

Committee on Faculty Welfare Faculty Salary Analysis, 2020-21

Background: For over a decade, CFW has monitored UCSC faculty salaries with particular attention to the effects on salaries of both the 2008-09 implementation and the 2017 modification of the Special Salary Practice (SSP). CFW has also repeatedly argued that in order to properly evaluate salary *competitiveness*, an analysis of cost of living, driven by housing costs, should be included. In 2019-20 the Senate agreed with this opinion, and produced a resolution that future analyses of salaries should include a cost of living component.¹ Up until this point, this type of analysis has been done only by CFW.

This year's CFW analysis reveals two main things: the first is that the initial special salary practice implemented in 2008 was interrupted too soon, before UCSC could catch up with the 9-campus median². This is true independently of whether we add considerations of cost of living. The second thing that emerged from this year's analysis is that, once we add cost of living, UCSC's salaries lag significantly behind salaries at the other UC campuses. This confirms CFW's previous cost of living analysis from 2017-18.

The goal of the Special Salary Practice was to elevate UCSC faculty salaries close to the 9-campus median. In 2017, VPAA Herbie Lee felt that the goal was met. It is unclear what justified this judgment given that CFW's analysis showed that UCSC salaries were not yet on par with campus-wide median salaries. Two confounding factors were that the analysis conducted by APO included a comparison of UCSC to only 6 other campuses (excluding UCLA and UCB), and that the analysis excluded above-scale faculty. The SSP was reduced as a result.³

The original joint task force on salaries recommended in 2008 that UCSC's salaries be raised to the 9-Campus median. UCSC is similar to UCLA and UCB in being a coastal campus, with high living costs. Additionally, our campus systematically uses cross-campus equity as metrics, for example when it comes to non-resident student enrollments, re-benching, student-aid, and admissions standards. Faculty at UCSC teach as much as faculty at all other campuses. Indeed, the ratio of FTE per number of students is higher at UCSC than at any other UC campus⁴, meaning that UCSC faculty teach and advise more students compared to their UC colleagues. As for research productivity, UCSC has been recently listed as one of the top schools in the world for

¹ Resolution on the Commitment to Ensure Salary Equity and Competitiveness within the UC System.

² The 9 campuses include all UC campuses except UC San Francisco (UCSF) because UCSF is a medical campus.

³ Lee to Deans, Department Chairs, and Senate Chair, 5/26/17, Re: UCSC Special Salary Practice Modifications

⁴ Shared in a slide presentation at the September 13, 2021 UCSC Leadership Retreat. Based on data from the UC Info Center Data: <https://www.universityofcalifornia.edu/infocenter/student-faculty-ratio>

research impact⁵. CFW sees no good reason for excluding UCLA and UCB from a comparison. The committee regards this as an issue of equity.

The exclusion of above scale Senate faculty is also problematic as approximately 8.5% of all Senate faculty at UCSC are above scale, a proportion that certainly affects median calculations. The Senate agrees with CFW on this point and has recommended that, in order to generate an honest picture of the salary discrepancies between UCSC and other UC campuses, above scale salaries be included (see Senate resolution footnote 1). Accordingly, CFW conducted its analysis this year by including above scale salaries, and by using a 9-campus comparison.

Key Findings: Median salaries of UCSC faculty continue to lag behind other UC campuses at the junior, and the full professor levels. This is true for regular scale faculty, and for faculty on the BEE scale. In line with previous years, regular scale and BBE scale are kept separate to reflect differences in hiring practices and salaries. Figures 1, 2 and 3 show UCSC median salaries as compared to UC-wide median salaries for regular scale faculty over the years. The three figures reflect the three ranks in the faculty series. Figures 4, 5 and 6 show the same comparison for faculty on the BEE scale.

⁵ In an analysis published by the Times Higher Education (THE) as part of THE World University Rankings 2018, UC Santa Cruz ranked third in research influence as measured by the number of times its faculty's published work is cited by scholars around the world.

Stephens, T.. (2017, September 7). *UC Santa Cruz Ranked Third Worldwide for Research Influence*. UCSC Newscenter.
<https://news.ucsc.edu/2017/09/times-higher-ed.html#:~:text=In the latest analysis by scholars around the world.>

