

2000  
Annual Survey  
of the  
Mathematical Sciences  
(AMS-ASA-IMS-MAA)

*Third Report*

Faculty Profile  
Enrollment and Undergraduate Majors Profile  
Graduate Student Profile

*Don O. Loftsgaarden*  
*James W. Maxwell*  
*Kinda Remick Priestley*

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# 2000 Annual Survey of the Mathematical Sciences

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## Introduction

The Annual Survey of the Mathematical Sciences collects information each year about departments, faculties, and students in the mathematical sciences at four-year colleges and universities in the United States. Definitions of the various groups surveyed in the Annual Survey can be found in the box on page 828 of this report. For the second year, departments in Group Vb are no longer being surveyed. More discussion of this can be found in the 1999 First Report in the February 2000 *Notices of the AMS*. We present information about the faculties and instructional programs at the undergraduate and graduate levels in these departments for the 2000–2001 academic year. We report the same kind of information in the Third Report that was reported last year and in earlier years as part of the Second Report. Another table has been added showing time trends for non-tenure-track doctoral full-time faculty and part-time faculty for the past five years.

Information about departments and their faculties is gathered on a questionnaire, the Departmental Profile, mailed to all departments of mathematical sciences in the U.S. in Groups I, II, III, IV, and Va. Projections to the entire population have been made using the data from the responding departments within each of these groups. Since the projections are made using

This new Third Report of the 2000 Survey gives information about faculty size, departmental enrollments, majors, and graduate students for departments of mathematical sciences in four-year colleges and universities in the United States. In prior years these data were included as part of the Second Report.

The 2000 Annual Survey represents the forty-fourth in an annual series begun in 1957 by the American Mathematical Society. The 2000 Survey is under the direction of the Annual Survey Data Committee, a joint committee of the American Mathematical Society, the American Statistical Association, the Institute of Mathematical Statistics, and the Mathematical Association of America. The current members of this committee are Lorraine Denby, J. Douglas Faires, Mary W. Gray, Alfred W. Hales, Peter E. Haskell, Ellen E. Kirkman, James M. Kister, James Lewis, Don O. Loftsgaarden (chair), James W. Maxwell (ex officio), and Yashiswini Mittal. The committee is assisted by AMS survey analyst Kinda Remick Priestley and survey coordinator Colleen Rose. Comments or suggestions regarding this Survey Report may be directed to the committee.

data from the departments who respond in a given year as opposed to a scientific random sample, biases in the projections can occur. Since the response rates for the doctoral-granting departments are high, most greater than 80%, it is felt that any biases in the projections for these groups are likely to be small.

Beginning with the 1999–2000 survey, stratified random samples of departments in Groups M and B were drawn, and projections were made from the Departmental Profile survey for Groups M and B

**Highlights**

Openings in fall 2000 for full-time faculty increased in all groups over 1999. There were 1,854 such openings in Groups I, II, III, M, and B, of which only 1,278 were tenure-track positions.

Of these 1,854 positions, 1,613 were open to new doctoral recipients, and of these, 1,134 were tenure-track.

The estimated total number of full-time faculty for all groups surveyed is 21,166, of which 18,000 have doctoral degrees and 4,662 are females.

The number of non-tenure-track doctoral full-time faculty, at 1,915, and the number of part-time faculty, at 7,491, continue to grow in most groups.

The number of junior/senior mathematics majors increased by 3,200, with most groups showing gains.

Full-time graduate students in Groups I, II, III, and M increased from 9,609 in 1999 to 11,388 in 2000, an increase of 18.5%. First-year full-time, female full-time, male full-time, U.S. citizen full-time, and non-U.S. citizen full-time graduate students all had substantial increases. These increases were seen in nearly all groups.

There was a total of 3,592 part-time graduate students reported, which is up by 536 from 1999. U.S. citizens account for 78.9% of the part-time graduate students.

using respondents from these stratified random samples. These projections should be more accurate and less subject to the biases that may have been present in past projections for Groups M and B, where the response rates were always low. The stratification in each group was based on the enrollment level of the school and whether it was a public or private school. Because of this change in methodology, results from the Departmental Profile Survey for years 1999 and later that involve Groups M and B may not be directly comparable to the same results from earlier years.

