Analysis of Graduate Student Stipends and Fees: Future Directions in Funding Equity

University of Vermont Graduate Student Senate 2020-2021 Stipend & Benefits Committee

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Introduction

Maximizing both accessibility to and quality of higher education is a continuous battle in academia. Today, one of the most significant barriers standing between any individual and the pursuit of higher education is cost. As such, it is essential to regularly assess the financial burden with which students are charged - not only by the university directly but also by the rising cost of living in the greater Burlington area. By monitoring this, the university can ensure that enough financial assistance is available so that UVM can remain a competitive institution and suitable environment for its student body. It is especially critical to ensure favorable living conditions for the graduate student population as UVM seeks approval as an R1 university. Graduate students provide an essential role as both researchers and teachers at UVM, bringing in revenue and saving costs for the university, in addition to the arduous workload of graduate studies, sometimes without any financial recompense whatsoever. The goal of this document is to provide a summary of the current conditions and financial obstacles that graduate students must overcome in order to succeed at UVM.

Some graduate students are compensated with a 9-month or 12-month stipend; however, recent data has elucidated that when compared to other academic institutions, the ratio of university costs to financial aid is grossly skewed, thus placing undue burden on the graduate student population. In an effort to compare the graduate stipends nationally and to understand students' satisfaction with their stipends, the 2018-2019 Graduate Student Senate (GSS) conducted a survey in spring 2019. In this survey, GSS collected information from the UVM graduate student body about the current cost of living in the greater Burlington area. 425 responses were recorded in the span of two weeks, which constituted 27.38% of the entire graduate student body at UVM. 51.5% of the respondents were doctoral students while the rest were master's students. Out of the 425 students surveyed, 73.4% were first- and second-year students. During the fall 2020 semester, graduate student senators further analyzed the results of this survey, compared UVM stipend and fee levels to those reported in a national survey, and visualized data from the UVM Graduate College's own study. The results of this effort are delineated below.

Survey Results

Students were divided into the following five categories based on the source and longevity of the stipend: no stipend, part-time (10h), graduate teaching assistant (GTA) alone (20h), graduate research assistant (GRA) alone (20h), and GRA and GTA combined (20h). Figure 1 depicts the distribution of student respondents by stipend categories. The results show that the largest proportion of students, **34.10%** of those who responded, reported that they received no stipend whatsoever.

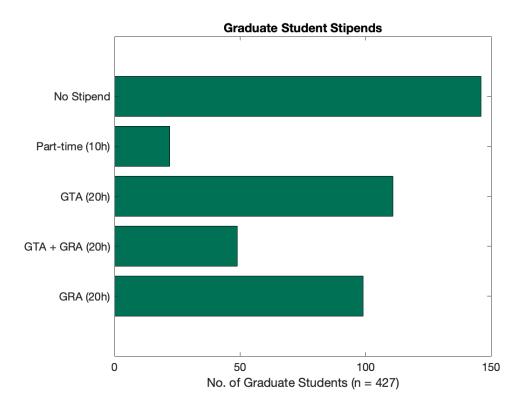


Figure 1. Distribution of students based on the stipend categories.

Though the stipend is intended to support graduate students in paying for necessary living expenses, a significant portion of each graduate student's yearly stipend goes back to UVM in the form of the comprehensive fee. According to UVM Student Financial Services, the comprehensive fee "supports the University's maintenance of critical academic, athletic, health, technology, and community infrastructure, as well as library resources, academic support services, online learning platforms, career counseling, student organizations, and more." Perhaps due to the reported various uses of the comprehensive fee, as of spring 2021, graduate students with 9 or more credits will be charged \$1,173 to cover this expense. As such, the vast majority of students surveyed (78.6%)

reported using their stipend funding to pay the comprehensive fee. A minority of students reported paying a reduced fee (7.6% of respondents), and 10% of students did not have to pay as the fee was covered by their department or by a grant. A remaining 3.80% of those surveyed were unsure if they paid any such fee (Figure 2).