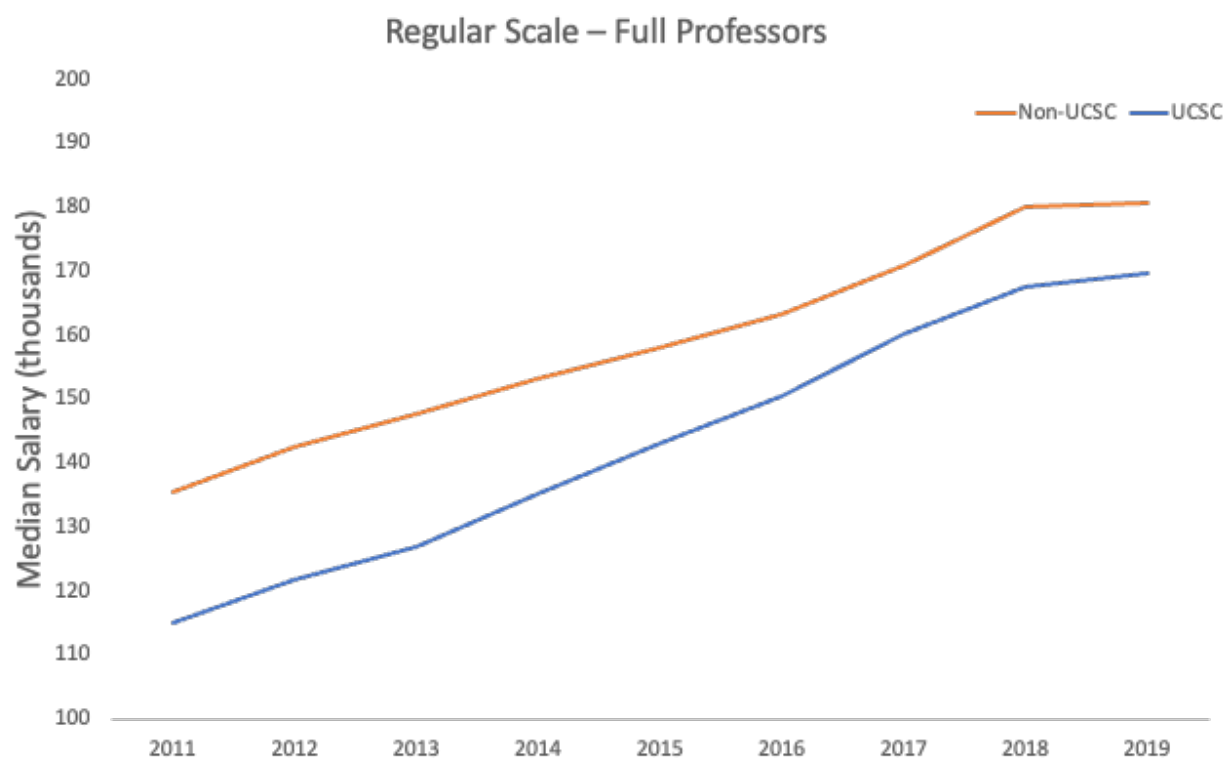


Figure 1. Median salaries for Full Professors on the regular scale from 2011 to 2019.

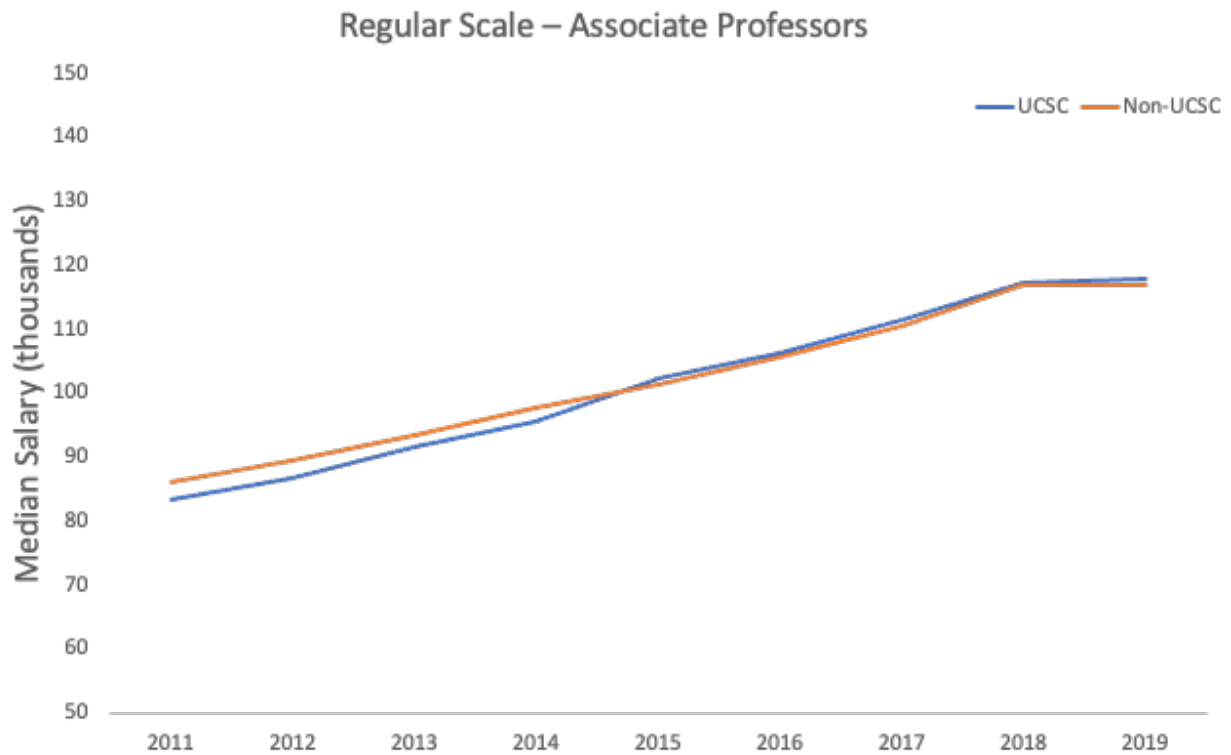


Figure 2. Median salaries for Associate Professors on the regular scale from 2011 to 2019.

