured faculty? Does collective bargaining influence salary targets for some, but not all, of these faculty sub-groups? Are there unique, fast-growing, or in-demand departments/disciplines that require a separate strategy?
- **Administrator salaries are broadly competitive.** Like faculty, many administrative positions in higher education are competitive at a national or broad regional level. Often, institutions seek administrators with experience at other institutions of a similar size or mission, and with this experience and mobility comes an expectation of a competitive salary. As higher education moves toward a “business model” where innovative leadership strategies are displacing more traditional shared governance models,⁶ finding administrators with the appropriate skills and expertise is becoming increasingly competitive, not only within higher education but sometimes against the broader executive employment market.
- **Employment competition varies for staff and professionals.** Many non-exempt staff are hired from within local labor markets where other institutions or companies in your state or local Metropolitan Statistical Area (MSA) might be a better salary comparison than a nationwide set of peer institutions based on Carnegie class. Exempt or professional staff, however, may be more limited to competition from the higher education sector, perhaps on a state or regional level. Are your institution's salaries for these employees having to compete with all higher education institutions (even those very different from your own) within your state or region, regardless of the type or size of these institutions?

5 Boggs, J. (2015, September). [Show Them the Money: An Approach to Faculty Salary Adjustments](#). (Blog). CUPA-HR.

6 Soares, L., Steele, P., & Wayt, L. (2016). [Evolving Higher Education Business Models: Leading with Data to Deliver Results](#). (Report). American Council on Education.

DATA LITERACY: MEAN VS. MEDIAN

Data literacy is also critical to making data-informed decisions. Human resources professionals should be ready to explain some basics about the data and statistics they are using. For example, most people understand that a mean salary is calculated by adding up all salaries and dividing by the total number of incumbents. However, because one or a few individuals may be paid a comparatively high (or low) salary, the best number to use to represent salary data is often the median. A median is calculated by sorting all the values in a dataset in rank order from low to high, then locating the "middle" ranked value. This approach gives a better estimate when one or a few salaries are very different from the others, and is much more robust (meaning it is less susceptible to variations) than the mean. Someone advocating for data-driven decision-making should be prepared to explain that a median salary is calculated by listing all salaries rank-ordered from least to greatest, then identifying the middle salary (or 50th percentile). You should also be prepared to explain why medians are a much better representation of a range of salaries: a median is usually a much less biased representation of the "middle" of the range of salaries than the mean, which can be biased by even a few atypical cases, especially when a small number of values are compared.



A Good Approach: Using Salary Surveys

The simplest, most straightforward way to make good, data-informed decisions is to compare your institution's previous salary increases against peer institutions in higher education and adjust the next year's plan accordingly. Each year, CUPA-HR surveys collect employee salary and demographic information from hundreds of colleges and universities in the United States. DataOnDemand (DOD) provides the ability to generate a *Trend Report* for each of the Administrators, Professionals, Staff, and Four-Year Faculty in Higher Education surveys.⁷

FINDING LAST YEAR'S CHANGE WITH THE TREND REPORT

The DOD *Trend Report* creates a table summarizing the percent change in salaries for any positions you select, while comparing your institution to your chosen set of peer institutions using the most up-to-date and comprehensive data available anywhere (Figure 3). Because the *Trend Report* matches actual position-level data from institutions that participated in both selected years, it is a much better representation of a trend than a snapshot comparison of each year's salaries.⁸

Using the *Trend Report* is a great starting point for understanding if last year's budget is on pace with the rest of higher education and for projecting the future salary needs of your institution. Use options in the *Trend Report* to create your own custom comparisons, whether that's comparing only salaries of positions your institution employs or slicing the data by comparisons relevant to your needs (e.g., Carnegie classification, geographic region, or operating budget). Another option is the ability to display a wide range of additional percentiles, which can be useful for getting a better feel for the distribution of salary increases. If your institution participates in the survey, the report matches position-level data from your institution and calculates comparison ratios against your benchmark group.

⁷ CUPA-HR's DataOnDemand is an online data application that allows your institution to run custom analysis reports on the most current and comprehensive salary and demographic data available in higher education. For more information on ordering and access, visit <https://www.cupahr.org/surveys/dataondemand/>.

