

Annual Survey of New Doctoral Recipients in the Mathematical Sciences



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Reporting Today on Two Surveys



- **Doctorates Granted** – an annual survey of all U.S. doctorate-granting departments in the mathematical sciences which gathers information on individuals awarded a doctorate.
- **Employment Experiences of New Doctoral Recipients** – a survey of the individuals reported via the Doctorates Granted survey.
- **AMS conducts two additional annual surveys of 1,500 U.S. math departments.** All work is done by 1.75 FTE from three individuals.

Doctorates Granted Survey



- 207 departments of mathematics or applied mathematics surveyed in 2010
- 57 departments of statistics and 35 departments of biostatistics surveyed in 2010

Departments Are Asked to Report



- Name, gender, citizenship and residency status for non-U.S. citizens
- Thesis advisor, thesis title, and month and year degree was awarded
- Mathematical area of thesis using an international classification scheme for mathematical sciences
- Employment plans for fall
- Contact information for summer and for fall

Steps in Doctorates Granted (DG) Survey



- April, Year N - Postal mailing to all departments requesting information on each individual awarded a doctorate between July 1, Year N-1 through June 30, Year N.
- June, Year N – email reminder one week before deadline.
- July, Year N – second paper mailing sent followed by email reminder one week before deadline in early September.

Steps in DG Survey (continued)



- October, Year N – Preliminary report prepared based on returns in hand by mid-September. Usually represents at least 90% of the final count of new doctorates. Report appears in AMS Notices in January.
- January through February, Year N+1 – intense follow up with remaining non-responding departments, using email, phone calls, and other *forms of persuasion*.
- Final report appears in summer issue of AMS Notices.

DG Response Rates

Department	2006	2007	2008	2009	2010
Mathematics	98%	91%	100%	100%	100%
Statistics or Biostatistics	94%	80%	73%	97%	100%

Improving DG Response Rates

- Added steps in 2009 to personalize requests sent to departments in statistics and biostatistics.
- Added one-page summary of survey results for previous year for doctoral recipients from departments of statistics or biostatistics.
- Added letter of endorsement from President and Executive Director of ASA.
- Preliminary report for 2010, published in early January, included the names of all non-responding departments.

Employment Experiences of New Doctoral Recipients (EENDR) Survey

- Sent to each new doctoral recipient reported to us by September. When email address is known, send email to confirm/update address for mailing EENDR form.
- Form and cover letter mailed in mid-October. Form may be completed online. For 2011 survey, will send paper only when no email is known.

EENDR Survey (continued)

- Mailing includes an incentive for completion of survey: responders by deadline are eligible for a drawing with first prize of \$500, two second prizes of \$200 and three third prizes of \$100.
- Instituted with 2009 survey, the incentive replaced \$20 coupons from each of 5 sponsoring societies in use for previous 12 years. The drawing has significantly increased the number of early responders, and raised the final response rate approximately 5%.

Data Gathered on EENDR Survey

- Employment status as of early October
- If employed, details on the position:
 - Full-time versus part-time
 - Permanent versus temporary
 - If temporary academic, is it a postdoc
 - Sector of employment
- Salary
- Gender, age, citizenship status, residency status
(serves to confirm data from departments)

EENDR Response Rates

2006	2007	2008	2009	2010
53%	47%	45%	53%	54%

EENDR Survey Response Rates

- Response rates vary depending on the employment sector of the new doctorate.
- Rates are higher for those employed within US academia, in the 60% range, and
- lower for those in US business and industry, in the 40% range.

More info on Annual Survey

- All current survey forms are available on the AMS website at <http://www.ams.org/profession/data/annual-survey/surveyforms>
- All survey reports are accessible from this same page, with enough clicks.
- Contact me at jwm@ams.org