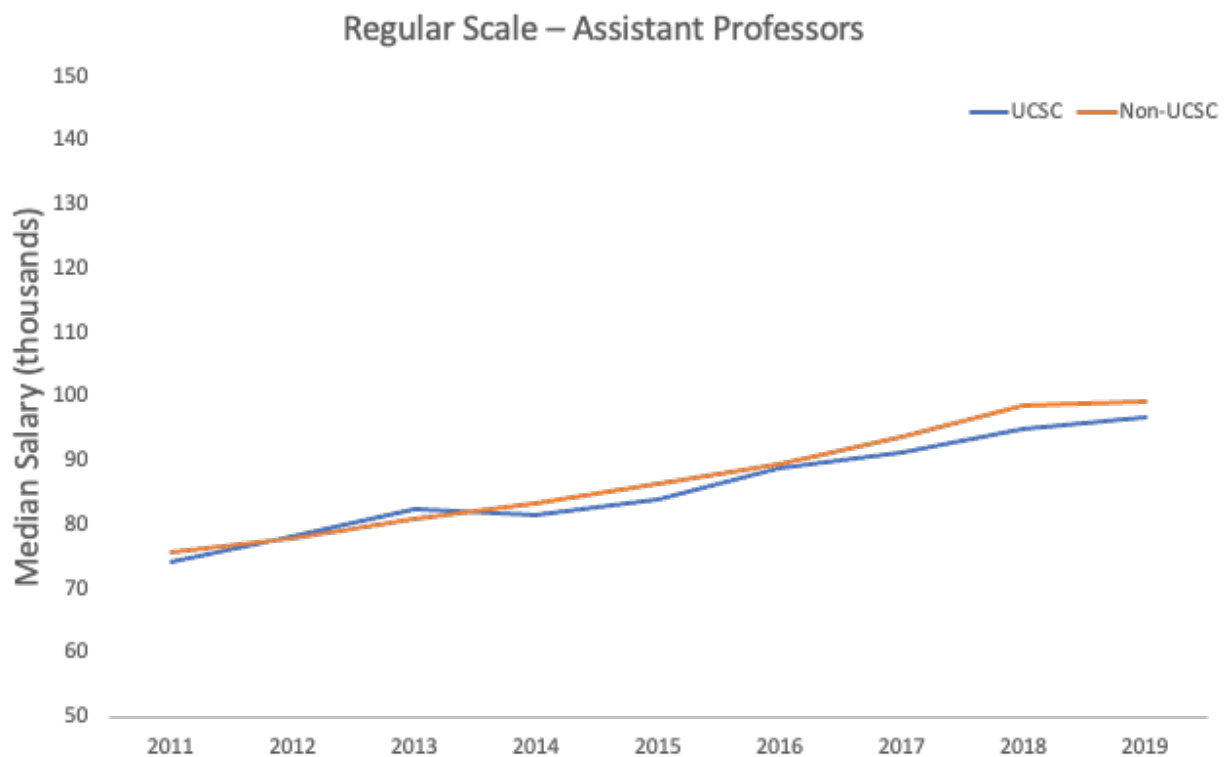


Figure 3. Median salaries for Assistant Professors on the regular scale from 2011 to 2019.