⁸ Matched data that tracks the same institution over multiple years, called longitudinal data, is more reliable than cross-sectional data which summarizes each year by itself. Because a given institution could submit data one year and not the next, comparing only those institutions who participated in both years ensures that data about salary increases is as accurate as possible.

Professional Survey: Trend Report (Multi-Position)

Report Parameters

Focus Institution	Demonstration University
Comparison Group	All Professionals: All Institutions (N = 1000)
Group Size	1000 Institutions
Earlier Year (1)	2016-17
Later Year (2)	2017-18
Effective Date of Salary Data	December 1, 2016

Key

- N¹ - Number of Incumbents in first comparison year
- N² - Number of Incumbents in second comparison year
- ⊙ - More than 2.0 times the group median
- ⊙ - Less than 0.5 times the group median

Only institutions that reported both years for a given Position are used to find the percent change in annual salary for that Position. Per Department of Justice Safe Harbor Guidelines, statistics will not display when the number of Institutions is less than 5 (too few data) or, if weighted statistics are selected, when one institution's data comprise more than 25% of the total (unbalanced data).

Position	A. Focus Salary			B. Comparison Group Statistics						Ratio of A to B	
	N ¹	N ²	% Change in Average	Median	Average	25th Pct	75th Pct	N ¹	N ²	Median	Average
Across All Positions Selected	18	21	2.4	2.0	2.8	0.1	3.6	8991	9597	1.2	0.9

Position	A. Focus Salary			B. Comparison Group Statistics						Ratio of A to B	
	N ¹	N ²	% Change in Average	Median	Average	25th Pct	75th Pct	N ¹	N ²	Median	Average
Academic Affairs											
[320010] Executive Assistant to System or Institution CEO	1	1	3.6	2.0	1.1	0	3.8	475	515	1.8	3.3
[320020] Secretary to the Board of Trust	1	1	3.4	2.0	3.1	0	3.5	55	63	1.7	1.1
[325000] Administrative Specialist/Coordinator	13	15	2.4	2.1	4.0	0.3	5.1	7924	8295	1.1	0.6
[400110] Study Abroad Advisor	3	4	2.3	2.0	2.0	0	3.0	537	724	1.2	1.2

Figure 3. Example of a DataOnDemand Trend Report

A Better Way: A 3-Year Trend and 3-Year Average

Although recent salary data is far more reliable than any projection estimate, there are still better ways a data-informed decision maker can utilize historical salary data strategically. An appropriate practice when setting salary budgets is to leverage historical data in finding the best benchmarks for your institution. Many institutions use **trend data** to make data-informed decisions, and three years of data is a commonly used timeframe when making these projections. A 3-year trend balances the advantages of using the most recent (and therefore relevant) data against the need to incorporate more long-term data points. Consider too few years, and an aberrant change in a single year might carry more weight than it should (e.g., salary freezes during a recession year). Consider too long a term, and the data quality might be negatively impacted, whether by structural changes to institutions over time (e.g., some fields might have emerged or changed dramatically in the past few years) or survey participation changes (e.g., an institution might have participated in a survey for the past four years but not the past five years, leaving some useful data out of a 5-year dataset).

A major strength of CUPA-HR's database is that it contains remarkably consistent data from previous years' surveys through the most recent year. CUPA-HR strives to meet the recommendations of best practices in data collection, including: providing current-year data, maintaining low participant churn rates for more robust longitudinal data, protecting institutional anonymity, collecting faculty data by both rank and discipline, collecting demographic data on all positions, gathering comprehensive data across thousands of positions, and allowing users to slice the data by several pre-defined and customizable sub-categories. CUPA-HR salary survey participants are also a good representation of the population of higher education institutions when broken down by Carnegie classification and affiliation (i.e., public, private independent, or private religious).⁹

⁹ You can see the full list of participating institutions in the "Overview of Report Contents" for each CUPA-HR salary survey, found at <https://www.cupahr.org/surveys/publications/>.

