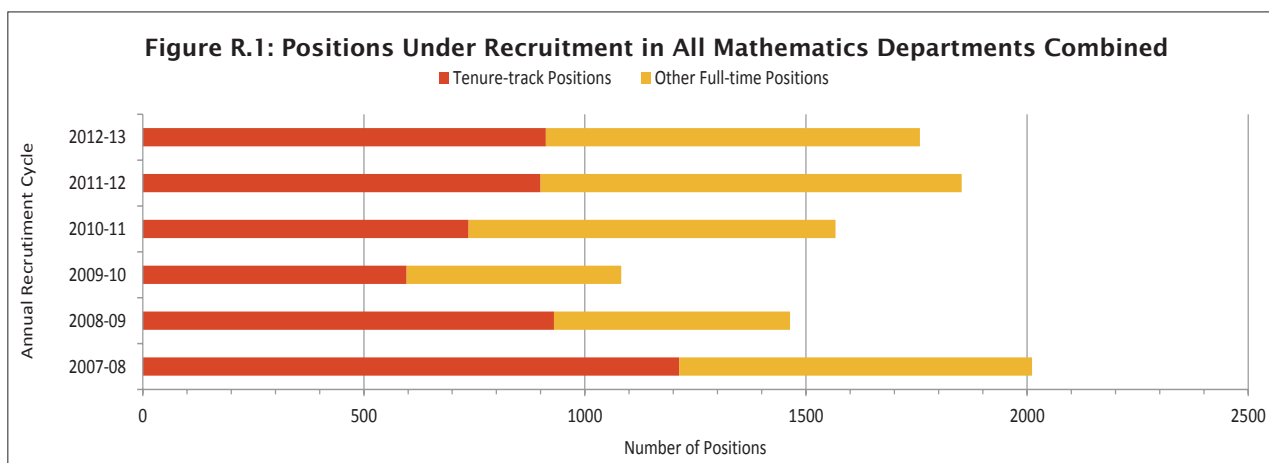


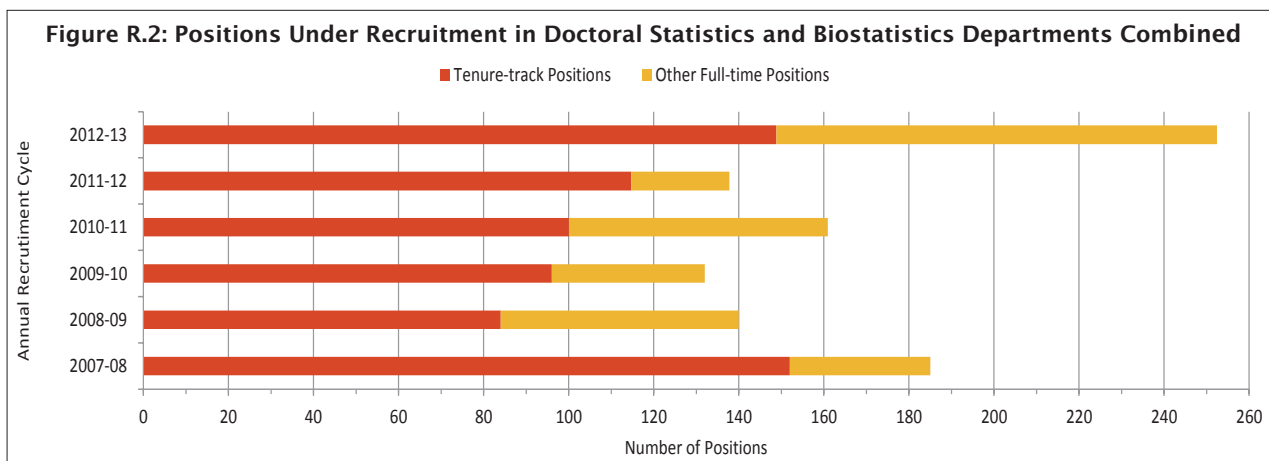
Report on 2012–2013 Academic Recruitment and Hiring

William Yslas Vélez, James W. Maxwell, and Colleen Rose

The number of full-time positions under recruitment in mathematics departments decreased during the 2012–2013 academic recruitment cycle (for employment beginning in fall 2013). The total number of positions under recruitment by all mathematics departments combined was 1,757¹. This number is down 5% from the 2011–2012 total and up 12% from the 2010–2011 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 department groupings each reported an 83% increase in the number of positions under recruitment over the numbers reported for the prior year, an (estimated¹) combined total of 252 positions under recruitment for the 2012–2013 recruitment cycle. The increase (114) reported for the biostatistics departments was heavily affected by the recruitment in just two of the 24 responding departments which, combined, accounted for over half of the total recruitment reported. It will be interesting to see if this increase in recruitment continues next year.