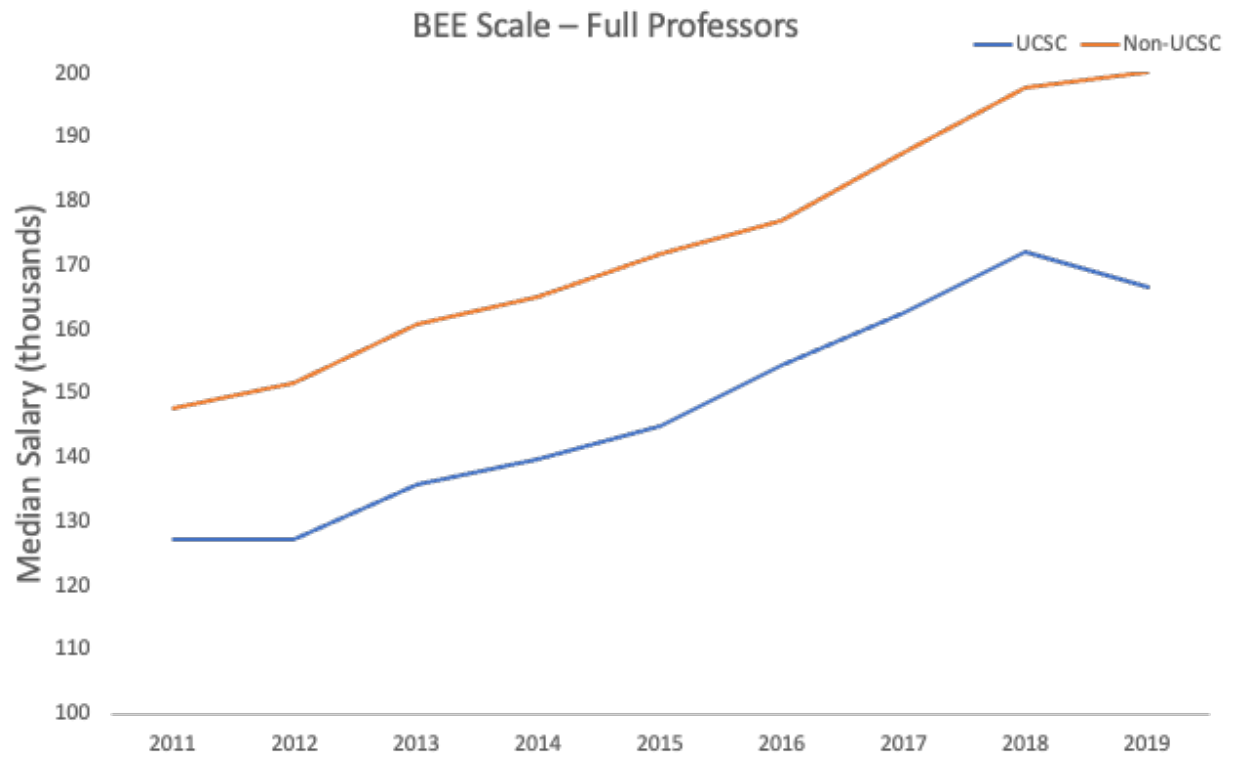


Figure 4. Median salaries for Full Professors on the BEE scale from 2011 to 2019.

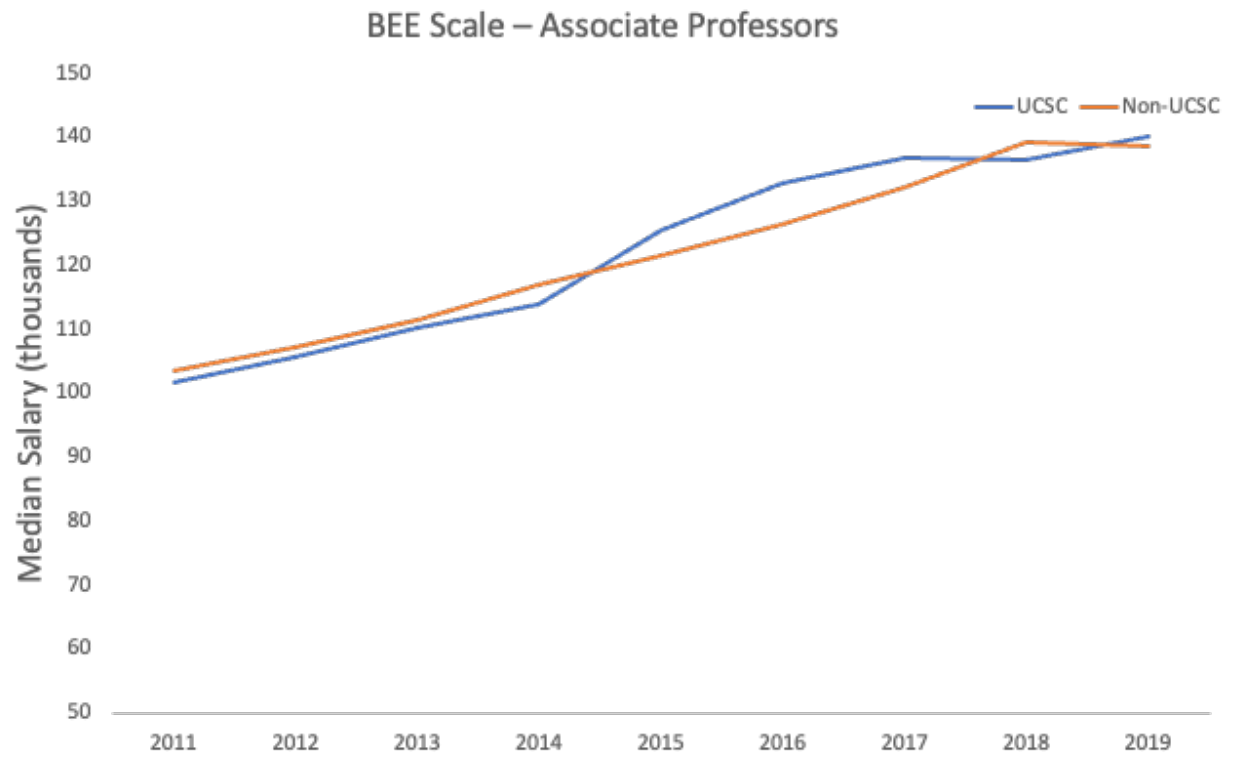


Figure 5. Median salaries for Associate Professors on the BEE scale from 2011 to 2019.