**Faculty Profile**

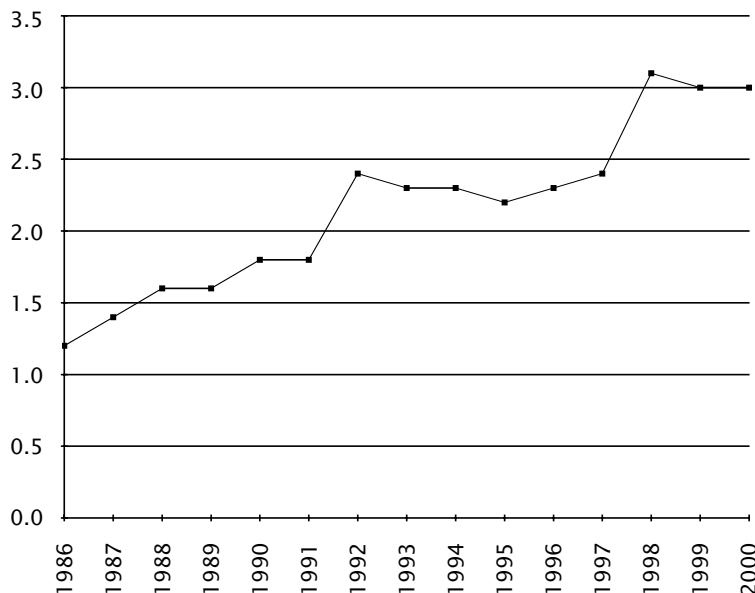
The Departmental Profile Survey, sent in fall 2000 to mathematical sciences departments at four-year colleges and universities as part of the Annual Survey, gathered information about faculties at these schools, which is reported in this section. The First Report presented data

**Table 1A: Faculty Attrition,<sup>1</sup> Fall 2000**

	GROUP									
	I Public	I Private	II	III	I, II, & III	IV	Va	M	B	I, II, III, M & B
<b>Full-time faculty who retired or died</b>										
Total number	37	22	59	60	<b>178</b>	25	8	174	238	<b>590</b>
Percentage (%)	2.3	2.4	2.5	3.0	<b>2.6</b>	1.8	2.3	3.6	3.1	<b>3.0</b>

<sup>1</sup> Number and percentage of full-time faculty who were in the department in fall 1999 but were reported to have retired or died by fall 2000.

**Figure 1B: Percent of Full-Time Doctoral Faculty Who Retired or Died in Groups I, II, III, M, & B Combined, Fall 1986 to Fall 2000**



collected earlier about faculty salaries (pages 203–7 of the February 2001 issue of the *Notices of the AMS*).

Table 1A displays losses of full-time mathematical sciences faculty due to retirements and deaths. The fall 2000 mathematics faculty attrition rate for Groups I, II, III, M, and B combined was 3.0% compared with fall 1999, 1998, and 1997 values of 3.0%, 3.1%, and 2.4%. Groups M and B had the highest attrition rates at 3.6% and 3.1% respectively. Figure 1B shows the trend in this attrition rate for mathematics departments during the years 1986 to 2000.

Table 2A contains detailed information on the number of full-time faculty positions in mathematical sciences departments under recruitment in 1999–2000 for employment beginning in the academic year 2000–2001. Among mathematics departments (Groups I, II, III, M, and

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**Table 2A: Recruitment of Doctoral Faculty, Fall 2000**

	GROUP									
	I Public	I Private	II	III	I, II, & III	IV	Va	M	B	I, II, III, M & B
<b>Posted Doctoral Positions</b>										
Total number <sup>1</sup>	195	139	173	146	654	184	22	407	794	1854
Tenured/tenure-track	75	41	100	95	311	124	17	327	640	1278
Open to new doctoral recipients	148	107	139	134	529	147	17	378	706	1613
Tenured/tenure-track	33	22	78	86	218	78	12	320	595	1134
Open at assoc/full level	35	20	27	22	104	58	7	76	137	318
<b>Reported Hires for Above</b>										
Male doctoral hires	145	108	122	98	473	89	16	176	319	968
Male new doctoral hires	72	68	51	23	214	32	5	53	120	387
Female doctoral hires	30	13	18	19	79	39	1	80	145	304
Female new doctoral hires	21	10	8	7	46	23	0	26	66	139
Male nondoctoral hires	0	0	2	1	3	1	0	13	66	82
Female nondoctoral hires	0	0	0	0	0	0	0	15	76	91
<b>Unfilled positions</b>	20	18	32	27	98	55	5	123	187	408

<sup>1</sup> Number of full-time doctoral positions under recruitment in 1999–2000 to be filled for 2000–2001. Subtotals of rounded table values may exhibit rounding errors.

