

Survey Results (Faculty Recruitment)

Employment Survey, February 2009 & March 2010

This document presents summary results from the survey of recruitment and retirement sent to 68 departments in February 2009 and again in March 2010. The information herein is from a snapshot of the complete survey responses received by Monday, March 2, 2009 for the 2009 Survey and by Monday, April 26, 2010 for the 2010 Survey. The response rate was 100% in 2009 and 90% in 2010.

This summary reports projections of counts to the full population of departments in Groups I Public, I Private, II, III, M and B according to the standard groupings of the Annual Survey. The method used to calculate the projected counts from the sample counts is described in the Endnotes.

Overview

The latest Annual Survey data are not yet available, but preliminary data indicate that the number of people receiving doctoral degrees will be in the same range in 2009-10 as in 2007-08 (1378) and in 2008-09 (1430). Excluding doctoral degrees from statistics departments, there were 1061 new Ph.D.s in 2007-08 and 1072 new Ph.D.s in 2008-09.

Data from the quick survey of representative departments just completed by the AMS project that the total number of academic positions available for these new doctoral candidates is 775, down about 16% from last year and down about 46% from 2007-08. New doctorates apply primarily for academic positions. Typically (based on Annual Survey reports) more than 10% of the total population of new doctoral recipients take positions outside the U.S. and about 75% of those employed in the U.S. take academic positions.

It is important to note that there are young mathematicians exiting postdoctoral and instructorship positions who are also candidates for the estimated 775 positions being recruited. To put the count of 775 in perspective, the 2007 Annual Survey reported 1543 academic positions open to new mathematics doctoral recipients in 2006-07.

2010 Results

Response Rate

Survey Group	Number Sampled	Number of Responses	Proportion of Faculty Sampled
Group I Public	10	9	0.401
Group I Private	10	8	0.291
Group II	10	10	0.242
Group III	11	10	0.159
Group M	13	11	0.077
Group B	14	13	0.037
TOTAL	68	61	

Total Recruitment, Change from 2007-08 to 2009-10, Projected Counts

Survey question: Report the number of full-time positions requiring a doctorate you have tried to fill for the 2010-2011 academic year.

Survey Group	Number Reported in March 2010	Change in Number from 07-08 to 09-10	Percentage Change from 07-08 to 09-10
Group I Public	127	-37	-22.7%
Group I Private	96	-48	-33.3%
Group II	136	-99	-42.1%
Group III	56	-88	-60.9%
Group M	104	-376	-78.4%
Group B	329	-465	-58.6%
TOTAL	849	-1114	-56.8%
I+II+III	360	-185	-33.9%
I+II+III+M	464	-561	-54.8%

New Doc Recruitment, Change from 2007-08 to 2009-10, Projected Counts

Survey question: Report the number of positions reported in Question 1 that were (are) open to new doctoral recipients.

Survey Group	Number Reported in March 2010	Change in Number from 07-08 to 09-10	Percentage Change from 07-08 to 09-10
Group I Public	107	-40	-27.1%
Group I Private	83	-17	-17.2%
Group II	116	-37	-24.3%
Group III	38	-94	-71.4%
Group M	104	-78	-42.9%
Group B	329	-383	-53.8%
TOTAL	775	-650	-45.6%
I+II+III	305	-94	-23.6%
I+II+III+M	409	-172	-29.6%

2009 Results

Response Rate

Survey Group	Number Sampled	Number of Responses	Proportion of Faculty Sampled
Group I Public	10	10	0.455
Group I Private	10	10	0.387
Group II	10	10	0.242
Group III	10	10	0.162
Group M	14	14	0.103
Group B	14	14	0.038
TOTAL	68	68	

Total Recruitment, Change from 2007-08 to 2008-09, Projected Counts

Survey question: Report the number of full-time positions requiring a doctorate you have tried to fill for the 2009-2010 academic year.

Survey Group	Number Reported in February 2009	Change in Number from 07-08 to 08-09	Percentage Change from 07-08 to 08-09
Group I Public	165	-4	-2.6%
Group I Private	90	-57	-38.6%
Group II	153	-83	-35.1%
Group III	74	-62	-45.5%
Group M	184	-252	-57.8%
Group B	367	-472	-56.3%
TOTAL	1034	-930	-47.3%
I+II+III	483	-206	-29.9%
I+II+III+M	667	-458	-40.7%

New Doc Recruitment, Change from 2007-08 to 2008-09, Projected Counts

Survey question: Report the number of positions reported in Question 1 that were (are) open to new doctoral recipients.

Survey Group	Number Reported in February 2009	Change in Number from 07-08 to 08-09	Percentage Change from 07-08 to 08-09
Group I Public	117	-33	-22.1%
Group I Private	39	-70	-64.3%
Group II	157	4	2.7%
Group III	74	-50	-40.0%
Group M	165	-39	-19.0%
Group B	367	-393	-51.7%
TOTAL	918	-580	-38.7%
I+II+III	387	-148	-27.7%
I+II+III+M	551	-187	-25.3%

Free-form Comments from Respondents (2010)

Survey question: Please feel free to describe likely changes for your department in response to the anticipated downturn in employment for your Ph.D. candidates.

Survey Group I Public

We are increasing class sizes and still turning away students in some undergraduate service courses.

A number of such candidates who ordinarily would have no difficulty finding a job will have great difficulty. We employ an unusually high number of postdoctoral assistant professor on three year term appointments, many with reduced teaching from grants, etc. They are also having a great deal of trouble finding jobs, including several who would typically have no trouble in a normal market. Of eight who were having problems, two have had recent success, and we are extending the appointments for at least three more. There are still three without positions for next year.