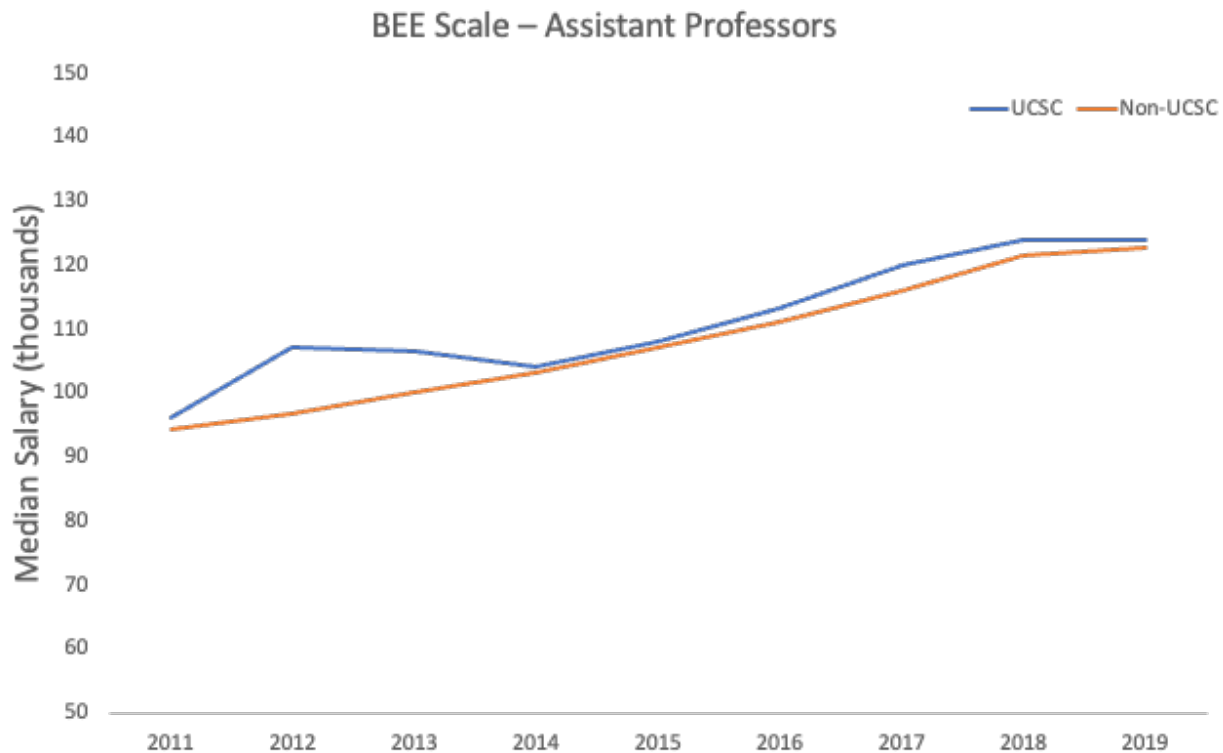


Figure 6. Median salaries for Assistant Professors on the BEE scale from 2011 to 2019.

The 2021 Faculty Competitiveness Report⁶ drafted by the Academic Personnel Office (APO) confirms these findings, adding that the 2008 SSP worked to significantly elevate compensation at the junior to mid-level ladder ranks. The Report notes that lower-rank faculty salaries at UCSC are no longer the lowest in the UC system, as they were prior to the implementation of the SSP. This is true although CFW notes that the ongoing goal is to elevate UCSC faculty to UC-wide medians, not merely to elevate them so that they are not the lowest in the UC.

CFW's current analysis shows that UCSC never actually met the 9-campus median at two out of three ranks. With the modification of the SSP in 2017, CFW fears that the salary discrepancies will increase and move us further away from our goal. Data for the past two years of salary growth is insufficient to make any definitive judgments -- considering also that one of the two years saw the implementation of a salary freeze due to the COVID 19 pandemic. But CFW sees signs of concern. Column versions of figures 1 and 4, for example, show in a clear way that salary growth for full professors at UCSC has slowed in the past two years compared to UC wide growth (see figures 7 and 8 below). The reverse should be the case. In order to catch up with our sister campuses, our growth should be larger.