GENERATING AND USING TREND DATA

With DataOnDemand (DOD), generating a **3-year trend** and **3-year average** from higher education salary survey data is a straightforward process. Using the *Trend Report* within DOD, you can examine changes over time for each of CUPA-HR's four major salary surveys: Administrators, Professionals, Staff, and 4-Year Faculty in higher education. For either type of 3-year data model, the process in DOD is the same:

- For each CUPA-HR survey, select the *Trend Report* to see percent changes in salaries from one year to another year.
- To get started, you must decide:
 - Which comparison group makes sense for my institution? A comparison group for trend data should be as large as possible while retaining key characteristics against which you would like to compare. Good examples are affiliation or broad classification (e.g., Associates, Baccalaureate, Master's, Doctoral).
 - What positions do I want to compare? Comparing only those positions reported by your institution in CUPA-HR surveys is quick and easy if you are a survey participant; otherwise, it is also possible to select specific positions to include or exclude. Using the option of all positions surveyed by CUPA-HR will result in the widest possible comparison.
- Create a **3-year trend** by gathering salary change data from each of three years (from which you could create a graph or table), and then calculate a **3-year average** that can be used as a conservative estimate for next year's salary increases based on the average annual change across the trend period.

Administrator Survey: Trend Report (Multi-Position)

REPORT PARAMETERS

FOCUS INSTITUTION
Demonstration University

COMPARISON GROUP
All 2017 Salary Participants (N=1204) ▼

EARLIER YEAR
2016-17 ▼

LATER YEAR
2017-18 ▼

Figure 4. Trend Report Parameters

To use DOD to find the data necessary to create a **3-year trend** and **3-year average**, simply use the *Trend Report* to find the percent change in salary for each pair of years you are interested in including. For a **3-year trend or average**, you would need to run three separate reports, one for each pair of years (i.e., 2014-15 to 2015-16; 2015-16 to 2016-17; 2016-17 to 2017-18) (Figure 4).

A 3-YEAR TREND, A 3-YEAR AVERAGE, OR BOTH?

Which of the two distinct ways to use historical data is better, a 3-year trend or a 3-year average? Each has its advantages and disadvantages. The most effective approach would be to use both.

A 3-year trend gives you the ability to easily visualize and communicate a pattern across a few years. For example, you can see if salary increase rates appear to be rising, falling, or remaining steady over the timeframe. However, you should use caution when extrapolating a trend (such as an increasing pattern) into future years. Sometimes, high rates of increase fall off or “correct” within a few years. Often, a more conservative approach is warranted.

A 3-year average can be an easy solution to this problem, effectively incorporating trend data into an easily understood statistic that summarizes the recent changes. A 3-year average is created by adding each year’s percent change, then dividing by the total number of years. This simple average gives you an easy way to estimate the “typical” annual change while reducing some of the year-to-year variation. You could even turn this into a “rolling” average by updating the figure each year, giving you a perpetually up-to-date estimate of the recent trend. A 3-year average has the advantage of stability throughout year-to-year variation, but does not provide as much specific detail as a trend.