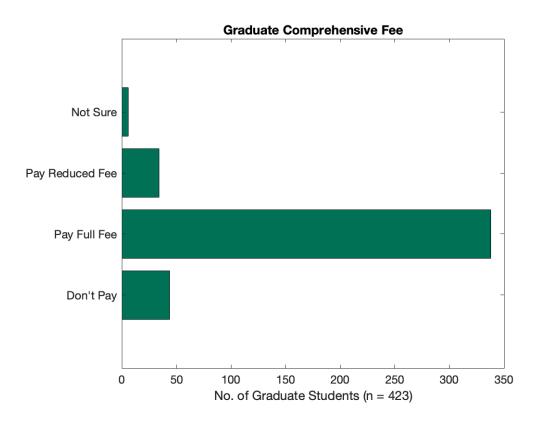


Figure 2. Graduate students standing based on comprehensive fee.

In order to further approximate the cost of living for graduate students attending UVM, students were asked to report how much they paid for housing expenses during the 2018-2019 year. The range of the reported rents that the students paid for off-campus housing was between \$500-\$1500 monthly. Qualitative reports (discussed at length in *Student Feedback*) substantiate that many graduate students live with roommates in an effort to obtain affordable housing. The median rent according to respondents was also \$750 (Figure 3). Graduate students are not eligible to live on campus in the dormitories, and UVM itself does not otherwise offer on campus housing accommodations for graduate students. Although the Redstone Lofts, Redstone Apartments, and Spinner Place complexes are local institutions affiliated with UVM, they are expensive housing

options that "tend to fill up quickly," according to the UVM Office of International Student Housing. As such, UVM graduate students must also balance the competitive housing environment and relatively expensive cost of living in the greater Burlington area with the available stipend options.

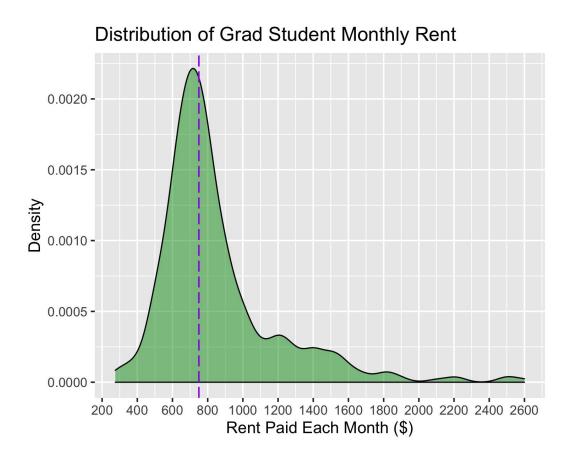


Figure 3. The amount of money that graduate students spend on rent each month. The dashed purple line represents the median monthly rent amount, which is \$750.



Figure 4. Ratio of rent to stipend (i.e. median rent/minimum stipend) for students who receive 9-month stipend (Master's), 12-month stipend (Master's), 9-month stipend (PhD) and 12-month stipend (PhD). The bottom panel shows the situation for students who use stipend income to pay the comprehensive fee.

Degree	Timeframe	Minimum Stipend	Living Wage Ratio	Stipend (after fee)	Living Wage Ratio (after fee)
PhD	9-month	20525	0.710	18179	0.629
PhD	12-month	27377	0.947	25031	0.866
Master's	9-month	16675	0.577	14329	0.496
Master's	12-month	22233	0.769	19887	0.688
Living wage for the Burlington area = \$28,899 (source: livingwage.mit.edu)					

Table 1. Minimum graduate stipends at UVM. Living wage ratio = BTV living wage / stipend

Though the stipend is meant to support all living and learning expenses associated with being a graduate student at UVM, our results suggest that, due to the high cost of rent in Vermont, students who receive a 9-month stipend spend on average over 50% of their stipend on rent or mortgage expenses (Figure 4). According to the American Apartment Owners Association, financial advisors recommend that no more than 30-35% of an individual's monthly income be spent on rent and/or mortgage payment(s), suggesting that graduate student stipends are not substantial enough to cover expenses of living in Burlington. Master's students receiving a 12month stipend also landed well above this 35% threshold, with those individuals on average spending over 40% of the stipend on rent or mortgage payments (Figure 4). Only Ph.D. students with a 12-month stipend fell within the recommended limit, spending approximately 33% of their stipends towards rent/ mortgage (Figure 4). However, as previously established, the vast majority of UVM students must return \$1,173 of their stipend to the university to cover the comprehensive fee. Therefore, a more realistic representation of the financial reality experienced by UVM graduate students can be seen in the bottom panel of Figure 4, which shows money spent on rent as a fraction of the net stipend remaining after fees. Figure 4 shows that, when fees are taken into consideration, graduate students at all levels are forced to dedicate well over 35% of their remaining stipend to rent. These results make it clear that the current graduate student stipend funding alone is insufficient to provide financial stability in accordance with expert recommendations. These findings echo the data displayed in Table 1, as they show that UVM