B), 1,854 positions were under recruitment in 1999–2000, up 22.8% compared to 1998–1999. Of those 1,854 positions, 1,613 (87.0%) were available to new doctoral recipients, and of those 1,613 positions, 1,134 (70.3%) were tenure-track positions. The 1,134 tenure-track positions open to new doctoral recipients is up substantially from the 859 such positions in 1998–1999. Table 2B provides a brief summary of Table 2A.

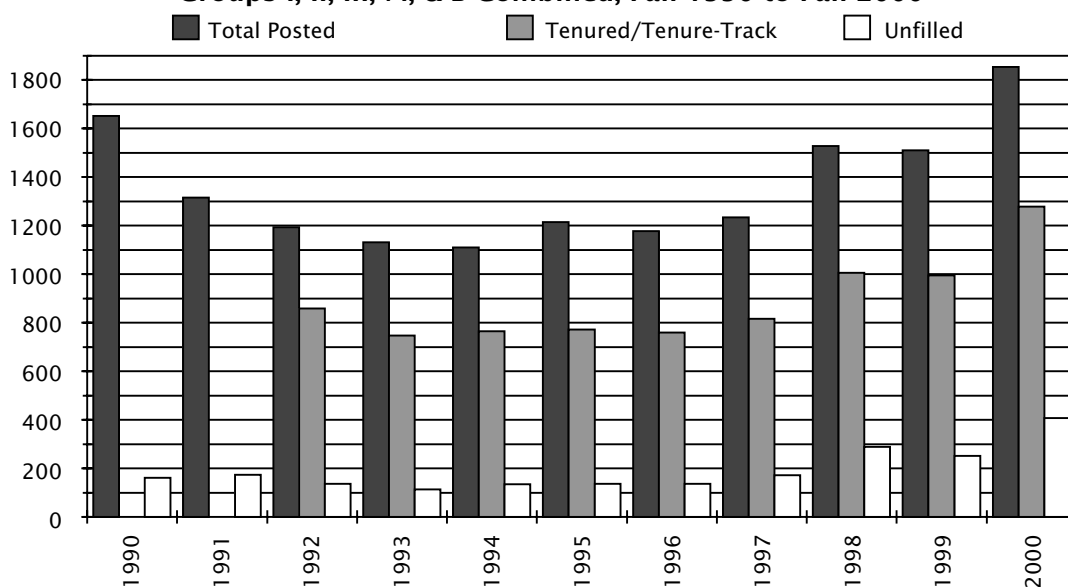
Figure 2C shows the number of full-time doctoral positions available in these groups, as well as the number of those that are tenured/tenure-track and the number unfilled for the years 1990 to 2000. (Note: The tenured/tenure-track status of these positions was not surveyed until 1992.) There was a sharp decrease in available positions in the first three years of the decade of the 1990s, but this number has increased significantly since 1997. Particularly interesting is the dramatic increase in tenure-track positions under recruitment.

Table 3A gives the number of faculty for six different categories of faculty broken down by group. Table 3B gives the same information for females only. The estimated total number of full-time faculty in Groups I, II, III, M and

**Table 2B: A Summary of Recruitment of Doctoral Faculty, Fall 2000**

	GROUP		
	I, II, III, Va, M & B	IV	Total
<b>Posted Doctoral Positions</b>			
Total number	1876	184	2060
Tenured/tenure-track	1293	124	1417
Open to new doctoral recipients	1630	147	1777
<b>Reported Hires for Above</b>			
Total doctoral hires	1289	128	1417
Male	984	89	1073
Female	305	39	344
<b>Unfilled positions</b>	413	55	468

**Figure 2C: Number of Full-Time Doctoral Positions under Recruitment: Total, Tenured/Tenure-Track, and Unfilled in Groups I, II, III, M, & B Combined, Fall 1990 to Fall 2000**



