

## **Executive Summary of Results from survey “Math Graduate Program Questionnaire for Public Universities”**

I sent this survey in October to 66 universities and received 38 responses from all over the country. Thank you all for contributing! This document has a rough summary of the results. I will also include a spreadsheet with the DGS contact information, approximate stipends, and cost of living estimates from participating institutions. I will leave the comments and soft data out.

For reference, at UNC, the 9 month minimum stipend for all Ph.D. students was previously about \$16000, with most STEM departments paying \$18000-19000. Effective 1 January, the minimum stipend increased to \$20000 and the math department has been approved to pay \$21000. We are looking forward to seeing how this affects our recruitment efforts this year.

Please let me know if you have further questions. I hope this data helps us all improve our programs!

**Nine month stipend:** The range is \$15600-32000, with a raw average is \$22102. Adjusted for cost of living index, the average is \$21296. There seems to be a huge range of student fees (up to \$2600), some paid by the university, some by the student from stipend, which may also skew the results. There were two outliers I left out of the average because it was not clear whether the stated number was monthly, 9 month, or 12 month.

**Cost of living index:** Most cities are 95-105% of nation average, with several big outliers (UC system, UMN, schools in New England and New York are much higher; some schools from the southeast are much lower).

**US News rankings:** As flawed as the methodology is, I also looked up US News rankings. It is difficult to determine if there is a correlation between stipend and ranking, especially given the big outliers in cost of living. It is also difficult to track rankings just for public universities.

**Typical weekly hours for grad students:** These are tabulated differently at different institutions. My approximation is that students work 6-20 hours/week, with 20 hours most common. (20 hours = .5 Full Time Equivalent (FTE)). I did not try to compute FTE salary for students based on these numbers because they were so inconsistent.

**Admissions offers:** This is again all over the place, early January to March. The vast majority of us start making offers late January-early February.

**Unfunded Ph.D. students:** Nearly all departments do not accept unfunded students. A few occasionally accept unfunded Ph.D. students if the student contacts admissions and offers to pay. For reference, we have done this with 2 international students in the past 2 years.

**Revenue from unfunded students:** Most departments do not have unfunded Ph.D. students and receive no direct funding.

**Professional MS:** Some departments offer professional MS degrees. Most professional MS programs are in applied math or financial math. Those departments having professional MS degrees typically receive some revenue from the MS program.

**Efforts to increase stipend:** These vary greatly, partly because we do not all know the history of our department and what previous grad directors and chairs have done. Most substantial increases seem to

come from universities where grad students are unionized. Some received raises from the university, but it is unclear whether these were initiated because of departmental efforts or were already planned before the high inflation. Some departments have used documented data of losing students due to low stipend, some have reduced class size, some departments have lowered faculty raises, and some have taken directly from department instructional budget by running a deficit.

**Additional comments:** The most obvious thing from the comments you all submitted is that we are all extremely frustrated with the stipend situation. Most of us have lost students either during admissions or after enrollment due to low stipends. Most departments have a chronic shortage of TAs to cover service courses, and do not have funds to hire more. This just makes the low stipend problem more pronounced and impossible to address.

**Conclusions:** When adjusted for cost of living, stipends mostly range \$20-23k, with 13/38 universities paying under \$20k in adjusted stipend. It is my understanding that the UC system has negotiated a new stipend with the grad student union, so it is likely all of these numbers will soon change. I think it is really important for us all to keep in touch and share when we have successes or failures in efforts to help our students. I will send this report to the email list of participating departments, so feel free to let the rest of us know if you find anything that works. Thank you all so much for helping with this important data!