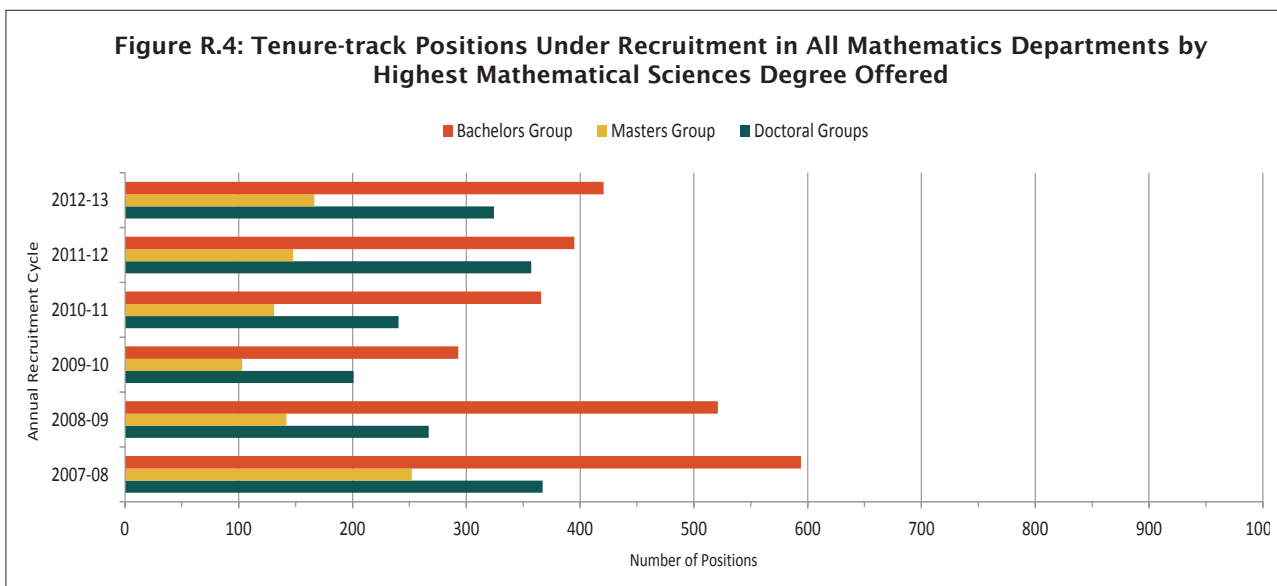
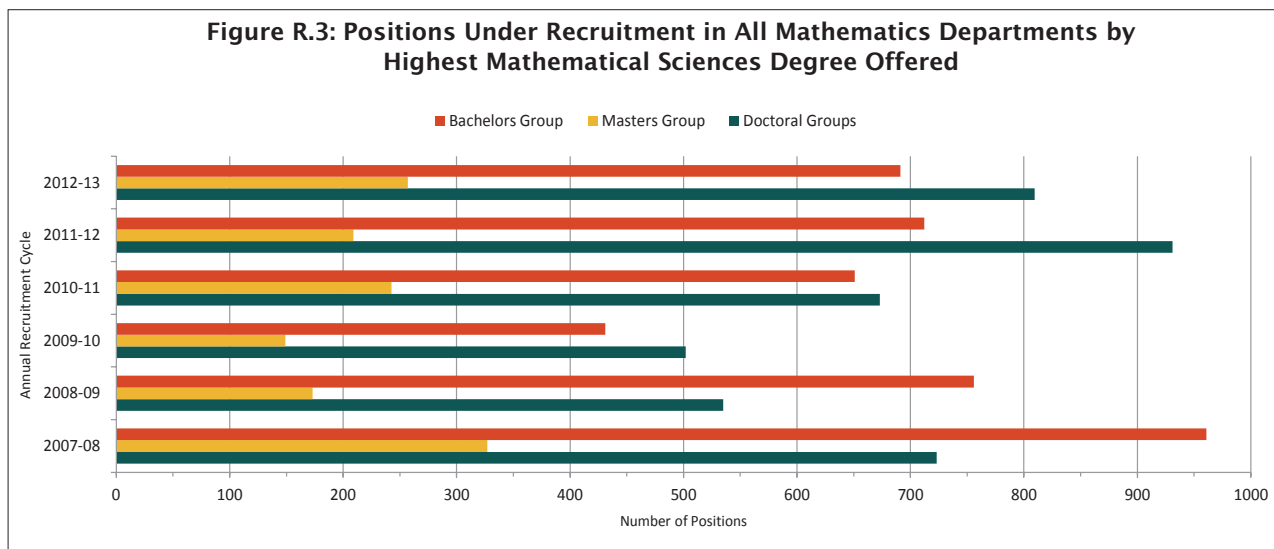