**Table 3A: Faculty Size, Fall 2000**

	GROUP									
	I Public	I Private	II	III	I, II, & III	IV	Va	M	B	I, II, III, M & B
Full-time faculty	1641	907	2393	2023	<b>6964</b>	1387	335	4775	7705	<b>19444</b>
Doctoral full-time faculty	1594	906	2197	1784	<b>6482</b>	1361	333	3932	5893	<b>16306</b>
Tenured doctoral full-time faculty	1192	550	1696	1342	<b>4780</b>	857	218	2851	4129	<b>11760</b>
Untenured, tenure-track doctoral full-time faculty	127	82	275	304	<b>788</b>	251	37	819	1357	<b>2963</b>
Non-tenure-track doctoral full-time faculty	275	275	226	138	<b>915</b>	253	78	262	407	<b>1583</b>
Part-time faculty	186	49	434	717	<b>1386</b>	190	13	2323	3580	<b>7288</b>

**Table 3B: Female Faculty Size, Fall 2000**

	GROUP									
	I Public	I Private	II	III	I, II, & III	IV	Va	M	B	I, II, III, M & B
Full-time female faculty	171	81	320	390	<b>961</b>	316	29	1272	2084	<b>4317</b>
Doctoral full-time female faculty	146	79	211	256	<b>692</b>	305	29	847	1350	<b>2889</b>
Tenured doctoral full-time female faculty	73	29	111	133	<b>346</b>	119	9	513	799	<b>1658</b>
Untenured, tenure-track doctoral full-time female faculty	19	10	47	76	<b>153</b>	86	8	258	428	<b>838</b>
Non-tenure-track doctoral full-time female faculty	54	40	53	47	<b>193</b>	100	12	76	123	<b>393</b>
Part-time female faculty	61	8	173	272	<b>514</b>	63	4	842	1447	<b>2803</b>

B combined is 19,444, up 954 from the number reported last year. Group M is up 299 full-time faculty, while Group B is up 604 and Groups I, II, and III are up 51 full-time faculty. Last year was the first year in which sampling from

Groups M and B was used. Substantial drops in faculty numbers in Groups M and B were reported last year. In last year's Second Report the authors discussed this fact and felt that the reported estimates for Groups M and B were on

**Table 3C: Number and Percentage of Full-Time Faculty, Fall 2000**

	GROUP									Total All Groups
	I Public	I Private	II	III	IV	Va	M	B		
<b>Full-Time Faculty</b>										
Number	1641	907	2393	2023	1387	335	4775	7705		<b>21166</b>
Percentage of total full-time faculty (%)	7.8	4.3	11.3	9.6	6.6	1.6	22.6	36.4		<b>100.0</b>
<b>Female Full-Time Faculty</b>										
Number	171	81	320	390	316	29	1272	2084		<b>4662</b>
Percentage of female full-time faculty (%)	3.7	1.7	6.9	8.4	6.8	0.6	27.3	44.7		<b>100.0</b>
<b>Female Full-Time Faculty</b>										
Percentage female full-time faculty by group (%)	10.4	8.9	13.4	19.3	22.8	8.6	26.6	27.1		<b>22.0</b>

**Table 3D: Number, and Percentage of Those Female, of Non-tenure-track Doctoral Full-Time Faculty and Part-Time Faculty by Group, Fall 1996 to Fall 2000**

	1996	1997	1998	1999	2000
<b>Groups I, II, &amp; III</b>					
Non-tenure-track doctoral full-time faculty	618	669	844	907	915
Percentage female (%)	22.7	21.8	21.2	22.7	21.1
Part-time faculty	1088	941	1088	1192	1386
Percentage female (%)	36.9	36.9	37.6	38.2	37.1
<b>Group M</b>					
Non-tenure-track doctoral full-time faculty	138	216	140	146	262
Percentage female (%)	23.9	29.6	27.1	56.2	29.0
Part-time faculty	1879	1612	1768	1906	2323
Percentage female (%)	41.4	45.5	42.8	35.2	36.2
<b>Group B</b>					
Non-tenure-track doctoral full-time faculty	419	385	427	514	407
Percentage female (%)	22.9	26.2	31.1	23.7	30.2
Part-time faculty	3055	3107	3585	3298	3580
Percentage female (%)	44.0	46.0	42.3	40.7	40.4

the low side. If that is true, the increases in faculty in Groups M and B are not as large as they appear this year. For further discussion of this matter see the 1999 Second Report in the September 2000 issue of the *Notices of the AMS*.

