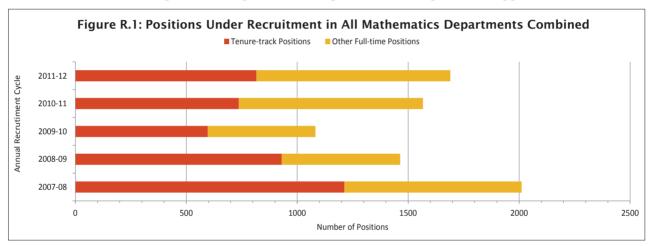


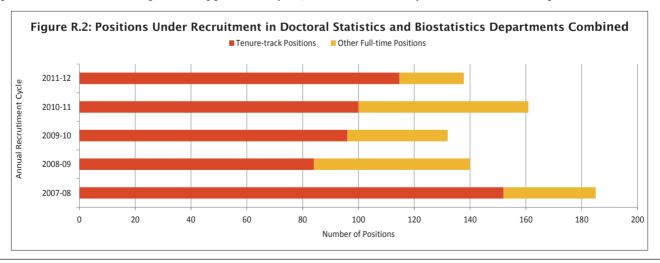
# Report on 2011–2012 Academic Recruitment and Hiring

Richard Cleary, James W. Maxwell, and Colleen Rose

The number of full-time positions under recruitment in mathematics departments increased during the 2011-2012 academic recruitment cycle (for employment beginning in fall 2012.) The total number of positions under recruitment by all mathematics departments combined was  $1,693^1$ . This number is up 8% from the 2010-2011 total and up 57% from the 2009-2010 total. (Note: Throughout this report, the term tenure-track encompasses positions that come with tenure as well as those which provide the option of earning tenure at some point after appointment.)



The doctoral statistics and biostatistics departments combined saw a decrease (14%) in the level of recruitment. These groups consist of 93 departments and so constitute a much smaller employment pool than the approximately 1,400 mathematics departments. In 2011 there were approximately 2,081 full-time faculty in the statistics and biostatistics departments combined compared to approximately 22,033 full-time faculty in all mathematics departments combined.

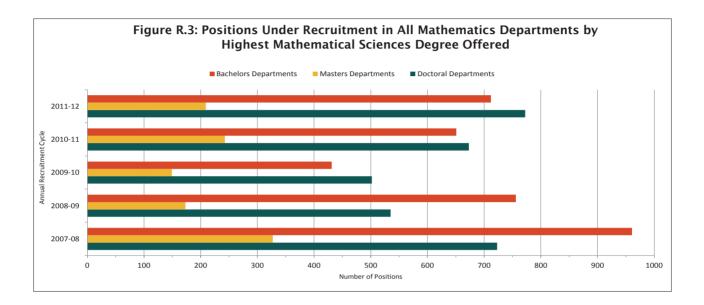


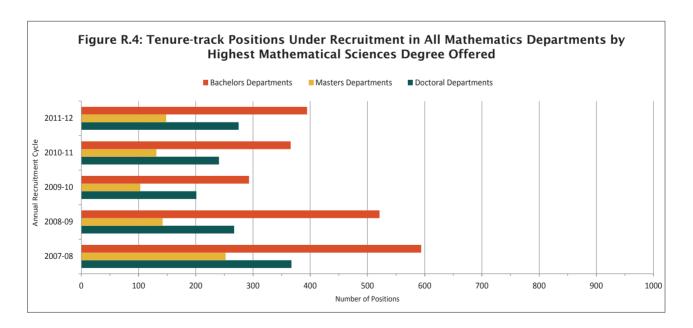
<sup>&</sup>lt;sup>1</sup> All numbers reported are estimates made to account for non-responding departments. See page 593 for response rates.

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# **Positions Under Recruitment**

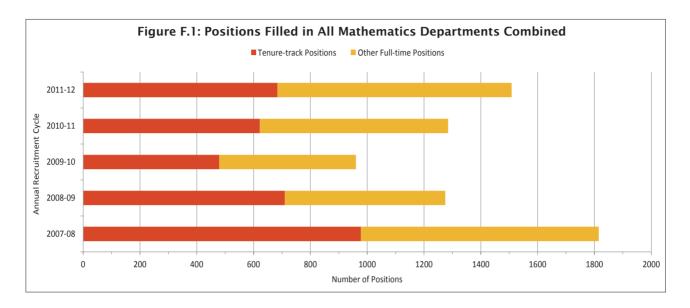
The overall number of positions under recruitment increased for the second consecutive year among the mathematics departments. There was a 15% increase for the doctoral mathematics departments combined, a 14% decrease for the masters mathematics departments group and a 9% increase for the bachelors mathematics departments group. Similarly, the increases in tenure-track positions under recruitment for these same department groupings were 14%, 13%, and 8%, respectively.