¹ All numbers reported are estimates made to account for non-responding departments. See page 749 for response rates.

William Yslas Vélez is a professor in the Department of Mathematics at University of Arizona. James W. Maxwell is AMS Coordinator for special projects. Colleen A. Rose is AMS survey analyst.

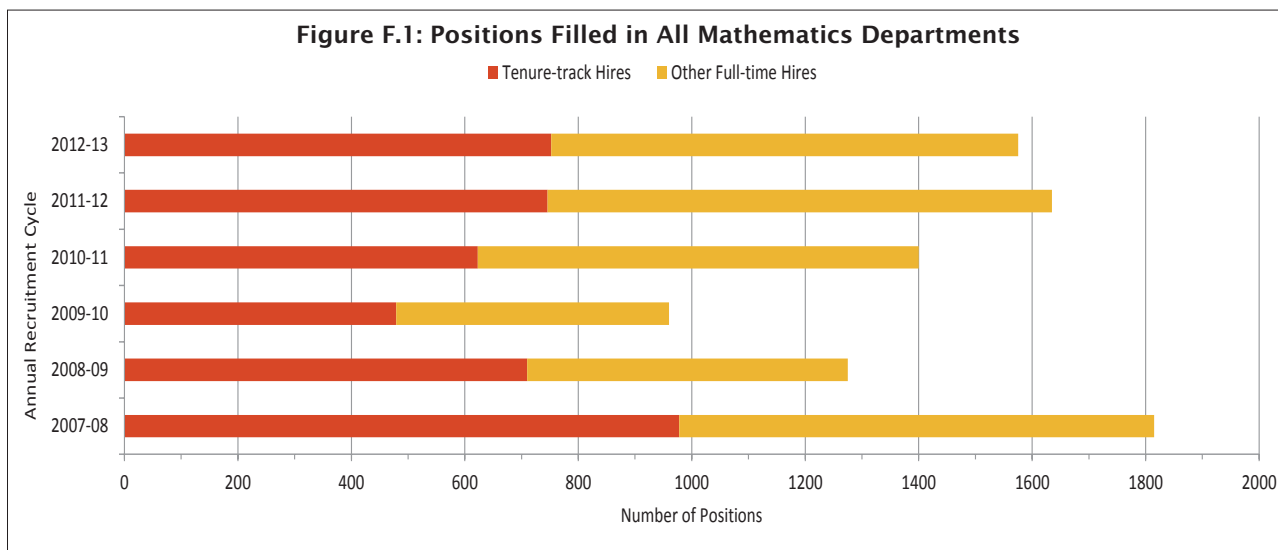
Positions Under Recruitment

The overall number of positions under recruitment decreased among the mathematics departments. There was a 13% decrease for the doctoral mathematics groups combined, a 23% increase for the masters group and a 3% decrease for the bachelors group. Recruitment of tenure-track positions increased overall, but decreased 9% among the doctoral mathematics groups combined and increased in both the masters and bachelors groups by 13% and 7%, respectively.