⁶ 2021 Report of UCSC Faculty Salary Competitiveness within UC, May 2021

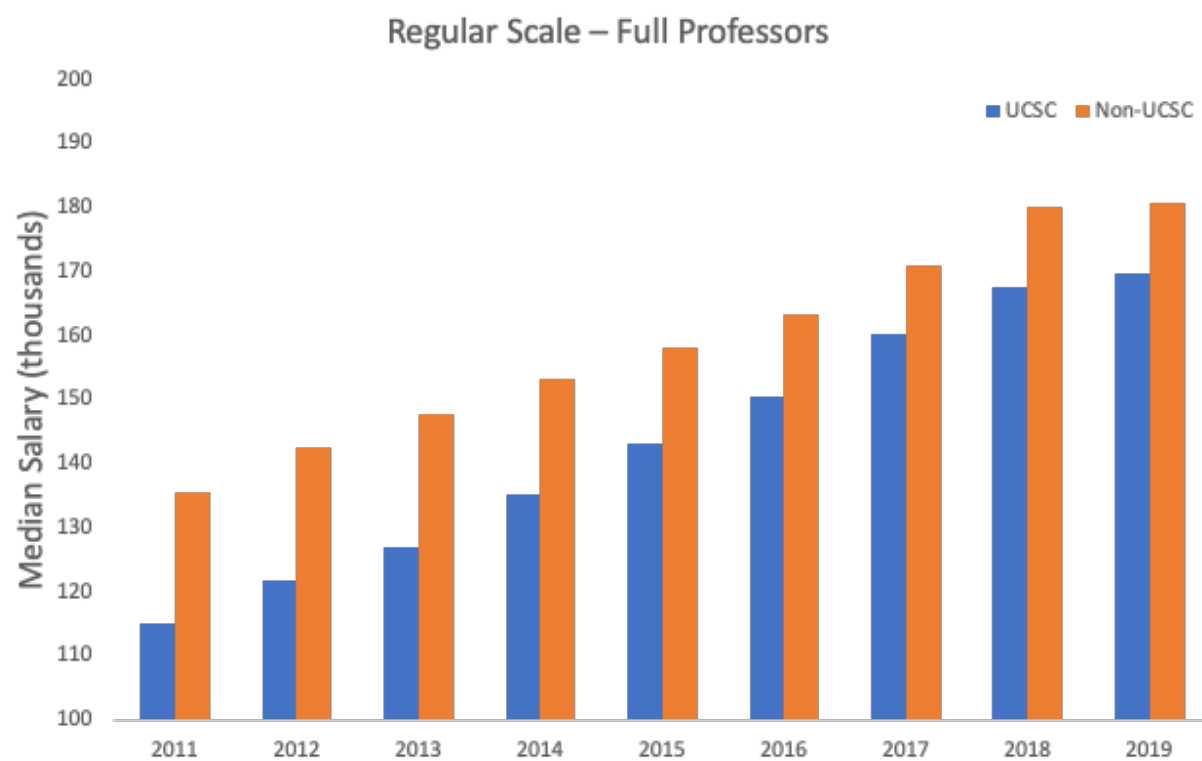


Figure 7. Column version of Figure 1.

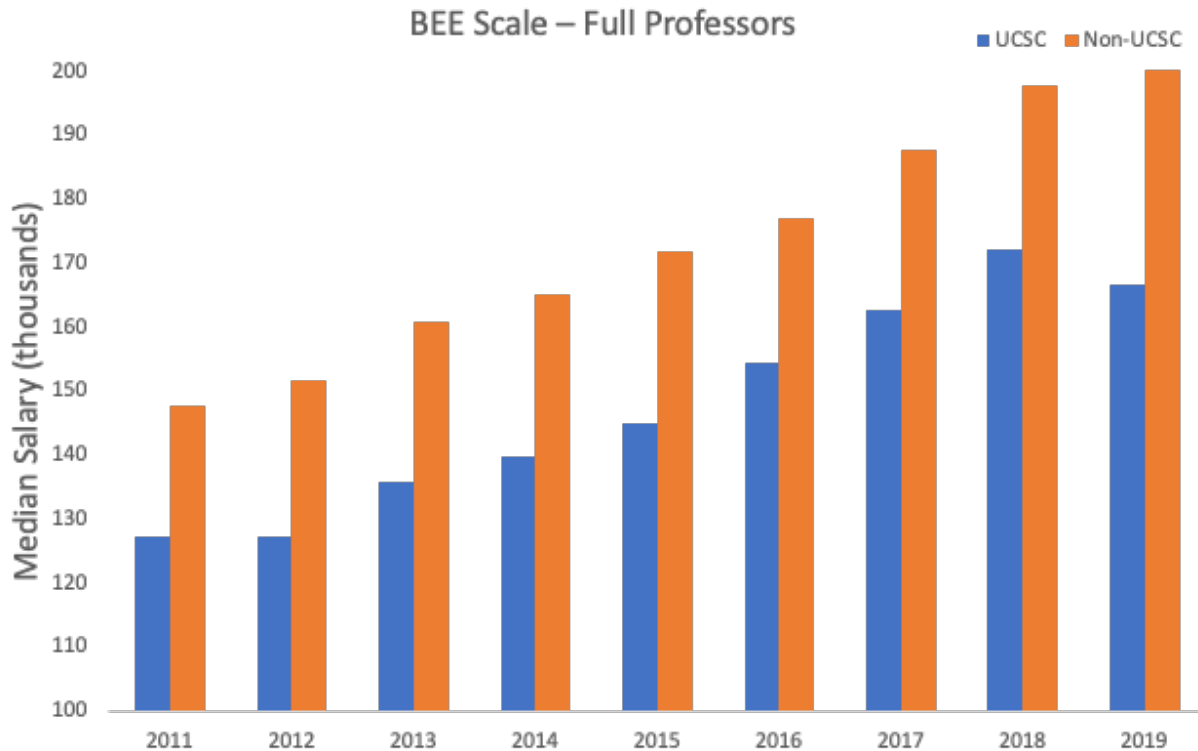


Figure 8. Column version of Figure 4.