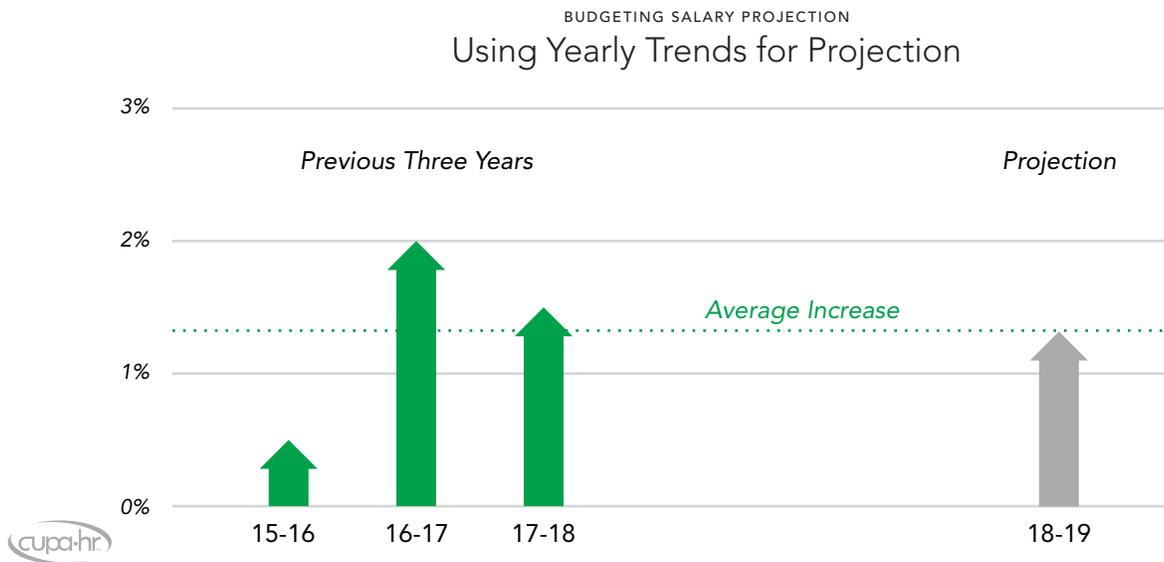


Figure 5

A great way to use trend data is to use a **3-year trend** graphic to provide context, while using a **3-year average** to make a conservative but data-driven projection into the next year (Figure 5).

The Best Way: Trend Data and Equity Targets

A data-informed strategy that incorporates recent salary trend data is better than simply using a single year's data or relying on targeted raise estimates. But the best approach to using data for budgeting is to make data-driven decisions in which the data itself helps you precisely focus your efforts. An overall 3-year model can help you set a baseline, but specific salary data can also be used to set exact targets for additional equity adjustments.

AUGMENTING WITH PRECISION DATA

The best way to augment your 3-year trend and 3-year average model with data is to consider how salary data can be useful in developing additional equity benchmarks tailored specifically to your institution and workforce. Go beyond simple category averages or overall trends, and build your strategy on position-specific salary and demographic data offered by CUPA-HR to identify precisely where targeted equity raises or adjustments are needed the most.

Since the 2016-17 survey cycle, CUPA-HR has collected data at the incumbent level, rather than aggregated by position. Incumbent-level data allows DataOnDemand users to examine trends relating to individual characteristics such as age, time in position, gender, and ethnicity for any position. The same summary statistics that have always been available with position-level surveys can still be calculated, but are now built from more precise and accurate incumbent-level data.

POSITION EQUITY ANALYSIS

Once you’ve established an overall 3-year trend and 3-year average for administrators, professionals, staff, and faculty at your institution, you may wish to use CUPA-HR salary data to dig deeper into position-level information. There are many possibilities to consider that can be easily examined using DOD survey reports.

Do any of your institution’s raises lead or lag the average for a certain position or area?

The DOD *Trend Report* generates both summary statistics and position-by-position statistics. If your institution participates in CUPA-HR salary surveys, the data you provided is automatically displayed side-by-side with your comparison group.