We are affected by it in terms of positions that we can offer as well as trying to give employment to our recent PhD's.

We have had budget reductions, and may be further reductions next year. Faculty positions that become vacant are being eliminated, and will result in a decrease of about 10% in faculty size for all departments in the College of Arts and Sciences, including ours. We will replace some of the tenure-track losses with postdoctoral or short-term appointments, and also increase class size in our courses.

Survey Group I Private

It is unlikely that all of our new PhD's will be employed next year.

We are aggressively trying to upgrade the quality of our department through replenishment of upcoming retirements. Our hope is that this will also upgrade the quality of our graduate program and the marketability of our PhDs.

All students have received job offers so far, so no changes seen at the moment.

Survey Group II

I expect that the number of filled ten-track positions in the department will decrease in the next two years, because of 1 or 2 retirements and perhaps a separation, which will not immediately be replaced.

The economic downturn seems to have increased the number and quality of students applying to study for a Ph.D. We also had excellent candidates for the tenure-track positions that we filled this year.

We are losing 3 faculty to retirement this year and have lost 3 last year (a total of 5.5 FTE professor lines). We were allowed to hire 1.5 FTE professor lines this year.

Many students are delaying their graduation and stay on as TA's for an additional year. This lowers the size of the incoming class and will put more folks on the job market next year.

Survey Group III

We are encouraging our students to broaden their career goals and consider opportunities they would not have considered in a stronger economy.

No change.

Survey Group M

Our university has not been affected too badly. We have not been denied the ability to hire, and we plan to ask for a new tenure line. I don't think we will get it, but the dean has not discouraged us. Our salaries have not been frozen, but the raises are small.

Our institution is experiencing significant fiscal stress. We have an elderly faculty some of whom might retire in the next few years. There is a real danger that we will not be allowed to replace them with full-time faculty.

A retirement at the end of the 2007-2008 academic year would normally have resulted in a hiring process during 2008-2009 for the replacement to begin in the fall of 2009, but that hiring process was put on hold. We were allowed to resume that search in the fall of 2009 for a new hire to begin in the fall of 2010, essentially a one-year delay. This resulted in the temporary full-time faculty member that usually fills that one year of the hiring process being here for two years instead. We have a faculty member retiring at the end of the current 2009-2010 year. When our search for the delayed replacement brought in several highly qualified candidates, we petitioned to be allowed to offer positions to two of them, filling the spot vacated by retirement at the end of the current year a year early -- without the usual year of a temporary full-time replacement. Our arguments were threefold: we would avoid the expenses of advertising and interviewing next year; the quality of job candidates was unusually good, certainly fallout from reduced hiring across the profession over the past two years; and there are advantages to having a cohort to go through the new-faculty-to-tenure process together. These final two arguments were strengthened by our good fortune in having two (actually three) very strong female candidates who matched our needs and whose interests we matched well. Perhaps the constrained hiring market contributed to our ability to have more success in recruiting excellent job candidates from traditionally underrepresented groups to our faculty. We are delighted to have two excellent candidates who have accepted our offers and will begin here in the fall. The downturn in employment strangely, accidentally, fortuitously landed us a double hire about which we are all excited.

Survey Group B

We also aren't able to hire more visitors, so classes will be larger or I will be hiring adjunct faculty to teach a few courses normally taught by those with PhD's.

None. We do have fewer faculty and will continue to not replace faculty who leave until our financial situation stabilizes.

just want to clarify my earlier responses: The 2 new positions I indicated were replacements for the 2 that I later said were retiring.

We do not have a graduate program.

Endnotes

Projected Counts

Within a *Survey Group*, the ratio between a projected count reported herein and the corresponding actual count for the sample is equal to the ratio within that *Survey Group* of the *Total Doctoral Faculty* (2007TDF) for that group in 2007 to the Total Doctoral Faculty In The Sampled Departments (2007TDFS) for that group in 2007.

The 2007 data are used for TDF because the analysis of the 2008 Annual Survey is still in progress.

Within Group---

$$\text{Projected Count} = (\text{Sample Count}) \times (\text{2007TDF} \div \text{2007TDFS})$$

There is a variation to this rule for the Group M and Group B analysis. 2008TDFS replaces 2007TDFS because the 2008 data are complete and the 2007 data are not.

Participating Departments

Group I Public

- University of California, San Diego
- University of Illinois at Chicago
- Purdue University
- University of Michigan
- City University of New York, Graduate Center
- Ohio State University, Columbus
- Pennsylvania State University
- University of Washington
- University of Wisconsin

Group I Private

- California Institute of Technology
- Northwestern University
- Harvard University
- Washington University
- Columbia University
- Cornell University

Rensselaer Polytechnic Institute
Brown University

Group II

Arizona State University
University of California, Davis
University of Florida
University of Georgia
University of Iowa
University of Kentucky
Louisiana State University, Baton Rouge
North Carolina State University, Raleigh
University of Pittsburgh, Pittsburgh
Texas A&M University

Group III

University of Alabama
University of South Florida
University of Kansas
University of Louisiana
University of Maryland, Baltimore County
University of Mississippi
Boston College
Montana State University
New Jersey Institute of Technology
University of Memphis

Group M

Florida International University
Ball State University
Western Kentucky University
University of Dayton
John Carroll University
Wright State University
University of Tulsa
Millersville University
Villanova University

University of Texas-Pan American
Hampton University

Group B

Loyola Marymount University
Bradley University
University of Southern Indiana
Northern Kentucky University
Williams College
Grand Valley State University
St. Olaf College
Truman State University
Lafayette College
Providence College
University of Richmond
Gonzaga University
University of Wisconsin-Eau Claire