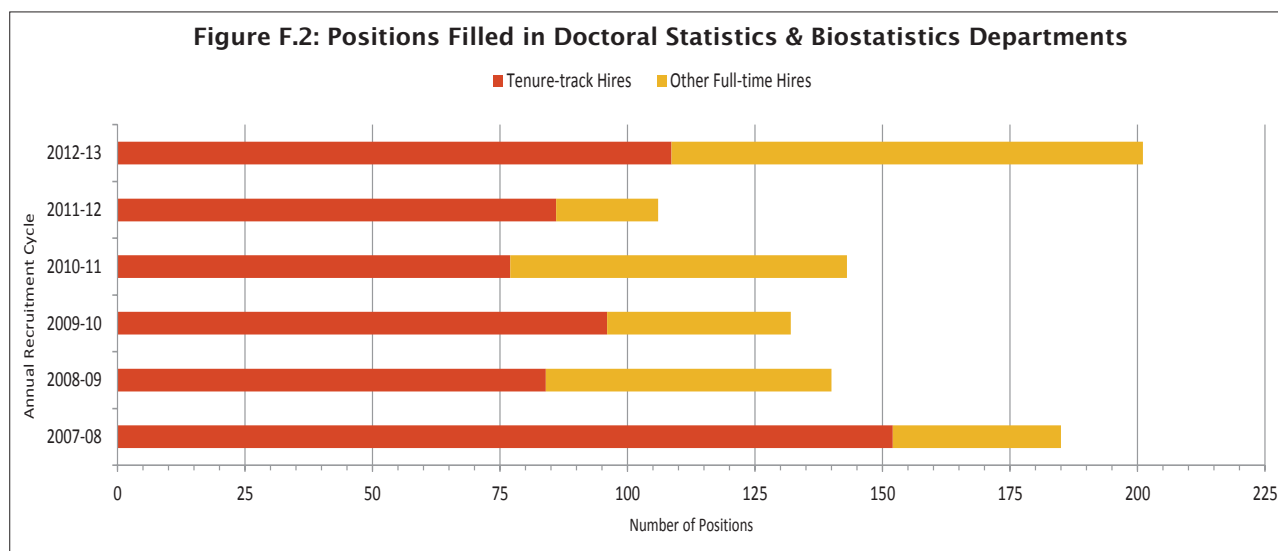


Positions Filled

A total of 1,576 positions were filled during the 2012–2013 academic cycle for employment beginning in fall 2013 by all mathematics groups combined. This total is down 4% from the 2011–2012 total and up 13% from the 2010–2011 total.