Table 3C gives some percentages based on the information in Tables 3A and 3B.

The number of non-tenure-track doctoral full-time faculty and the number of part-time faculty have been steadily increasing in recent years. Table 3D gives a five-year history of these two types of faculty for Groups I, II, and III combined, for Group M, and for Group B. Also shown for each number in this table is the percentage of females. This increase in non-tenure-track full-time doctoral positions continues a disturbing trend reported in "Changes in Mathematics Faculty Composition, Fall 1990-Fall 1996" (James W. Maxwell, *Notices of the AMS*, November 1997, pages 1321-3). The growth in part-time faculty appears to be more recent, since it was absent in the earlier period 1990-1996.

**Table 3E: Summary of Full-Time and Part-Time Faculty by Sex, Fall 2000**

	GROUP					
	I, II, & III		IV		M & B	
	Male	Female	Male	Female	Male	Female
Full-time faculty						
Number	6003	961	1071	316	9123	3356
Percentage (%)	86.2	13.8	77.2	22.8	73.1	26.9
Doctoral full-time faculty						
Number	5790	692	1057	305	7628	2197
Percentage (%)	89.3	10.7	77.6	22.4	77.6	22.4
Tenured doctoral full-time faculty						
Number	4434	346	738	119	5668	1312
Percentage (%)	92.8	7.2	86.1	13.9	81.2	18.8
Untenured, tenure-track doctoral full-time faculty						
Number	635	153	165	86	1490	686
Percentage (%)	80.6	19.4	65.8	34.2	68.5	31.5
Non-tenure-track doctoral full-time faculty						
Number	721	193	153	100	470	199
Percentage (%)	78.8	21.2	60.6	39.4	70.2	29.8
Part-time faculty						
Number	872	514	127	63	3613	2289
Percentage (%)	62.9	37.1	66.9	33.1	61.2	38.8

**Faculty Profile for Females**

Table 3B gives a complete breakdown of all categories of female faculty by group. The total number of full-time faculty in all groups for 2000-2001 is 21,166, of which 4,662 (22.0%) are females.

Table 3C shows the number and percentage of all full-time faculty that fall in each group for 2000-2001 and the number and percentage of all female full-time faculty that fall in each group for 2000-2001. In addition, the percentage of

**Table 4A: Undergraduate and Graduate Enrollments (thousands), Fall 2000**

	GROUP									
	I Public	I Private	II	III	I, II, & III	IV	Va	M	B	Total All Groups
<b>Undergraduate Course Enrollments</b> Total number (thousands)	175	47	279	241	742	77	13	526	729	2087
<b>Graduate Course Enrollments</b> Total number (thousands)	7	4	9	9	29	24	2	14		69

**Table 4B: Distribution of Undergraduate Enrollments (thousands), Fall 2000**

	GROUP													
	I Public	I Private	II	III	I, II, & III	IV	Va	M	B	Total All Groups				
<b>Remedial Mathematics<sup>1</sup></b> Total number (thousands), % <sup>2</sup>	10 6	0 0	22 8	32 13	65 9	0 0	0 1	94 18	106 15	265 13				
<b>Precalculus</b> Total number (thousands), %	35 20	1 2	63 23	57 24	156 21	1 1	1 4	114 22	132 18	403 19				
<b>1st-Year Calculus (mainstream)</b> Total number (thousands), %	46 26	18 39	57 20	37 15	158 21	0 0	3 23	52 10	96 13	309 15				
<b>1st-Year Calculus (nonmainstream)</b> Total number (thousands), %	24 14	4 9	34 12	25 10	88 12	0 0	0 0	33 6	33 4	154 7				
<b>Statistics</b> Total number (thousands), %	2 1	3 5	13 5	19 8	37 5	73 94	2 18	45 9	79 11	236 11				
<b>Computer Science</b> Total number (thousands), %	2 1	1 2	2 1	8 3	14 2	0 0	0 0	36 7	80 11	129 6				
<b>Other Enrollments for Majors</b> Total number (thousands), %	31 18	10 22	34 12	24 10	100 13	1 1	5 37	52 10	63 9	220 11				
<b>Remaining Undergraduate Enroll.</b> Total number (thousands), %	24 14	9 20	53 19	39 16	125 17	2 3	2 17	101 19	141 19	371 18				
<b>Total Enrollments</b>	175	47	279	241	742	77	13	526	729	2087				

<sup>1</sup> Arithmetic, high school algebra, geometry.

