Data from the NSF on Master's Degree Recipients

The following data is from the 1993 National Survey of Recent College Graduates sponsored by the NSF. This survey includes data on both bachelor's and master's degree recipients who graduated during spring 1990, academic year 1990-1991, and academic year 1991-1992. A sample of 25,785 graduates (16,585 bachelor's and 9,200 master's) were selected and the unweighted response rate was 85.7 percent. Of those who responded, 391 had received master's degrees in the mathematical sciences. Participants were asked questions about their education background and their present employment status.

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Participants were asked questions about their education background and their present employment status. In particular, each master's degree recipient was asked about their major area of study. Those who majored in the mathematical sciences were asked to choose from four major areas of study. Table 1 displays the result for master's graduates in the mathematical sciences.

Table 1: Percent of Master's Degree Recipients by Major Area of Study in the Mathematics Sciences

Major Area of Study	Percent of Master's Recipients
General Mathematics	61
Statistics	19
Applied Mathematics	12
Operation Research	6
Other	2

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Table 2 displays the percent of master's degree recipients with a major in the mathematical sciences by sector of employment. The academic sector includes the following: teachers in primary or secondary education; educators in post secondary positions; and graduate students working as teaching assistants or graduate assistants. Graduates who are not full time students or graduate research assistants but are employed by academic institutions in non-teaching positions are considered employed in a nonacademic position.

Table 2: Percent of Master's Degree Recipients with a Major in the Mathematical Sciences by Employment Sector

Employment Sector	Percent of Master's Recipients
Academic	49
Nonacademic	40
Student, Not Employed	5
Other Unemployed	6

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Each employed participant was asked to identify their occupation by choosing a job code which best identified their principle occupation. Table 3 displays the percent of master's graduates in nonacademic occupations by occupation area.

Table 3: Percent of Master's Degree Recipients with a Major in the Mathematical Sciences Working in a Nonacademic Position by Occupation

Occupation	Percent of Master's Recipients
Statistics	20
Mathematics, OR, Modeling	12
Computer Programming	11
Engineering	9
Management and Related Positions	6
Actuarial	5
Computer Systems Analysis	5
Sales and Marketing	4
Accounting and Finance	2
Other Computer Science	9
Other Sciences, Health, and Social Services	7
Other Technical Areas	3
Other Occupations	7

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Participants were asked to identify the type of company or institution that employed them. Table 4 displays the result or responses given by master's degree recipients with a major in the mathematical sciences working in a nonacademic position. Recall that the positions at education institutions are non-teaching positions, such as positions in the business

office.

Table 4: Percent of Master's Degree Recipients with a Major in the Mathematical Sciences in a Nonacademic Position by Type of Employer

Type of Employer	Percent of Master's Recipients
Private for Profit	63
Private, Not for Profit	5
Self Employed	6
Education Institution	9
Federal Government - Civilian	10
Federal Government - Military	4
State or Local Government	3

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Participants were asked to list the top two activities they spend the most hours working at during a typical week. Table 5 shows the response of master's degree recipients with a major in the mathematical sciences in a nonacademic position to being asked on which activity they spent the most hours and Table 6 displays their response to being asked on which activity they spent the second most number of hours. Table 5 shows that 35% of the respondents spent the most number of their work hours on computer applications. Table 6 shows that 26% of the respondents choose computer applications as the activity with the second most number of hours and 10% choose no second activity.

Table 5: Percent of Master's Degree Recipients With a Major in the Mathematical Sciences in a Nonacademic Position Selecting an Activity They Spend the Most Hours Working on During a Typical Work Week

Activity	Percent of Master's Recipients
Computer Applications	35
Applied Research	22
Professional Services	7
Development	6
Management and Administration	5
Quality or Productivity Management	5
Basic Research	4
Design Equipment, Processes, Structure	4
Production, Operations, Maintenance	2
Employee Relations	2
Accounting, Finance, Contracts	1
Sales, Purchasing, Marketing	1
Teaching	1
Other	5

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Table 6: Percent of Master's Degree Recipients With a Major in the Mathematical Sciences in a Nonacademic Position Selecting an Activity They Spend the Second Most Number of Hours Working on During a Typical Work Week

Activity	Percent of Master's Recipients
Computer Applications	26
Applied Research	15
Design Equipment, Processes, Structure	11
Quality or Productivity Management	8
Management and Administration	8
Basic Research	6
Development	6
Sales, Purchasing, Marketing	3
Accounting, Finance, Contracts	2
Employee Relations	2
Teaching	1
Production, Operations, Maintenance	<1
Professional Services	<1
Other	1
Inapplicable (No Answer)	10

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Participants were asked for their salary, before deductions, and not including bonuses, overtime or additional compensation. Table 7 displays this data for master's degree recipients with a major in the mathematical sciences working in a nonacademic position. These are graduates employed full time and does not include those who are self-employed (part-time or full-time).

Table 7: Percent of Master's Degree Recipients With a Major in the Mathematical Sciences in a Nonacademic Position by Full Time Salary Range

Salary Range	Percent of Master's Recipients
Less Than \$10,000	0
\$10,000 - \$19,999	3
\$20,000 - \$29,999	11
\$30,000 - \$39,000	40
\$40,000 - \$49,999	34
\$50,000 - \$59,999	9
\$60,000 - \$69,999	2
\$70,000 - \$79,999	0
\$80,000 - \$89,999	0
\$100,000 or more	1

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