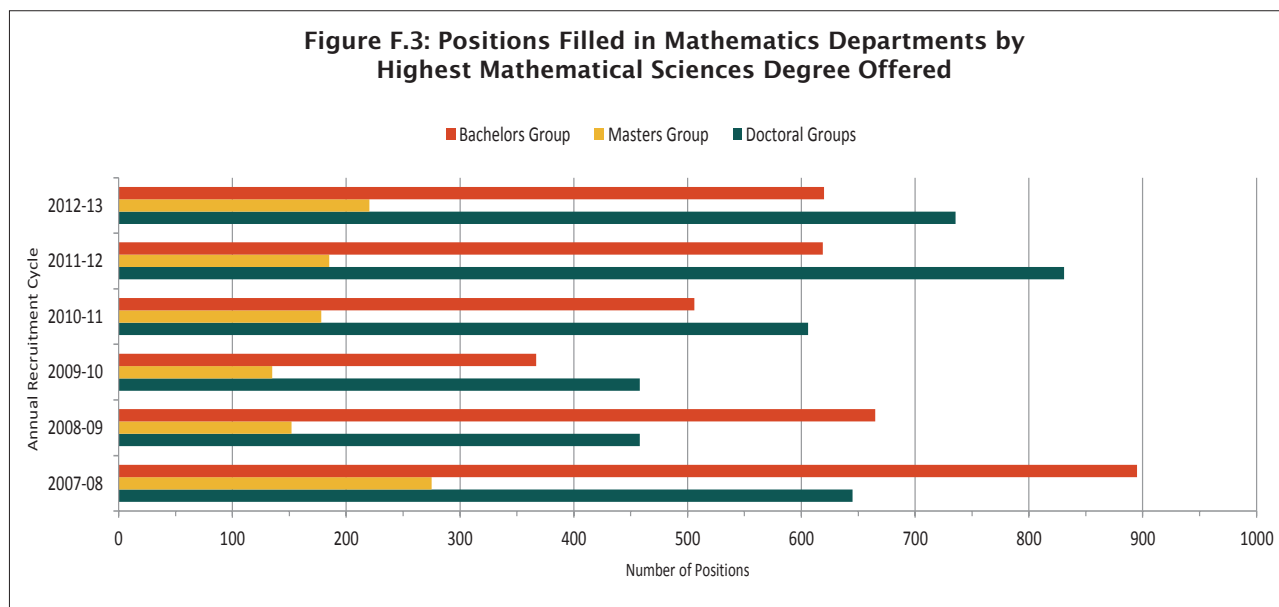


The situation for doctoral statistics departments and biostatistics departments combined was somewhat different, as demonstrated by the accompanying figure. The total of filled positions is up 90% from the 2011–2012 total and up 41% from the 2010–2011 total. As was the case for recruitment, the increase in hiring by biostatistics departments was heavily affected by the recruitment in just two of the 24 responding departments which, combined, accounted for 60% of the total hiring reported by biostatistics.

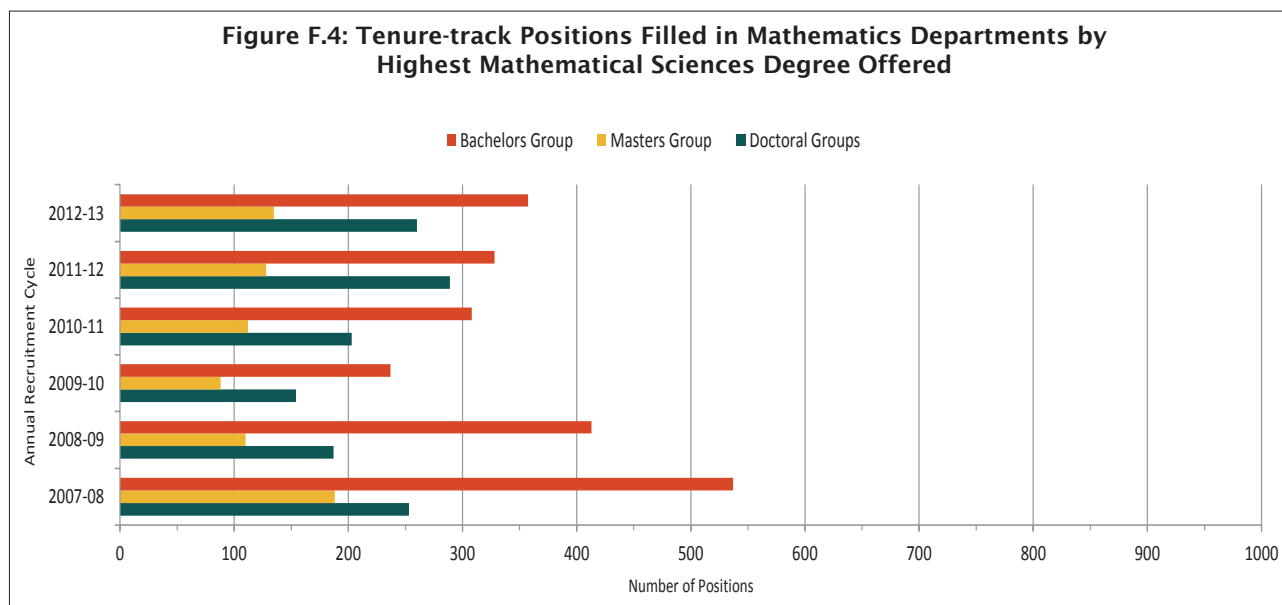


Positions Filled

The increase in positions filled for fall 2013 also varied widely among the various reporting groups. For the doctoral mathematics groups combined, the number of positions filled was 735, a decrease of 12% from the fall 2012 and up 21% from fall 2011 counts. For the masters group the count was 220, up 19% from fall 2012 and up 24% from the fall 2011 count. For the bachelors group the count remained essentially unchanged, 620 compared to 619 for fall 2012, and up 22% from fall 2011.