minimum graduate stipends do not constitute a living wage in Burlington, VT. A living wage is defined as the minimum salary needed to afford the most basic necessities (rent, food, utilities, etc.) in a given area based on the local cost of living (Glasmeier et al., 2020). Table 1 lists UVM's minimum graduate stipends, as well as a living wage ratio, which is the stipend divided by the living wage for the Burlington/South Burlington area, according to the MIT Living Wage Calculator (Glasmeier et al., 2020). All living wage ratios in Table 1 are less than 1, which indicates that none of the UVM minimum stipends sufficiently cover the cost of living in the Burlington area.

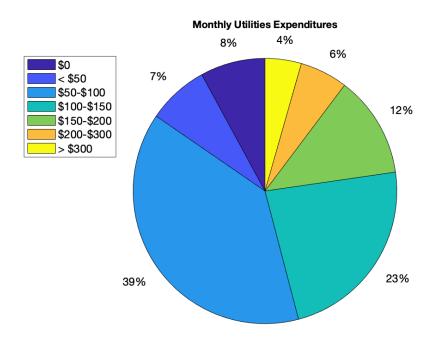


Figure 5. Utility expenditures for heat, electricity and internet (n = 425)

To conclude the assessment of the cost of living for UVM graduate students, respondents were asked to quantify how much they spent on household utilities each month. The results showed that 38.8% of graduate students spent between \$50-100, 23.1% spent \$100-150, and 12.5% spent \$150-200 on utilities per month on top of the cost of rent (Figure 5). A staggering 10.4% of those surveyed said they spent \$200 or more on utilities in addition to monthly rent and mortgage expenses. With all this in consideration, it should not come as a surprise that 70% of respondents

reported that they could not accumulate financial savings after paying for rent, utilities, and other needs every month.

Student Feedback

At the end of the survey, students were asked to provide additional comments and observations; 142 students (33%) responded. We qualitatively analyzed their responses, looking for recurring themes that may further enhance our understanding of the data. Several recurring messages emerged: the high cost of rent in Burlington, the costly comprehensive fee, financial insecurity, and lower stipends compared to similar programs in the U.S.

The cost of living in the Burlington area was the most common theme, discussed by 29% of the respondents. Several noted that a large part of their paycheck went towards rent and utilities, even though many shared the rent payment with roommates. In fact, the data collected echoed the sentiment that many graduate students feel obliged to live with roommates in order to accommodate the high cost of living in Burlington. Some students noted that while their stipends may be considered relatively competitive out of context, the stipend funding is incongruous with the high cost of living in the greater Burlington area. Others noted that their stipends did not have annual adjustments to the growing cost of living, which would be a helpful step towards addressing the pleas for realistic, accommodating funding for graduate students.

The second most prominent theme, mentioned by 20% of the respondents, was the comprehensive fee. Students found the fees excessively high, although many students were not sure what the fee actually serves to cover. One student pointed out that UVM reported the full amount of their stipend as taxable income, even though about 10% of the stipend went towards paying required comprehensive fees. Some students felt that not having to pay comprehensive fees would have significantly alleviated their financial situation.

These responses bring to light a significant financial burden that is currently being shouldered by the average UVM graduate student. This burden has led many UVM graduate students to experience financial insecurity, which not only makes it more difficult for UVM to retain its current graduate students but also hinders subsequent graduate student recruitment that will be necessary to attain R1 status. Many students shared that they have acquired loans and credit card debts to cover their current costs. Several individuals noted that they were not able to afford

necessities like health care, let alone services beyond the basics, leading to anxiety about the ability to cover unforeseeable or emergency expenses. The insecurity seemed particularly acute for students with dependents and students who did not have summer funding. In some cases, students even procured an off-campus job to help cover expenses that they could not keep because of academic workload. These survey results are in agreement with the results of a survey conducted by the UVM Office of Student and Community Relations in 2020, which found that roughly 30% of surveyed UVM students are experiencing food insecurity.

