

Graduate Finances White Paper

Graduate SGA

The Georgia Institute of Technology

Background

Over the last three decades, Georgia Tech has established itself as a globally recognized research institution. In the past decade, research and sponsored activity awards more than doubled, and crossed \$1 billion in FY 2019. Graduate Student enrollment has risen steadily, and today, the 7000+ graduate students account for more than 30% of the total enrollment on the Atlanta campus. More than 50% of the graduate students are enrolled in a doctoral degree seeking program, and are integral in driving Georgia Tech's research portfolio. According to the 2016 Graduate Experience Survey by the Office of Graduate Studies and Graduate SGA, financial stress was one of the main factors leading to mental health concerns among graduate, and especially PhD students.

In Fall 2017, the College of Engineering (CoE) Graduate Student Advisory Council, conducted a cost of living survey for PhD students within the CoE. The results indicated that not only were PhD students within COE were under financial stress, but also that the graduate research assistant (GRA) stipends were not competitive as compared to our peer institutions.

In Fall of 2018, the Graduate Student Advisory Group within the School of Materials Science and Engineering (MSE), successfully convinced the MSE administration to approve a 22% raise in PhD stipend levels, to be implemented over three years, starting in 2019 through 2021.

We have identified three common themes from the work of these groups:

1. Georgia Tech PhD stipends are generally not competitive with our peer institutions;
2. Georgia Tech students are “severely rent-burdened” as defined by the U.S. Housing and Urban Development, regardless if students live on- or off-campus;
3. Mandatory fees charged to Ph.D students are the highest among our peers. Ph.D students at a significant number of peer institutions are not required to pay fees from their stipend amount.

In this white paper, we analyze multiple factors such as stipend levels, mandatory fees, cost of on-campus housing etc., and compare Georgia Tech with its 15 peer institutions in these regards. The data has been gathered and verified from publicly available information from the websites of these institutes as well as current graduate students in these institutes.

Financial health of Ph.D students at Georgia Tech

This section focuses on the PhD stipend levels at Georgia Tech, as well as the typical cost of living for graduate students. The typical stipend levels across different colleges are listed in table 1 below. More than 60% of Georgia Tech Ph.D students are enrolled within the College of Engineering. The

Table 1: Typical Georgia Tech Ph.D Stipend Levels - As of Fall 2019

<i>College</i>	<i>Standard 12-Month Stipend</i>
College of Business	\$ 30,000
College of Engineering	{ \$25,000 – \$31,000 }
College of Science	{ \$22,000 – \$30,000 }
College of Computing	{ \$29,400 – \$33,000 }
College of Liberal Arts	{ \$18,000 – \$22,000 }

mean graduate stipend level within the COE is above the mean stipend level across all academic units. While the representative agent from the College of Engineering has, in general, a higher degree of financial welfare the average graduate student from across all academic units, the distribution of welfare among graduate students has a definite mode within Engineering. Therefore, for the sake of exposition and ease of comparison with peer institutions, we will consider the welfare of the average COE graduate student to be the norm in the following analysis.

Before continuing, it is imperative to note that the average stipend across all academic units is awarded over a 12-month period, while elements within the Ivan Allen college of Arts and Sciences, in particular, awards stipends to be disbursed across the Fall and Spring academic terms, leaving students without definite funding in the summer months, which compounds financial stress throughout the year.

The mean graduate stipend within our comparison group—the College of Engineering—is \$27,800, distributed over 12 months. Mandatory fees charged to graduate students in AY 2019-2020¹ total \$2,788. Using this information, we provide a sample net monthly income statement in table 2 below.