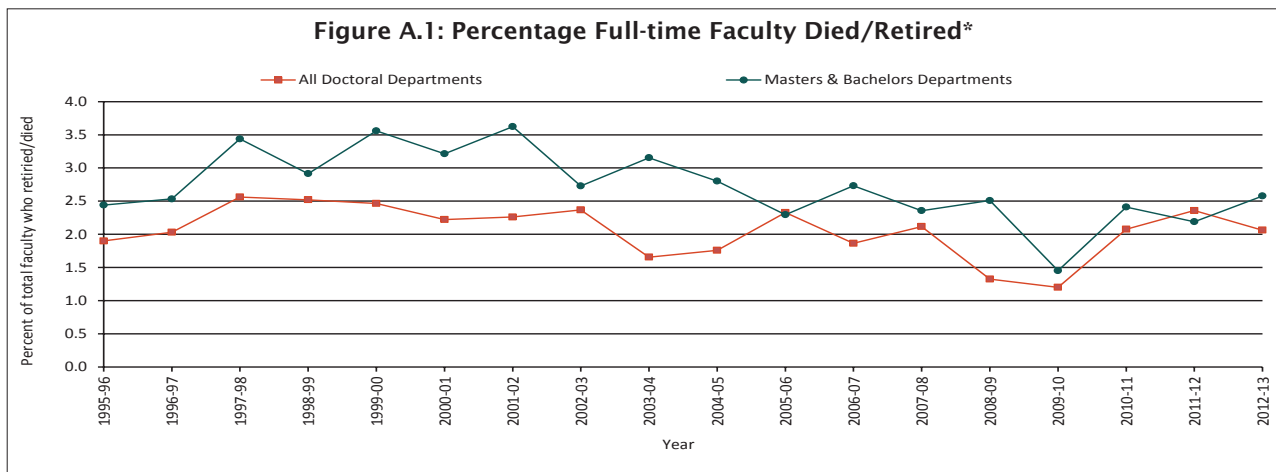


The total tenure-track positions filled for fall 2013 by all mathematics groups combined remained essentially unchanged, 752 compared to 746 for 2011-2012. This total is up 21% from the 2010-2011 figure of 623 and up 57% from the 2009-2010 total of 479.



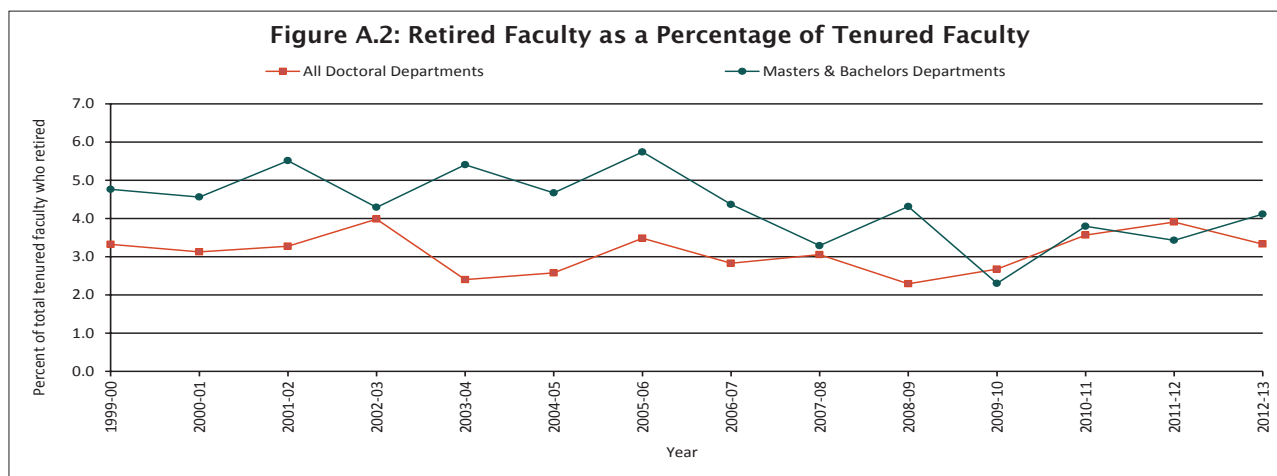
Faculty Attrition

Figure A.1 shows the trends in attrition from deaths and retirements among the full-time faculty for the academic years 1995-1996 through 2012-2013. In the late 1990s attrition leveled off, then began dropping after 2000, reaching the lowest rate of attrition in 2009-2010.



* 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 this year show that approximately 85% of those retiring were tenured.



* 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.

Survey Groups 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 is 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>.

Survey Groups:

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-degree-granting biostatistics departments.

Masters contains U.S. departments granting a masters degree as the highest graduate degree.

Bachelors 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.