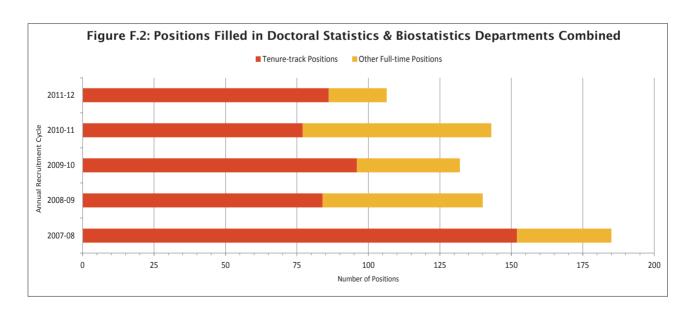


## **Positions Filled**

A total of 1,504 positions were filled during the 2011-2012 academic cycle for employment beginning in fall 2012 by all mathematics departments combined. This total is up 7% from the 2010-2011 total and up 57% from the 2009-2010 total.

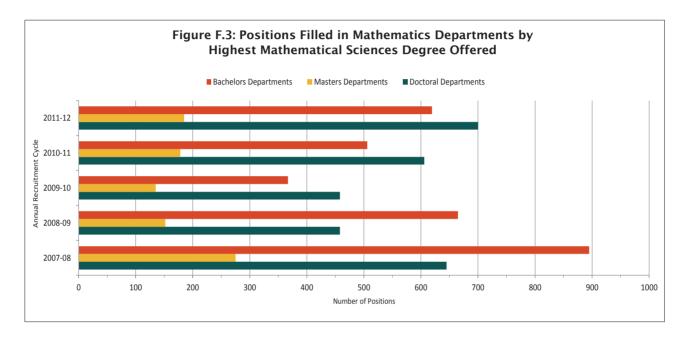


The situtation for doctoral statistics departments and biostatistics departments combined was somewhat different, as demonstrated by the accompanying figure. The total of filled positions is down 34% from the 2010-2011 total and down 19% from the 2009-2010 total.

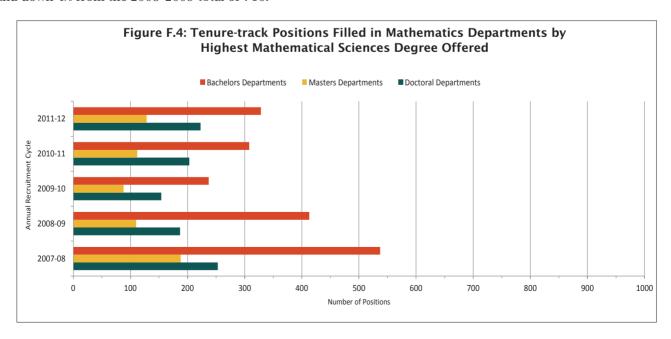


### **Positions Filled**

The increase in positions filled for fall 2012 also varied widely among the various reporting groups within all mathematics departments. For the doctoral mathematics departments combined, the number of positions filled was 700, an increase of 16% from the fall 2011 and up 53% from fall 2010 counts. For the masters departments the count was 185, up 4% from fall 2011 and up 37% from the fall 2010 count. For the bachelors departments the count was 619, up 22% from fall 2011 and up 69% from fall 2010.

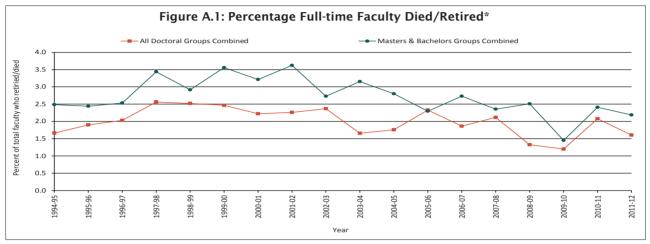


The total tenure-track positions filled during the 2011-2012 recruitment cycle by all mathematics departments combined was 680, up 9% from the 2010-2011 total of 623. This total is up 42% from the 2009-2010 figure of 479 and down 4% from the 2008-2009 total of 710.



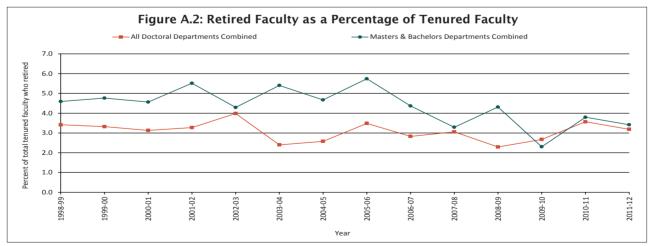
## **Faculty Attrition**

Figure A.1 shows the trends in attrition from deaths and retirements among the full-time faculty for the academic years 1994–1995 through 2011–2012. In the late 1990s attrition leveled off, then began dropping after 2000, reaching the lowest rate of attrition in 2009–2010.