Table 2: Sample income statement (net fees and taxes)

Annual Income (Gross)	\$27,800
Taxes ($\sim 12\%$ federal taxes only)	\$3,336 ²
Mandatory Fees	\$2,788
Annual Income (Net taxes and fees)	\$21,676
Monthly Income (Net taxes and fees)	\$1,806.33
Lowest Monthly On-Campus Rental Rate	\$1,145
<i>Monthly Income (Net taxes, fees, and rent)</i>	\$661.33
% Net Income Paid to Rent	63.4%

As shown in table 2, the average PhD student within the College of Engineering at Georgia Tech earns a net monthly income of \$1,806.33. The monthly rental rate for the *lowest-cost on-campus graduate housing option* is \$1,145, which is 63.4% of a student’s net monthly income. The

¹To wit: Fall 2019, Spring 2020, and Summer 2020.

following definitions come directly from the U.S. Department of Housing and Urban Development (HUD):

- “*Cost-Burdened*”: Housing costs (rent + utilities) in excess of 30% of net monthly income;
- “*Severely Cost-Burdened*”: Housing costs (rent + utilities) in excess of 50% of net monthly income.

By the standards set by the U.S. HUD, Georgia Tech graduate students who receive stipends from the College of Engineering are, at very best, *severely cost-burdened*. However, we acknowledge that many graduate students tend to live in off-campus housing locations close to campus. From the 2017 COE cost of living survey results, it was found that PhD students spent \$1000/month towards single-room rent and utilities (Sample size $n = 702$). This off-campus housing cost is 54% of the monthly income. Considering this, Georgia Tech graduate research assistants fall under the “severely cost-burdened” category, regardless of whether they live on-campus or off-campus. In the next section, we compare the on-campus housing costs, and stipend levels across all 15 of our peer institutions.

Comparisons with peer institutions

Georgia Tech recognizes 15 institutions as its peers (irp.gatech.edu/peer-institutions). In this section we analyze the data collected from these institutions. These institutions are located in different cities across the US. The cost of living across different cities varies with its location, size, and other factors. Therefore, we understand that it would be unfair to compare only the gross annual stipend levels across these institutes. At the same time, the living wage index of the city may not be an appropriate metric to assess the cost of living, since the location of the institute within the city can change the cost of living drastically (e.g. The greater Atlanta area might have a cheaper cost of living, however, locations in Midtown and West midtown where most graduate students live are significantly more expensive). Therefore, in order to normalize the stipend levels across different institutes, we use the cheapest on-campus housing as the metric to estimate the cost of living.

For sake of exposition, we uphold the following definitions:

- *Cost of Living (COL)*: Cost of the least expensive on-campus housing option³.
- *% COL*: COL expressed as a percentage of the graduate student stipend, net of taxes and fees.

³The cheapest on-campus graduate student housing option provided by the Georgia Institute of Technology in FY19-20 is a single-room in a shared student apartment