Response Rates by Survey Groups

Faculty Recruitment & Hiring Response Rates

Group*	Received (%)
Math. Public Large	21 of 26 with 20 recruiting (81%)
Math. Public Medium	33 of 40 with 30 recruiting (83%)
Math. Public Small	44 of 64 with 32 recruiting (69%)
Math. Private Large	13 of 24 with 12 recruiting (54%)
Math. Private Small	25 of 28 with 23 recruiting (89%)
Applied Math.	19 of 24 with 18 recruiting (79%)
Statistics	40 of 59 with 35 recruiting (68%)
Biostatistics	24 of 43 with 15 recruiting (56%)
Masters	111 of 182 with 72 recruiting (61%)
Bachelors	459 of 1002 with 200 recruiting (46%)
Total	789 of 1492 with 457 recruiting (53%)

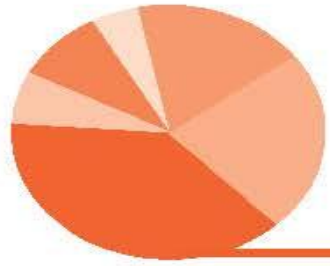
* Doctoral programs that do not formally "house" faculty and their salaries are excluded from this survey.

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.



Supplemental Table(s) for the Report on Academic Recruitment and Hiring

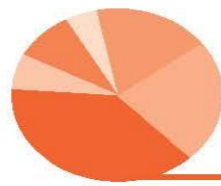
Section on Faculty Attrition

Supplemental Table A.1: Faculty Deaths & Retirements, Fall 2013

	Math. Public Large Group	Math. Public Medium Group	Math. Public Small Group	Math. Private Large Group	Math. Private Small Group	Applied Math. Group	Total Doctoral Groups Combined	Master's	Bachelor's	Total Math. Groups Combined	Statistics Group	Biostatistics Group	Total Statistics & Biostatistics Combined
Full-time faculty who retired or died	36	34	47	24	20	11	172	95	255	522	28	22	50
<i>Standard Error</i>	2	3	4	4	1	1	7	6	14	17	3	3	4
% of Full-time faculty	1.8%	1.7%	2.2%	2.1%	2.6%	2.0%	1.6%	2.2%	2.8%	2.4%	0.3%	2.3%	2.3%
Died	6	1	6	2	3	1	20	5	18	42	6	2	8
Retired	30	33	41	22	17	10	152	90	237	480	22	20	42
Tenured Faculty	30	28	32	22	13	10	135	76	199	410	22	11	33

Supplemental Table A.2: Tenured Faculty Retirements, Fall 2013

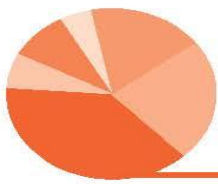
	Math. Public Large Group	Math. Public Medium Group	Math. Public Small Group	Math. Private Large Group	Math. Private Small Group	Applied Math. Group	Total Doctoral Math. Groups	Master's	Bachelor's	Total Math. Groups Combined	Statistics Group	Biostatistics Group	Total Statistics & Biostatistics Groups Combined
Full-time Tenured faculty who retired	30	28	32	22	13	10	135	76	199	410	22	11	33
<i>Standard Error</i>	2	3	5	4	1	1	8	7	16	19	3	5	
% of Full-time tenured faculty	2.5%	2.5%	2.7%	4.0%	2.9%	3.1%	2.8%	2.9%	3.7%	3.2%	3.3%	3.4%	3.3%