<sup>\*</sup> The percentage of full-time faculty who died or retired is the number of faculty who died or retired at some point during the academic year (September 1 through August 31) divided by the number of full-time faculty at the start of the academic year.

Figure A.2 shows an alternative way of looking at the trends in annual faculty retirements compared to that offered in Figure A.1. It seems highly likely that the vast majority of individuals who are reported by their department as retiring are, in fact, members of the tenured faculty. Given that, it makes sense to look at the ratio of those retiring during an academic year to the total tenured faculty at the start of that year, as is done in A.2. Data collected for the last two years confirms that approximately 90% of those retiring where tenured.



<sup>\*</sup> Each percentage in this figure is the number of full-time faculty that retired at some point during the academic year (September 1 through August 31) divided by the number of full-time tenured faculty at the start of the academic year.

# **Departmental Groupings and Response Rates**

Starting with reports on the 2012 AMS-ASA-IMS-MAA-SIAM Annual Survey of the Mathematical Sciences, the Joint Data Committee has implemented a new method for grouping the doctorate-granting mathematics departments. These departments are first grouped into those at public institutions and those at private institutions. These groups are further subdivided based on the size of their doctoral program as reflected in the average annual number of Ph.D.'s awarded between 2000 and 2010, based on their reports to the Annual Survey during this period. Furthermore, doctorate-granting departments which self-classify their Ph.D. program as being in applied mathematics will join with the other applied mathematics departments previously in Group Va to form their own group. The former Group IV will be divided into two groups, one for departments in statistics and one for departments in biostatistics.

For further details on the change in the doctoral department groupings see the article in the October 2012 issue of *Notices of the AMS* at http://www.ams.org/notices/201209/rtx120901262p.pdf.

 $\textbf{Math. Public Large} \ consists \ of \ departments \ with \ the \ highest \ annual \ rate \ of \ production \ of \ Ph.D.'s, \ ranging \ between \ 7.0 \ and \ 24.2 \ per \ year.$ 

Math. Public Medium consists of departments with an annual rate of production of Ph.D.'s, ranging between 3.9 and 6.9 per year.

Math. Public Small consists of departments with an annual rate of production of Ph.D.'s of 3.8 or less per year.

Math. Private Large consists of departments with an annual rate of production of Ph.D.'s, ranging between 3.9 and 19.8 per year.

Math. Private Small consists of departments with an annual rate of production of Ph.D.'s of 3.8 or less per year.

Applied Mathematics consists of doctoral degree granting applied mathematics departments.

**Statistics** consists of doctoral degree granting statistics departments.

Biostatistics consists of doctoral granting biostatistics departments.

Group M contains U.S. departments granting a master's degree as the highest graduate degree.

**Group B** contains U.S. departments granting a baccalaureate degree only.

Listings of the actual departments which compose these groups are available on the AMS website at www.ams.org/annual-survey/groups.

### **Survey Response Rates by New Groupings**

## Faculty Recruitment & Hiring Response Rates

Group*	Received (%)
Math. Public Large	17 of 26 with 17 recruiting (65%)
Math. Public Medium	28 of 40 with 26 recruiting (70%)
Math. Public Small	37 of 64 with 28 recruiting (59%)
Math. Private Large	13 of 24 with 13 recruiting (54%)
Math. Private Small	18 of 28 with 14 recruiting (64%)
Applied Math.	14 of 24 with 12 recruiting (58%)
Statistics	24 of 59 with 16 recruiting (41%)
Biostatistics	13 of 36 with 11 recruiting (36%)
Masters	86 of 179 with 47 recruiting (48%)
Bachelors	392 of 1010 with 161 recruiting (39%)
Total	642 of 1496 with 345 recruiting (43%)

<sup>\*</sup> Doctoral programs that do not formally "house" faculty and their salaries are excluded from this survey.

### Other Information

The interested reader may view additional details on the results of this survey and prior year trends by visiting the AMS website at www.ams.org/annual-survey. Survey results for the doctoral departments in statistics and biostatistics are available there.

## Acknowledgements

The Annual Survey attempts to provide an accurate appraisal and analysis of various aspects of the academic mathematical sciences scene for the use and benefit of the community and for filling the information needs of the professional organizations. Every year, college and university departments in the United States are invited to respond. The Annual Survey relies heavily on the conscientious efforts of the dedicated staff members of these departments for the quality of its information. On behalf of the Data Committee and the Annual Survey Staff, we thank the many secretarial and administrative staff members in the mathematical sciences departments for their cooperation and assistance in responding to the survey questionnaires.