A major concern in this context is also the continued undercompensation of faculty at the level of Full Professor at UCSC across all steps. This issue was duly noted in last year's CFW's report as well. While the gap has narrowed since 2012, the discrepancy remains and CFW fears that it is bound to increase.

Cost of Living

The cost of living in Santa Cruz is one of the highest in the nation, and there is a legitimate fear that the campus will fail to attract and retain the highest quality faculty unless salary compensation and/or other financial incentives can demonstrably address the extraordinary financial burden imposed by the rising costs of housing (rentals as well as homes). A preliminary report shows that real estate in Santa Cruz have gone up in price 21% in the last year⁷, with a median cost of housing on the Westside of \$1.28 million as of May 2021.

In 2019-20, the Academic Senate passed a resolution which, among other things, called for a cost of living variable in the campus's annual analysis of faculty salaries and in the resulting Annual Report on Faculty Salary Competitiveness. Unfortunately, the 2020-21 report from APO did not

⁷ <https://www.bayareamarketreports.com/trend/santa-cruz-real-estate-prices-trends-news>

include a cost of living analysis as requested. CFW Chair Orlandi and Senate leadership met with CP/EVC Kletzer during the summer to begin to discuss the issue. CFW will continue to monitor this situation in 2021-22 and awaits developments on this front.

In line with a previous CFW analysis dating back to 2017-18,⁸ a cost of living analysis was performed by CFW this year. The 2017-18 analysis used three cost of living metrics: the BEA Regional Price Parities tool,⁹ the MIT calculator (livingwage.mit.edu), and the website www.recolation.com.

This year's CFW consulted with Professor Steven McKay, who designed in collaboration with Miriam Greenberg a COLA calculator for graduate students -- see "No Place Like Home"¹⁰ and the Graduate Student Cost of Attendance and Living Calculator Project¹¹. After the consultation, CFW decided to use one calculator, and to plan a more thorough analysis of cost of living next year.

The main driver of cost of living is cost of housing with childcare and elder care also playing substantive roles. Online calculators generally take housing into account in the form of rent. Many UC faculty, however, either own a home or aspire to own a home. For this year's analysis, CFW used the MIT Living Wage Calculator¹² which tracks rental prices and, following Professor McKay's suggestion, looked at the website Zillow.com to calculate the cost of owning a home in the different California counties that house a UC.

We used the MIT calculator to pull the cost of living statistics for each county in which the nine campuses are situated. The calculator breaks things down by category (food, child care, housing, etc.) and provides a total "required annual income before taxes." It also provides costs as a function of household scenario (i.e., number of adults, whether both adults are working, number of children).

Figure 9 below shows the required annual income before taxes for each campus and household scenario.

⁸ Committee on Faculty Welfare, Faculty Salary Analysis, May 2017

⁹ <https://www.bea.gov/data/prices-inflation/regional-price-parities-state-and-metro-area>

¹⁰ <https://noplacelikehome.ucsc.edu/en/>

¹¹ <https://www2.ucsc.edu/gradcosts/>

¹² <https://livingwage.mit.edu/>

Averages												
	1 ADULT				2 ADULTS				2 ADULTS			
					(1 WORKING)				(BOTH WORKING)			
	0 Children	1 Child	2 Children	3 Children	0 Children	1 Child	2 Children	3 Children	0 Children	1 Child	2 Children	3 Children
UCB	\$45,520	\$96,907	\$120,953	\$159,990	\$71,284	\$85,662	\$93,937	\$107,441	\$71,284	\$103,500	\$129,614	\$160,957
UCD	\$36,212	\$79,669	\$99,534	\$131,543	\$59,683	\$72,606	\$80,882	\$91,540	\$59,683	\$86,262	\$108,195	\$132,510
UCI	\$46,673	\$94,339	\$116,175	\$154,239	\$70,925	\$85,302	\$93,578	\$108,317	\$70,925	\$100,932	\$124,836	\$155,205
UCLA	\$40,244	\$88,207	\$107,980	\$140,475	\$66,734	\$81,237	\$89,512	\$100,749	\$66,734	\$94,800	\$116,641	\$141,441
UCM	\$29,372	\$69,738	\$86,816	\$112,881	\$55,243	\$65,461	\$73,736	\$81,237	\$55,243	\$76,331	\$95,477	\$113,848
UCR	\$34,188	\$76,087	\$94,167	\$122,501	\$59,120	\$70,808	\$79,084	\$87,850	\$59,120	\$82,681	\$102,828	\$123,467
UCSB	\$48,534	\$93,774	\$113,358	\$147,528	\$73,723	\$86,991	\$95,266	\$108,364	\$73,723	\$100,368	\$122,019	\$148,494
UCSD	\$44,229	\$89,385	\$109,066	\$144,584	\$67,501	\$82,503	\$90,779	\$105,127	\$67,501	\$95,978	\$117,727	\$145,551
All	\$40,622	\$86,013	\$106,006	\$139,218	\$65,527	\$78,821	\$87,097	\$98,828	\$65,527	\$92,607	\$114,667	\$140,184
UCSC	\$47,873	\$97,374	\$117,511	\$152,950	\$72,926	\$90,039	\$98,315	\$112,132	\$72,926	\$103,968	\$126,172	\$153,917