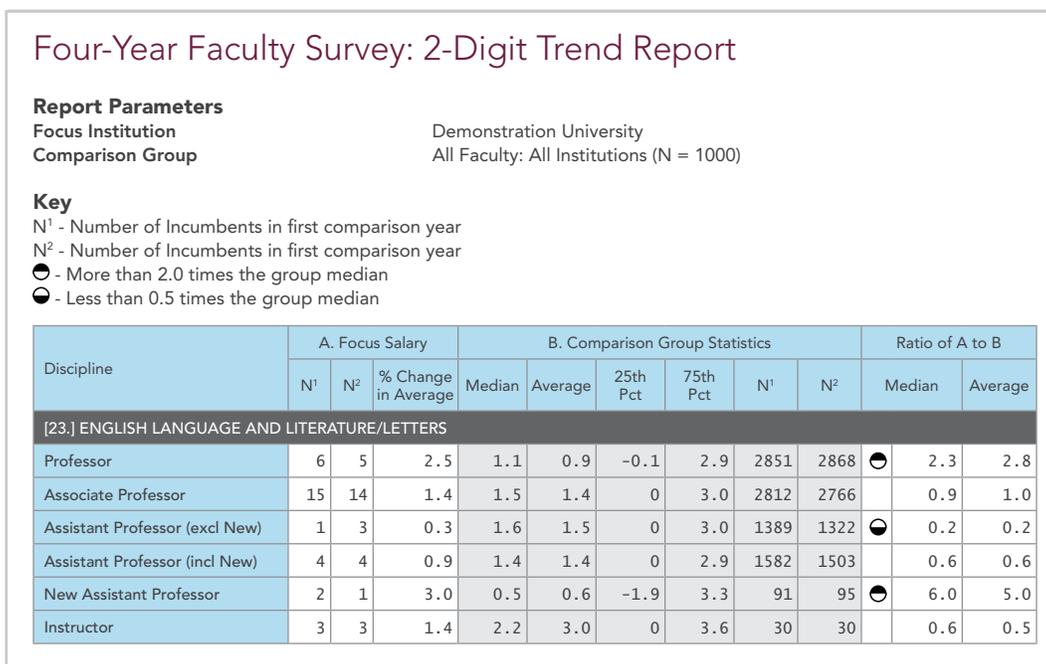


Figure 6. Example Trend Report

For individual positions, or for individual ranks within disciplines on the faculty survey’s *2-Digit Trend Report* for 2-digit CIP codes, you can quickly determine how your positions measure up over time (Figure 6). By running reports for successive years, you can build a unique 3-year trend and 3-year average for each position or area. These data can directly inform your efforts to determine if there is a need for additional equity raises for specific academic departments or functional units on campus.

The *Trend Report* can help you make a strong case for equity adjustments to key units or positions using the same 3-year trend and 3-year average strategy discussed above, but laser-focused on specific areas of need.

Are your position salaries themselves in line with other institutions?

Although your institution may be doing a great job overall keeping in line with recent salary increase trends, a closer look at current salaries might be informative in making more specific pay equity recommendations. For current-year salaries, DOD has several tools that can be used for benchmarking individual administrative, professional, staff, or faculty positions.