<sup>2</sup> Percents are "column percents" describing relative enrollments within the respective survey groups of the different types of undergraduate courses.

the full-time faculty within each group who are female is given in the bottom section of Table 3C. We see that the number of females as a percentage of full-time faculty varies considerably among the groups, from 8.9% and

8.6% for Groups I Private and Va to 26.6% and 27.1% for Groups M and B respectively. Note: In Table 3C the percentages for each group in rows 2 and 4 are of the row totals. The percentages in row 5 are column percentages using the numbers in rows 1 and 3.

**Table 4C: Total Undergraduate Enrollments (thousands), Fall 1996 to Fall 2000**

	GROUP								
	I	I	II	III	IV	Va <sup>2</sup>	M	B	Total <sup>3</sup>
1996	215 <sup>1</sup>		245	212	98		589	705	2085
1997	173	42	247	220	69		561	701	2037
1998	182	43	258	214	78		585	741	2124
1999	182	45	271	251	92	13	568	810	2232
2000	175	47	279	241	77	13	526	729	2087

<sup>1</sup> Prior to 1997, Group I was not separated into Public and Private.

<sup>2</sup> Prior to 1999, Group Va was combined with Group Vb, which is no longer surveyed. Group Va figures for these years are not available.

<sup>3</sup> Totals are sums of unrounded enrollments and may not be exactly the same as the sums of rounded figures in the table.

Table 3D contains information about non-tenure-track doctoral full-time faculty and part-time faculty for 1996 to 2000 for Groups I, II, and III combined, M, and B. This table includes the total number for each category as well as the percentage female for each number.

Table 3E gives the male/female breakdown by count and percentage for Groups I, II, and III combined for various categories of faculty in columns 2 and 3. The same breakdowns are given for Group IV in columns 4 and 5 and for Groups M and B combined in columns 6 and 7.



**Table 4D: Distribution of Undergraduate Enrollments (thousands), Fall 1992 to Fall 2000**

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Remedial Mathematics	300	294	279	275	269	274	322	281	265
Precalculus	356	341	342	336	332	303	347	429	403
1st-Year Calculus (mainstream)	315	319	298	314	312	309	325	321	309
1st-Year Calculus (nonmainstream)	127	138	131	145	144	146	148	151	154
Statistics	213	215	199	209	218	233	233	282	236
Computer Science	141	111	119	108	119	113	116	142	129
Other Enrollments for Majors	270	258	233	257	263	233	218	235	220
Remaining Undergraduate Enroll.	392	353	353	411	428	426	412	390	371
<b>Total Enrollments</b> <sup>1</sup>	<b>2114</b>	<b>2029</b>	<b>1954</b>	<b>2055</b>	<b>2085</b>	<b>2037</b>	<b>2124</b>	<b>2232</b>	<b>2087</b>

<sup>1</sup> Totals are sums of unrounded enrollments and may not be exactly the same as the sums of rounded figures in the table.

**Table 4E: Undergraduate and Graduate Enrollments per Full-Time Faculty Member, Fall 2000**

	GROUP							
	I Public	I Private	II	III	IV	Va	M	B
<b>Undergraduate Course Enrollments</b> Number per full-time faculty member	107	52	117	119	56	39	110	95
<b>Graduate Course Enrollments</b> Number per full-time faculty member	4	5	4	4	17	7	3	

## Enrollment Profile and Undergraduate Majors Profile

The Departmental Profile Survey obtained information about enrollments and distribution of instructional effort among various course groupings in mathematical sciences departments. Table 4A gives the total undergraduate and total graduate enrollments in mathematics courses for each group that is part of the Annual Survey. Each enrollment in this and other tables in this section is projected from schools responding to the survey. In fall 2000, for the second year, the projections for Groups M and B were made using the responding schools that were part of a stratified random sample for each of these groups.