Supplemental Table(s) for the Report on Academic Recruitment and Hiring

Supplemental Table R.1: Recruitment of Faculty with a Doctorate, Fall 2013

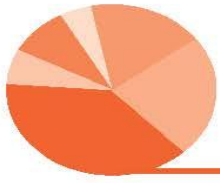
	Math. Public Large Group	Math. Public Medium Group	Math. Public Small Group	Math. Private Large Group	Math. Private Small Group	Applied Math. Group	Total Doctoral Groups Combined	Master's	Bachelor's	Total Math. Groups Combined	Statistics Group	Biostatistics Group	Total Statistics & Biostatistics Groups Combined
Posted Doctoral Positions													
Total Number	198	166	161	133	103	48	809	257	691	1757	129	124	252
<i>Standard Error</i>	11	10	14	19	19	3	28	16	33	46	7	32	33
Tenured/tenure-track	57	75	84	44	38	25	324	167	421	912	84	65	149
Open to new doctoral recipients	25	67	73	31	26	20	242	163	396	801	65	22	86
Open to assoc/full level	23	12	22	22	15	9	103	25	52	180	25	16	42
Non-tenure-track	141	91	77	89	65	23	485	90	270	846	44	59	104
Open to new doctoral recipients	133	91	57	89	57	23	449	83	265	796	44	50	95
Temporary 1-year appointments	22	12	31	15	21	8	109	48	144	302	19	18	38
Reported Hires for Above													
Total number	176	156	152	118	95	39	735	220	620	1576	90	111	201
Male doctoral hires	135	111	92	81	64	23	505	112	369	986	59	55	114
Tenured/tenure-track	32	47	51	28	26	10	193	77	207	478	41	32	74
Non-tenure-track	103	64	41	54	38	13	312	35	161	508	18	23	41
Postdoc appointments	74	51	29	46	22	9	231	6	4	241	9	14	23
1-year appointments	9	6	12	7	10	0	44	21	63	127	6	6	11
Female doctoral hires	33	44	41	24	29	16	188	76	212	477	27	56	83
Tenured/tenure-track	9	20	20	2	8	7	67	58	150	275	14	22	34
Non-tenure-track	25	24	20	22	21	9	122	18	62	202	14	34	48
Postdoc appointments	16	8	15	13	12	1	66	3	6	75	2	14	16
1-year appointments	0	2	10	4	6	0	22	21	35	77	5	0	5
Nondoctoral hires	7	0	19	13	2	0	42	33	39	113	4	0	0
Male	4	0	9	13	1	0	27	10	15	52	2	0	2
Female	4	0	10	0	1	0	15	23	23	61	2	0	12
Total new doctoral hires	103	65	41	68	35	14	326	89	250	665	38	36	47
Male new doctoral hires	83	51	26	54	20	8	241	47	144	433	27	18	18
Tenured/tenure-track	4	4	7	6	4	0	24	28	88	140	12	3	15
Female new doctoral hires	20	14	15	15	15	6	85	42	106	232	12	18	30
Tenured/tenure-track	0	6	4	0	6	1	17	31	71	120	9	2	11
Unfilled positions	23	10	13	28	10	9	93	70	110	273	42	12	55



Supplemental Table(s) for the Report on Academic Recruitment and Hiring

Supplemental Table R.2: Summary of Recruitment of Faculty with a Doctorate,
Fall 2013

	Doctoral Math. Groups	Master's and Bachelor's	Statistics & Biostatistics Groups	Total
Posted Doctoral Positions				
Total Number	809	948	252	2010
Tenure/tenure-track	324	587	149	1060
Open to new doctoral recipients	242	560	86	888
Open to assoc/full level	103	77	42	221
Non-tenure-track	485	361	104	949
Open to new doctoral recipients	449	347	95	891
Reported Hires for Above, excluding temporary hires				
Total doctoral hires	694	768	198	1660
Tenure/tenure-track	260	492	107	860
Previously in non-tenure-track	40	108	8	156
Previously in postdoc	136	103	29	268
Non-tenure-track	379	276	89	744
1-year appointments	65	139	16	220
Postdoc appointments	297	19	39	355
Total new doctoral hires	326	339	74	739
Tenured/tenure-track	42	218	26	286
Male	241	192	44	477
Tenured/tenure-track	24	116	15	155
Female	85	147	30	262
Tenured/tenure-track	17	103	11	130
Total not-new doctoral hires	368	429	123	921
Tenured/tenure-track	219	274	81	574
Male	264	289	97	650
Tenured/tenure-track	169	169	58	396
Female	104	141	53	298
Tenured/tenure-track	49	105	23	178
Total Non-doctoral hires	42	72	4	117
Male	27	26	2	54
Female	15	46	2	63



Supplemental Table(s) for the Report on Academic Recruitment and Hiring

Supplemental Table R.3: Positions Posted and Filled, Fall 2013

Positions	Doctoral Math. Groups	Master's and Bachelor's	Statistics & Biostatistics Groups	Total
Posted positions open to new doctoral recipients	242	560	86	888
% tenured/tenure-track	75%	95%	58%	84%
Positions filled by new doctoral recipients	326	339	74	739
% tenured/tenure-track	13%	64%	35%	39%
Positions filled by not-new doctoral recipients	368	429	123	921
% tenured/tenure-track	59%	64%	66%	62%