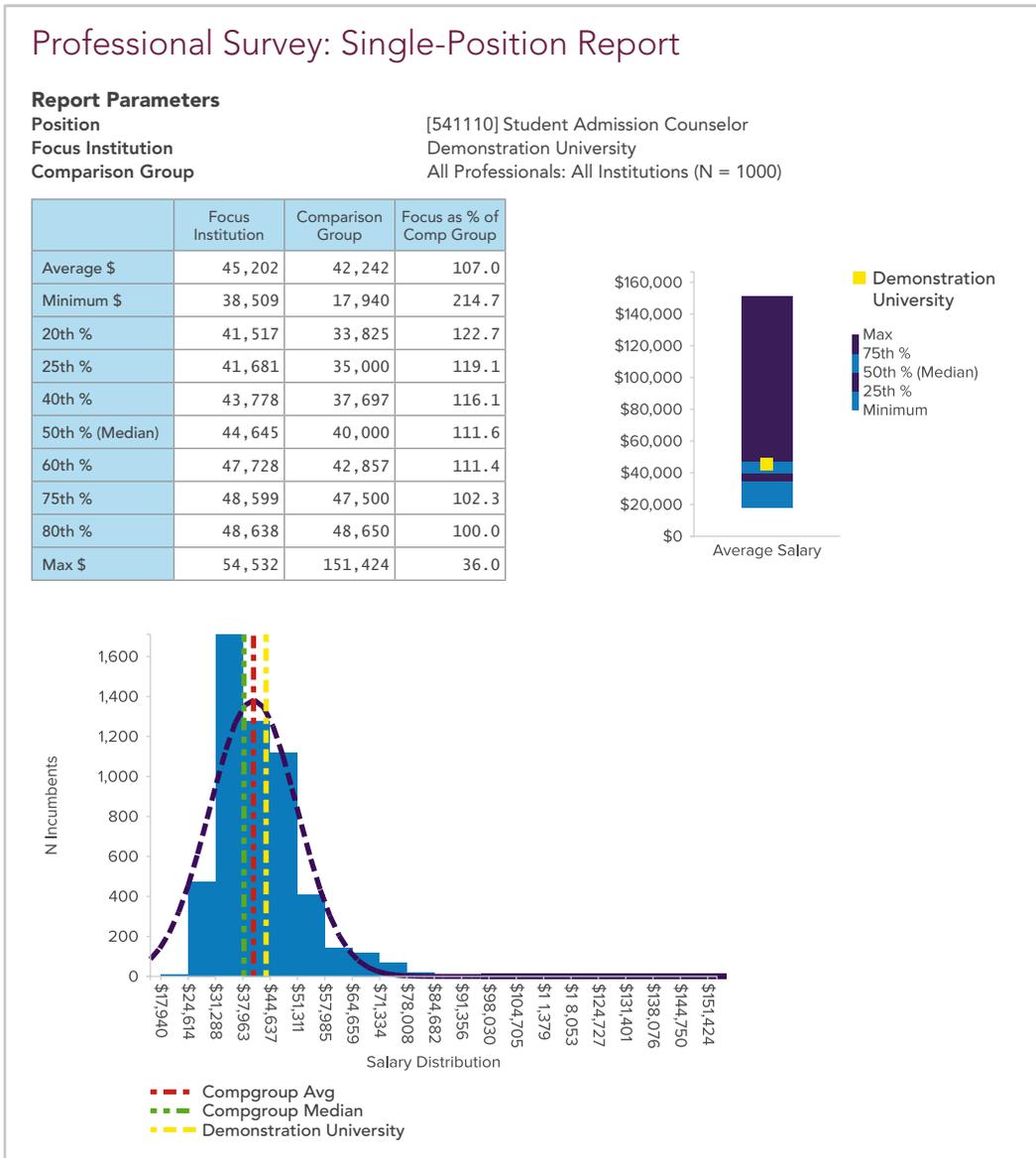


Figure 7. Example of a Single-Position Report

The Single-Position Report (Figure 7) benchmarks an individual position against percentiles in your comparison group. This is a useful tool for CUPA-HR survey participants to compare one position to peers, and is also helpful for determining salary ranges for a position.

To get an overview of many positions at your institution in comparison to a peer group, use the *Multi-Position Report* in DOD (Figure 8). This can be helpful when trying to identify areas with a possible need for salary adjustments or those with relative strength.

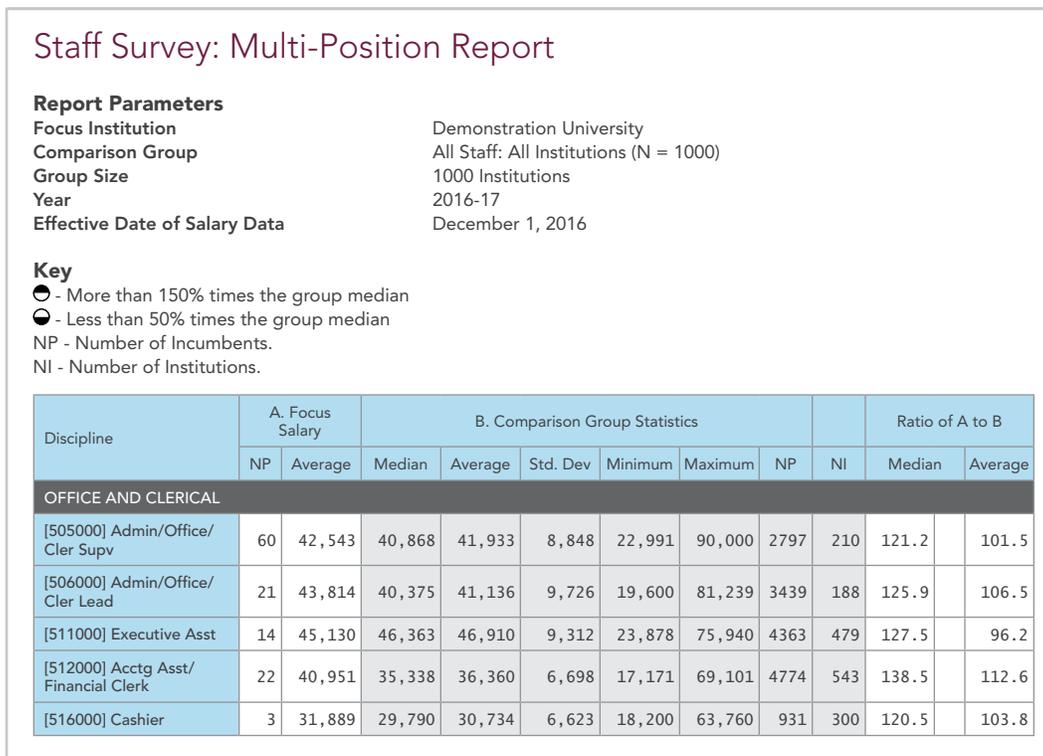


Figure 8. Example of a Multi-Position Report

One notable feature of both the Single-Position Report and Multi-Position Report useful for salary projection is the ability to apply an “Annual Aging Factor” to the data. This feature can be used to quickly apply a prorated salary increase to the data, creating estimates for compensation and range percentiles for any position or group of positions effective for any date between the survey date and when the next year’s data becomes available. The “Annual Aging Factor” option is customizable — so you can use any aging factor you need, whether that’s your own institution’s projected raises or one of many quarterly cost indexes such as the Consumer Price Index (CPI) or Employment Cost Index (ECI) published by the U.S. Bureau of Labor Statistics.¹⁰

10 U.S. Bureau of Labor Statistics. <https://www.bls.gov>.

How does your institution compare on diversity, pay equity, and inclusion efforts?