Comparison to Other Universities

Thus far, this report has shown that UVM stipend minimums do not cover the cost of living in the Burlington area, and that this issue is exacerbated by a high comprehensive fee. However, it is worth asking if this is true at other universities. On the survey, some students recognized that their stipends were significantly lower than comparable programs across the United States. To investigate this claim, we used a dataset from phdstipends.com, a website which compiles stipend levels reported for thousands of departments across hundreds of universities. This dataset is well suited for this analysis, as living wage ratios are reported for each stipend, and these values are calculated with the same method as the UVM living wage ratios reported in Table 1. Therefore, these data allow for the comparison of stipends across universities while controlling for cost of living differences. One drawback to this dataset is that it only considers 12-month PhD stipends, so we used data shared with us by UVM's graduate college to calculate a mean 12-month PhD stipend for PhD students at UVM, which was \$28,518.9 (a living wage ratio of 0.986). We compared this living wage ratio to 228 other universities (Figure 6). This analysis revealed that the majority of considered universities offer a more competitive stipend than UVM. On average, universities in this dataset pay a stipend that amounts to a living wage ratio of 1.08, which implies that, unlike UVM, these universities pay a stipend that fully covers the cost of living experienced by their graduate students. Meanwhile, UVM barely exceeded the bottom 25th percentile of the distribution of living wage ratios (Figure 6).

The dataset used to compare living wage ratios also contains fee data for a subset of schools, so we compared UVM's per-semester comprehensive fee of \$1173 to other schools in the northeast. As can be seen in Figure 7, UVM's fee is higher than many of the universities it competes with for students. Figure 8 shows that UVM's fee is especially uncompetitive when compared to the fees paid by graduate students in STEM programs at other regional universities.

Stipend to Living Wage Ratios for 229 Universities UVM average for 12 month PhD = .986 (green point). Purple lines are percentiles. 25% O 50% 0 0 ଚ University 0 0 0.75 1.25 1.00 Average Stipend to Living Wage Ratio

Figure 6. Each point is the ratio of a university's average 12 month PhD stipend to the living wage for the city/town where said university is located. UVM's average is the green point. Purple lines are the percentiles of the 229 points.

Data sources: phdstipends.com, livingwage.mit.edu

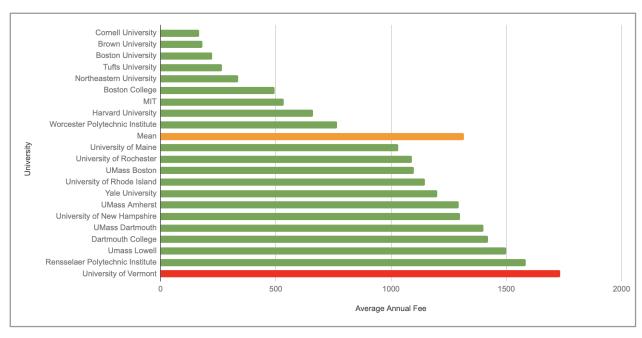


Figure 7: Comparison of other universities' annual average fee in New England and surrounding areas.

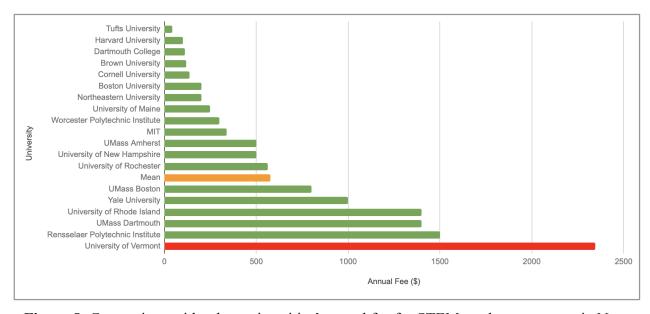


Figure 8: Comparison with other universities' annual fee for STEM graduate program in New England and surrounding areas.

UVM Graduate College Data

While finishing this analysis, it was brought to the authors' attention that the UVM Graduate College was willing to share some of the data from their own comparative analysis of graduate stipends and fees. In an effort to make this report as comprehensive as possible, we include our own visualizations of these data. The analysis performed by the Graduate College included a comparison of UVM's comprehensive fee to that of 48 other universities monitored in a national survey, as well as 17 additional "comparison schools". Figure 9 shows this comparison. Only 4 out of the 65 universities charge their students a higher fee than UVM (University of Connecticut, UNC Wilmington, NC State Raleigh and Colorado Schools of Mines) (Figure 9). Similar to our analysis, the Graduate College produced a comparative ranking of stipends that accounts for cost of living. This analysis is broken down by CIP academic program categories. In Figure 10, we show how UVM stipends ranked in this analysis for each category. Similar to our own analysis, UVM does not rank competitively compared to other universities, only making the top 50th percentile for 3 out of 17 categories (Figure 10).