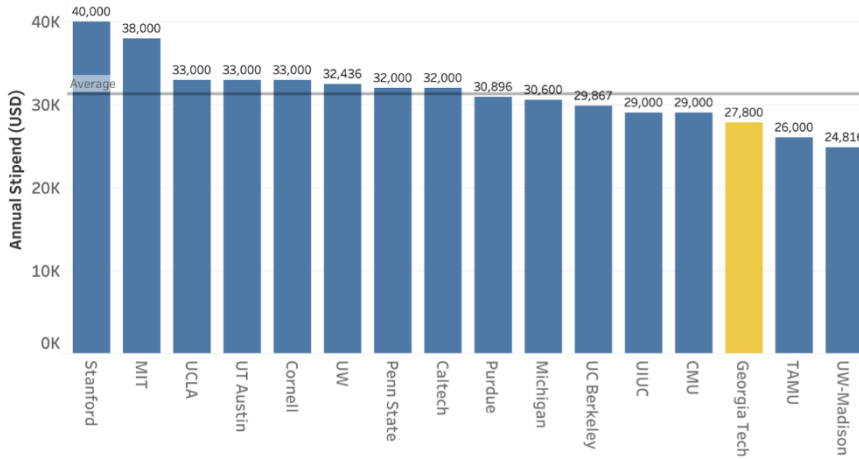


Figure 1: Comparison of Ph.D Stipend Levels Across Peer Institutions

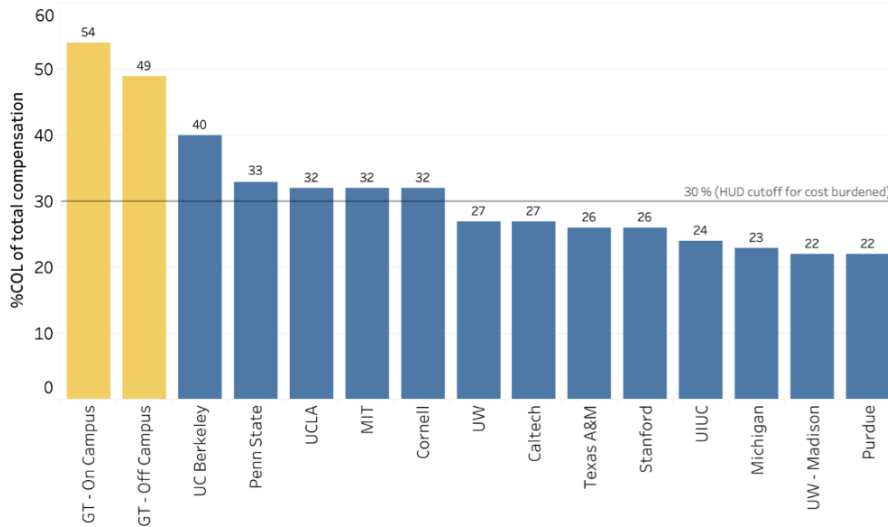


Figure 2: % COL Comparison Across Peer Institutions

Figure 1 displays the average gross stipend from the College of Engineering at Georgia Tech, plotted with the typical Ph.D stipend levels from 15 peer institutions⁴. The data in figure 2 compare the % COL as a percentage of current stipend levels at Georgia Tech and the aforementioned 15 peer institutions. The results indicate that Georgia Tech offers the *lowest level of graduate student welfare*, compared with other institutions, with the highest % COL of any institution in our equivalence class. Noting that several academic units offer stipends that are significantly less than the representative COE stipend used in this analysis, it is without loss of generality that we assume the average graduate student at Georgia Tech is *severely cost-burdened or worse*.

⁴Note: We would like to reiterate the earlier point that the *average* stipend within the graduate programs in the COE is *greater than* the means stipend taken across all academic units, meaning the welfare of the “average” Georgia Tech Ph.D student is lower even than what is described in our analysis. Namely, students inside of the Ivan Allen College of Arts and Sciences receive net stipends that fall below 115% of the federal poverty line, net of taxes and fees.

Ph.D students at the Georgia Institute of Technology are forced to allocate a greater % share of their stipends to housing costs than at any of our 15 peer institutions. This figure is surprising when we take into consideration that the *raw* costs of living faced by students at UC Berkeley, UCLA, MIT, Caltech, and Stanford are significantly higher than those faced by students at Georgia Tech. This means that the cost-burden faced by graduate students at Georgia Tech is not due to high costs of living, but due to a combination of low stipend allocations and high graduate student fees. Moreover, we highlight that Ph.D students at most of the listed peer institutions are *not required to pay mandatory fees from their monthly stipends*. These fees are absorbed by other means at peer institutions, which significantly increases graduate student welfare. High mandatory fees continue to be a source of stress for graduate students across the United States, contributing to increased rates of mental and physical health problems, as well as reducing the effectiveness of graduate students in their research and teaching duties^{1,2}. The result of this analysis is clear: Georgia Tech is not competitive amongst its peer institutions in terms of PhD student stipend levels and overall welfare.

Stipend-living: analysis of a representative monthly balance sheet

In the previous section, we showed that GT PhD students are required to spend a significantly higher percentage of their stipend towards housing. However, the students ultimately care about the actual amount they are left with, to take care of other monthly expenses such as food, transportation, health insurance etc. For example, if 50% of \$100,000 is being spent on housing, the student would still be left with \$50,000 to cover other recurring expenses. However, when the student is left with only a few hundred dollars every month to cover basic recurring expenses such as food, transportation, health insurance, the student is bound to be under financial stress. In Table 3, we have shown a typical monthly balance sheet for a student living on campus and not owning a car, and a student living off campus owning a car.