Table 4B presents a further breakdown of the undergraduate enrollments into eight categories of courses. For each group the percentage of the total enrollment in each of these eight categories is also given. Column totals in Table 4B give the total enrollments for each group, and they are the numbers given in the first row of Table 4A. Table 4C gives these totals for fall 1996 to fall 2000. Row totals in Table 4B give the total enrollments in each of the eight categories of courses for all mathematical sciences depart-

ments. Table 4D shows these same enrollments for fall 1992 to fall 2000.

Total enrollments in undergraduate mathematics courses dropped 145,000 from 1999 to 2000. Most of this drop was in Groups M and B. In 1999 a switch in methodology to sampling was instituted for Groups M and B. Until more years of experience with sampling are available, year-to-year comparisons are not reliable. The authors believe that this estimate of total enrollment in 1999 was somewhat high, which

**Table 4F: Undergraduate Enrollments per Full-Time Faculty Member, Fall 1996 to Fall 2000**

	GROUP							
	I Public	I Private	II	III	IV	Va <sup>2</sup>	M	B
1996	88 <sup>1</sup>		110	108	69		112	100
1997	110	52	115	113	57		106	96
1998	109	52	114	108	60		117	94
1999	115	54	111	122	68	43	127	114
2000	107	52	117	119	56	39	110	95

<sup>1</sup> Prior to 1997, Group I was not separated into Public and Private.

<sup>2</sup> Prior to 1999, Group Va was combined with Group Vb, which is no longer surveyed. Group Va figures for these years are not available.

**Table 5A: Undergraduate Junior/Senior Majors (hundreds), Fall 2000**

	GROUP								
	I Public	I Private	II	III	IV	Va	M	B	I, II, III, M & B
<b>Total Undergraduate</b> Junior/senior majors (hundreds)	51	18	49	59	8	5	158	260	<b>594</b>
<b>Female Undergraduate</b> Junior/senior majors (hundreds)	19	5	21	24	3	2	70	103	<b>242</b>

**Table 5B: Junior/Senior Majors (hundreds) in Groups I, II, III, M & B Combined, Fall 1992 to Fall 2000**

	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Total Undergraduate</b> Junior/senior majors (hundreds)	728	689	663	671	626	590	580	562	594
<b>Female Undergraduate</b> Junior/senior majors (hundreds)	319	299	285	284	271	255	251	246	242
Percentage female (%)	43.8	43.4	43.0	42.3	43.3	43.2	43.3	43.8	40.7

would explain a good deal about the size of the drop in the estimate of total enrollment for 2000. Group B especially seemed overprojected in 1999.

Table 4E gives the undergraduate enrollments per faculty member and the graduate enrollments per faculty member for each group. Table 4F gives the undergraduate enrollments per faculty member for fall 1996 to fall 2000.

Table 5A gives the number of junior/senior majors and the number of female junior/senior majors for each group. Table 5B gives the total number of junior/senior majors and female junior/senior majors for fall 1992 to fall 2000. The number of junior/senior mathematics majors in Groups I, II, III, M, and B dropped from 72,800 in 1992 to 56,200 in 1999, but showed an increase of 3,200 in 2000. The number of female

junior/senior majors was down 400 from 1999. The percentage of the junior/senior majors who are females has remained relatively constant, near 43%, during the years 1991 through 1999, but dropped 3.1% in 2000 to 40.7%. Although the number of female junior/senior majors dropped only 400 compared to last year, there was an increase of 3,600 male junior/senior majors in 2000, which accounts for most of the drop of 3.1% in the percentage of junior/senior majors who are female.