UVM Comprehensive Fee Compared to Other Universities

UVM Fee = \$1173 (green point). Purple lines are percentiles.

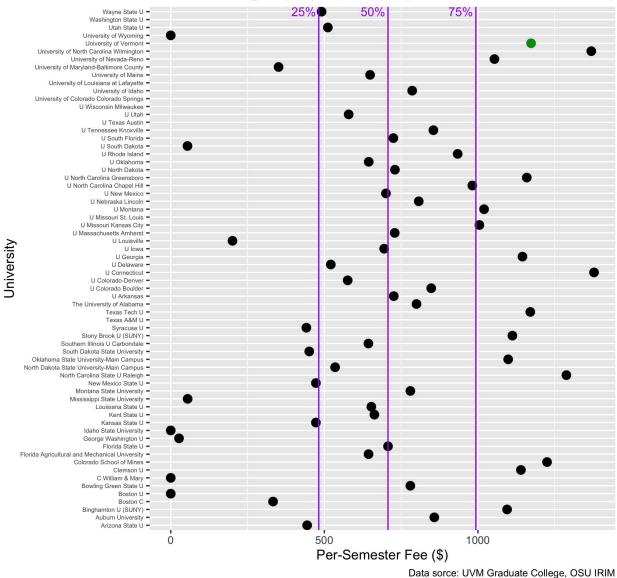


Figure 9. Each point is a given university's per-semester comprehensive fee. UVM's fee is the green point. Purple lines are the percentiles of the 66 points.

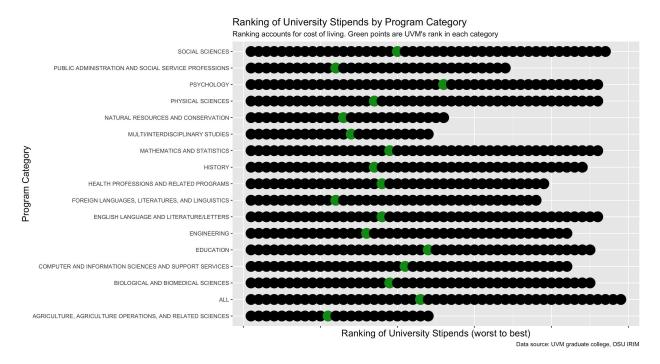


Figure 10. Ranking of stipends (adjusted for cost of living) for different CIP categories compared across universities included in the OSU IRIM survey dataset. For each category, the number of points is the number of schools considered. The green points indicate where the UVM stipend ranks in each category, with the point furthest to the right representing the top-ranking stipend.

Conclusions

In this report, we found that the majority of surveyed graduate students at UVM receive no stipend and pay a comprehensive fee that is vastly higher than nearly all the schools UVM compares itself to. Our survey also revealed that many graduate students are struggling to afford the cost of living in Burlington. This finding is supported by the fact that UVM minimum stipends do not constitute a living wage in the Burlington area (Table 1). In fact, we found that the average 12 month PhD stipend falls just short of a living wage (living wage ratio of 0.986). We compared this living wage ratio to 228 other universities and found that UVM ranks in the bottom third (Figure 6). This finding is echoed by the Graduate College's analysis (Figure 10). Finally, we found that comprehensive fees are much higher at UVM than they are at nearby universities (Figures 7 and 8). Similarly, the Graduate College's analysis shows that UVM has the 4th highest comprehensive fee out of the 65 universities chosen for comparison. Reflecting on these findings,

it is hard for one to decide which is more concerning: UVM's failure to offer competitive compensation as it strives to become an elite R1 university, or UVM's unwillingness to provide a living wage in exchange for a full-time commitment. It is our hope that bringing these issues to light initiates positive change.

Data availability

Raw data, figures and analysis scripts are available upon request. Please contact gss@uvm.edu

References

Glasmeier, Amy K. Living Wage Calculator. 2020. Massachusetts Institute of Technology. www.livingwage.mit.edu

Rent to Income Ratio: Calculation Guide for Landlords. (2020, December 29). Retrieved December 16, 2020, from https://www.american-apartment-owners-association.org/property-management/rent-to-income-ratio

PhD Stipends, Evolving Personal Finance, 2020, www.phdstipends.com