<i>Expenses</i>	<i>On-Campus, No Car</i>	<i>Off-Campus, Car</i>
Rent + Utilities	\$1,145	\$1,000
Food	\$400	\$400
Health Insurance	\$50	\$50
GT Parking Permit	-	\$70
Transportation	\$100	\$200
Travel (Est. \$1000)	\$80	\$80
Total Monthly Expenditure	\$1,775	\$1,800
Net Monthly Stipend	\$1,806.33	

Table 3: Representative Monthly Expenses

As is evident from Table 3, regardless of the housing location, the situation facing graduate students is bleak. Students have less than \$75 per month for any contingencies. A single visit to the emergency room costs more than \$100. Considering STAMPS counseling services are intended for short-term solutions, many students are forced to seek outside help for mental health. Charges for such visits range from \$25 co-pays to hundreds of dollars per visit for out-of-network specialists in the greater Atlanta metropolitan area. In addition, the large international student population faces even greater burdens, often with a lack of ability to apply for additional U.S. education loans, coupled with the need to spend much more than \$1000 on travel to visit their families once a year.

Compounding costs are forcing students to shift apartments multiple times during their PhD, move further away from campus or into lower-quality residences, which increases exposure to crime and reduces overall student welfare. The average GT graduate student receiving a stipend is spending increasing amounts of time traveling, lives in lower quality housing, and is unable to afford high-quality/high-nutrient foods, such as organic produce. This is unquestionable detrimental to the emotional, financial, physical, mental, and productive health of graduate students at GT.

Summary

The data clearly indicates that the financial assistance offered to our PhD and Masters students is not competitive with our peer institutions. While the individual academic units are responsible for reviewing and raising the stipend levels to maintain their competitive edge, the broader issues such as the costs of on-campus housing, and mandatory fees being charged to PhD students need to be addressed at the institute level. As an institute, it is in our best interest to remain competitive and attract the best talent for creating the next. Since 2017, many academic units have implemented stipend raises for their graduate students.

Georgia Tech is home to more than 3500 PhD students today. These students are likely to spend more time at Georgia Tech than they did in their undergraduate institution. A graduate degree from Georgia Tech is going to define their career, especially in the case of international students. As an institute, this is a wonderful opportunity to engage this demographic, give them a sense of belonging, improve their experience as a student, and build their loyalty towards Georgia Tech. We should view these students as alumni-in-residence. We want to make sure that we build this goodwill so that these students give back to this institution, as future donors, as alumni mentors, or even by serving the institute as its President. Therefore, it is imperative that the institute take bold and immediate steps towards addressing these concerns to improve the overall graduate student experience on campus. As Graduate SGA, we are committed to working with the institute administration to find creative solutions to these financial concerns.

Policy Recommendations

There is no one-size-fits-all solution that will help alleviate the financial stress on graduate students. As we've seen from the data, there are multiple dimensions to this problem, and we need to address each one of these. While we do not want to prescribe to a specific solution, here are a few proposed routes:

1. *Covering the Mandatory Fees*: Alternative mechanisms to cover the mandatory fees for PhD students need to be explored. Ultimately, the students should not have to pay for the fees from their monthly paycheck.
2. *Affordable on-campus housing*: Given the economic growth in Midtown Atlanta, housing costs are likely to continue increasing. As an institute, we should come up with a strategic plan to add cheaper-than-market on-campus housing for graduate students, and eventually house majority of the graduate population on campus.
3. *Focus on Graduate Support in Fundraising Campaigns*: In order to alleviate the financial concerns, we need to add more supplementary graduate fellowships (Similar to the President's Fellowship, which provides \$5,500 topping grant in addition to the stipend). There needs

to be a focused effort to raise funds for graduate support through endowments in the next fundraising campaign.

4. *Cost of Living Adjustments to the PhD Stipends*: Instituting a policy to have a steady stipend raise every year, to offset the increase in cost of living, will help prevent these situations in the future.

References

1. *Hefty university fees are sending some grad students to food banks*, Science, August 12, 2019
2. *Graduate students are mounting degrees of protest over 'hidden fees'*, Washington Post, August 2, 2019