Any data-driven effort to identify targets for salary equity adjustments should consider the characteristics and relative pay of incumbents. High-quality salary data makes it possible to examine minority representation and benchmark salaries for each position. CUPA-HR surveys allow you to evaluate your position salary equity efforts along several key demographic categories: age, ethnicity, and gender (Figure 9).

CUPA-HR provides demographic reports for each of these incumbent characteristics in DOD, with the ability to compare the data against any peer group you choose to create. There is nothing like comparison data to help you make the case to leadership that certain equity adjustments need to be made for certain positions.

Administrator Survey: Age Demographic Report

Focus Institution Demonstration University
Comparison Group Carnegie Class: Highest Research (N=200)

Position	A. Focus			B. Comparison Group						
	Average Salary	Average Age	NP	Median Salary	Average Salary	Average Age	Lowest Age	Highest Age	NP	NI
[304190] A/A Dean Graduate Prgms	91,600	46	1	92,000	101,514	57.6	41	69	21	20
[304200] A/A Dean Health-Related	125,370	58	3	119,703	120,375	55.8	40	67	39	29
[304210] A/A Dean Honors Prgm	82,400	44	1	86,919	91,611	52.5	41	67	6	6
[304220] A/A Dean Humanities	101,880	55	1	102,943	102,322	52.2	38	70	19	14

Professional Survey: Ethnicity Demographic Report

Focus Institution Demonstration University
Comparison Group Regional Institutions: Northeast (N=500)

Position	A. Focus					B. Comparison Group									
	White		Minority*		Total NP	White					Minority*				
	Avg Salary	%	Avg Salary	%		Median Salary	Average Salary	%	NP	NI	Median Salary	Average Salary	%	NP	NI
[416120] Student Counselor	50,700	85.7	48,200	14.3	7	49,317	50,983	82.2	244	118	48,651	49,193	17.8	53	39
[418100] Associate Registrar	75,200	100.0			1	57,158	59,382	80.8	210	160	56,523	58,507	19.2	50	38
[418110] Assistant Registrar	55,230	66.6	51,510	33.3	3	47,908	47,061	79.6	257	154	47,519	49,448	20.4	66	52
[420000] Staff Attorney	110,180	75.0	105,000	25.0	4	101,210	102,865	77.1	27	24	82,554	82,742	22.9	8	7

Staff Survey: Gender Demographic Report

Focus Institution Demonstration University
Comparison Group Public Institutions (N=600)

Position	A. Focus					B. Comparison Group									
	Males		Females		Total NP	Males					Females				
	Avg Salary	%	Avg Salary	%		Median Salary	Average Salary	%	NP	NI	Median Salary	Average Salary	%	NP	NI
[841000] Police Officer	46,846	14.6	40,122	85.4	21	37,500	38,935	17	60	31	37,620	37,975	83	293	51
[614030] Computer Ops Tech	47,222	50.0	43,301	50.0	2	40,872	41,318	13.3	6	6	41,432	42,184	86.7	26	11
[616000] Telecom Tech/Pro	55,450	30.0	54,480	70.0	10	56,323	53,270	16.7	5	5	51,557	51,433	83.3	25	21
[618000] Graphical Design Parapro	55,741	20.0	50,034	80.0	5	44,737	45,006	70.5	43	33	43,000	43,586	29.5	18	16

Figure 9. Example Demographic Reports: Age, Ethnicity, and Gender

Can you identify solutions for high-turnover positions?

Not only can incumbent-level demographics be useful in promoting diversity and inclusion, they can also be used to diagnose problematic units on campus. Tools like the *Years in Position Report* can help you identify positions where the average time-in-position for your institution is much lower than among peers (Figure 10). Comparing your salaries to other institutions can give you a starting point for deciding if pay equity increases are a possible remedy.