Figure 9. Average required income for each California campus modulo type of household and number of adults working.

As can be seen quite clearly, it is more expensive to live in Santa Cruz county than it is at the other campuses. Across the 12 household scenarios, UCSC is between about \$7000 and \$14000 more expensive than the average of the other 8 campuses.

We then considered the median salaries in 2020 for Full, Associate, and Assistant Professors combining here regular and BEE scales. We know that a more fine grained analysis is needed but we think the numbers are nevertheless instructive. Figure 10 shows median salaries at the 9 UC campuses as well as the median of all the campuses at the three ranks.

Median Salaries in 2020 (unadjusted)			
	Full	Associate	Assistant
UCB	198	131	112
UCD	165	116	104
UCI	169	117	100
UCLA	209	135	115
UCM	155	117	98
UCR	168	112	97
UCSB	197	115	108
UCSD	180	122	109
All	185	121	105
UCSC	169	120	101

Figure 10. Median Salaries in \$1000 At the 9 UC campuses without any adjustment for cost of living.

UCSC salaries are already lower than at other UC campuses. When adjusted for cost of living, the differences become more pronounced. To do this analysis, we averaged across all 12 household scenarios. When adjusting for cost of living, UCSC faculty are paid about 10%-14% less than faculty at other campuses (see Figure 11).

	Full	Associate	Assistant
Unadjusted	-8%	-1%	-4%
Cost of Living Adjusted	-14%	-10%	-14%

Figure 11. Percentage of salary difference between UCSC salaries and 9-campus median with and without a cost of living adjustment.

Interestingly, the difference is larger for faculty with children than it is for faculty without children, suggesting that child care is relatively more expensive in Santa Cruz than it is at other places (Figure 12):

	Full	Associate	Assistant
0 children	-12%	-7%	-11%
1 or 2 children	-14%	-11%	-15%
3 children	-16%	-13%	-17%

Figure 12. Percentage of salary difference between UCSC salaries and 9-campus median as a function of number of children.

As previously mentioned, one of the limitations of the MIT calculator is that it assumes people are renting. Since we are also interested in taking into account the cost of owning a home, we looked up the median single family homes in each California county in which a UC is located (Zillow, June 2021). Figure 13 shows in the first column the median price of a home in the different counties as well as the average cost of a home at the other 8 campuses. It also shows the median cost of a home in the town of Santa Cruz (1.31M) as opposed to the county of Santa Cruz (1.15M).

We used NerdWallet to calculate the estimated monthly mortgage payments assuming a \$100,000 down payment and a 30 year mortgage with a 4% APR (second column). This is a conservative approach since it does not take into account differences in property taxes and in rates in different areas of California. The second column shows that UCSC faculty are paying about \$1900 more per month compared to faculty at other campuses.

The third column of figure 13 shows the ratio of the estimated monthly mortgage payments to the gross median salary (before taxes or anything else) of an Assistant Professor at each of the nine campuses. UCSC's ratio is 77% if we use the county home values and 88% if you use only Santa Cruz home values. This is higher than at any other campus and certainly out of the affordability threshold.

Median Single Family Homes in County (Zillow; June 2021)			
Estimated monthly costs assuming \$100,000 downpayment and 30 year mortgage at 4% APR			
(note that this doesn't account for differences in taxes between the counties)			
	price (mil)	est. monthly payments	payment/salary (asst prof)
UCB	1.2	7047	75%
UCD	0.59	3175	37%
UCI	1.06	5932	71%
UCLA	0.937	5211	54%
UCM	0.355	1690	21%
UCR	0.534	2847	35%
UCSB	1.02	5697	63%
UCSD	0.91	5052	56%
All	0.826	4559	52%
UCSC	1.150	6460	77%
UCSC (City of Santa Cruz)	1.31	7398	88%

Figure 13. Median Single family homes by county (column 1). Estimated monthly payments excluding property taxes (column 2). Percentage of salary dedicated to paying mortgage (column 3).

CFW urges a thorough analysis of cost of living moving forward and holds that there is no meaningful assessment of salary competitiveness without a consideration of living costs.

Respectfully submitted;

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