Administrator Survey: Years in Position Demographic Report										
Report Parameters										
Focus Institution			Demonstration University							
Comparison Group			Doctoral Institutions (N=150)							
Key										
NP - Number of Incumbents.										
NI - Number of Institutions.										
Position	A. Focus			B. Comparison Group						
	Average Salary	Average Years in Rank	NP	Median Salary	Average Salary	Average Years in Rank	Least Years in Rank	Most Years in Rank	NP	NI
[153010] Dean Agriculture	275,443	7	1	259,424	266,344	5.7	1	19	34	34
[153020] Dean Arch/Design	230,290	4	1	229,750	239,625	7.5	1	29	40	40
[153030] Dean Liberal Arts	200,176	3	1	204,000	229,091	6.1	1	17	25	25
[153040] Dean Arts and Sciences	255,380	5	1	249,808	266,634	5.2	0	31	124	116

Figure 10. Example of Years in Position Report

Precision salary data from CUPA-HR surveys can tell you not only which positions may require equity raises, but also give you an idea of how much to adjust. Not only can the *Years in Position Report* help to address turnover, it can also be useful for benchmarking efforts to reward longevity or support succession planning to retain institutional knowledge.

Summary

CUPA-HR provides data tools through its DataOnDemand subscription service that can aid human resources professionals in creating many of the comparisons that allow for better data-driven decisions about salaries. These data are the best available source of salary and demographic information in higher education.

DataOnDemand (DOD) can be used to provide customized, up-to-date salary trends and projection tools for each of CUPA-HR's four major salary surveys: **Administrators**, **Professionals**, **Staff**, and **Four-Year Faculty**. Tools like the *Trend Report*, *Single-Position Report*, and *Multi-Position Report* are designed to help HR professionals access the precise salary information necessary to make the data-driven decisions discussed in this research brief, customized to your institution and comparison needs.¹¹

¹¹ For more information on these and other data reports and tools available from CUPA-HR, or on additional surveys and how to participate in and access these data, please visit <http://www.cupahr.org/surveys/about-research/>.

Conclusions and Next Steps

Every human resources department strives to maintain competitive compensation through effective budgeting for future salary changes. Human resources professionals are uniquely positioned to impact these decisions through sound, data-driven decision-making. Using the most up-to-date, high-quality data available is a great first step, but a better strategy incorporates historical trend data in projections rather than relying on others' (often uninformed) target projections. The best strategies use quality data, trend projections, and precision analysis to move from data-informed to data-driven decision-making about overall pay increases as well as targeted equity adjustments.

Here are the next steps for incorporating the best-quality data into your salary projections:

- Move beyond targeted salary projections and instead be prepared to explain and demonstrate why real, data-informed figures are much more appropriate and accurate.
- Develop your own well-reasoned strategic comparison groups to benchmark against; for instance, you might compare against institutions with a similar Carnegie classification for faculty and administrative positions, but with institutions in your geographic region for professional and staff positions.
- Examine and make your overall raise projections from past salary trends; use a 3-year trend and 3-year average from salary surveys, and recognize when and how patterns differ for certain groups of positions compared to others.
- Augment your 3-year trend and 3-year average model with focused analysis; a data-driven approach to making pay equity adjustments is strengthened and easily explained when you utilize the right data and comparisons.
- Consider the importance of accurately budgeting salary projections for the overall management of your workforce; getting it right might support your institution's broader workforce culture goals, support diversity and inclusion efforts, aid in reducing salary gaps, and help you respond to high-turnover positions.
- Utilize the same salary data needed to budget for salary increase projections to help you make smarter salary decisions for any individual position, which can be especially effective when you are able to prorate salaries from reliable data sources.
- Recognize that no single data source is adequate; consider how other expertise on your campus (e.g., knowledge of your state's legislative agenda, national or regional economic outlooks) can be combined with salary survey data to make the most effective projections possible.

With tools like DataOnDemand, CUPA-HR strives to be a valuable contributor to empowering higher education human resources professionals to lead the conversations on their campus about compensation and other important strategic workforce decisions. When it comes to budgeting salary projections, making data-driven decisions using the best-quality data source combined with the best strategy is an effective way to positively impact your institution and get the most out of that data.