The reader should be aware that at least 60 of the 227 departments in the 2000 Group M population and at least 260 of the 1,018 departments in the 2000 Group B population also offer a computer science program in addition to their offerings in mathematics. In some instances, these computer science programs

**Table 6A: Graduate Students, Fall 2000**

	GROUP								
	I Public	I Private	II	III	I, II, & III	IV	Va	M	I, II, III, & M
<b>Total Graduate Students</b>									
Number who are full-time	2733	1314	2712	2143	<b>8902</b>	3622	735	2486	<b>11388</b>
Number who are first-year	722	365	790	738	<b>2614</b>	1188	225	971	<b>3585</b>
Number who are part-time	244	<b>135</b>	436	686	<b>1501</b>	<b>948</b>	99	<b>2091</b>	<b>3592</b>
<b>Female Graduate Students</b>									
Number who are full-time	726	271	935	853	<b>2784</b>	1773	232	1168	<b>3952</b>
Number who are first-year	220	68	301	290	<b>879</b>	670	88	456	<b>1334</b>
Number who are part-time	119	<b>42</b>	153	293	<b>607</b>	<b>507</b>	32	<b>971</b>	<b>1578</b>
<b>U.S. Citizen Graduate Students</b>									
Number who are full-time	1386	674	1578	1044	<b>4682</b>	1739	403	1502	<b>6183</b>
Number who are first-year	381	204	467	336	<b>1388</b>	596	139	509	<b>1896</b>
Number who are part-time	154	<b>104</b>	302	571	<b>1131</b>	<b>765</b>	84	<b>1703</b>	<b>2834</b>

**Table 6B: Full-time Graduate Students in Groups I, II, & III  
by Sex and Citizenship, Fall 1992 to Fall 2000**

	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total full-time graduate students	10121	9863	9714	9140	8774	8399	8186	8016	8902
First-year full-time graduate students	2705	2602	2546	2459	2256	2229	2348	2486	2614
Female full-time graduate students	2895	2816	2772	2696	2539	2504	2568	2486	2784
Male full-time graduate students	7226	7047	6942	6444	6235	5895	5618	5530	6118
U.S. citizen full-time graduate students	5759	5497	5678	5261	5035	4608	4475	4231	4682
Non-U.S. citizen full-time graduate students	4362	4366	4036	3879	3739	3791	3711	3785	4220

account for a major fraction of the department's undergraduate majors (and even the degrees awarded by the departments.) The data on majors currently collected do not distinguish computer science majors from mathematics majors, so it is not possible to estimate the size of these computer science programs.

The 1995 CBMS survey *Statistical abstract of undergraduate programs in the mathematical sciences in the U.S.* (MAA Reports No. 2, 1997) provides a more comprehensive study of departmental majors. The 2000 CBMS survey results will be available in spring 2002.

## Graduate Student Profile

Table 6A summarizes information gathered about graduate students by the 2000 Departmental Profile Survey. This table gives the number of full-time, full-time first-year, and part-time graduate students for each type of graduate department. These same numbers are also given for only female graduate students and for only U.S. citizen graduate students.

There were substantial increases in nearly all types of graduate students from 1999 to 2000. Of the 63 entries in the group columns in Table 6A, only 10 were down, most only slightly; the rest were up, and many were up substantially. Six of the decreases were in Group Va, and three were in Group III. Nearly half of this increase of 1,779 full-time graduate students in Groups I, II, III, and M was in Group M, which may have been underestimated last year.

(Note: These comparisons were made against numbers from a corrected Table 10A from the Second Report for 1999. This table, which first appeared on page 902 of the September 2000 issue of the *Notices of the AMS*, had errors in the last two columns. The corrected data are presented in a table that appears in a note on the right side of this page.)

The total number of full-time graduate students in Groups I, II, III, and M increased from 9,609 to 11,388, an increase of 18.5%. First-year full-time graduate students in Groups I, II, III, and

### Correction to Table 10A in the 1999 Second Report

Table 10A in the 1999 Second Report, which appeared in the September 2000 issue of the *Notices of the AMS* on page 902, contained incorrect numbers in the last two columns. The table below contains the reported figures and the newly revised figures.

The second to last paragraph from the 1999 Second Report on page 901 uses some of these bad numbers from the original Table 10A. A corrected version of this paragraph follows:

For the first time this year the number of part-time graduate students for various categories is reported. Groups I, II, and III have a total of 1,255 part-time graduate students, with 680 (54.2%) being in Group III. For Group III, 24.1% of all graduate students are part-time. Group M schools have 1,801 part-time graduate students compared to 1,593 full-time graduate students. For Group M, 53.1% of all graduate students are part-time. For Groups I, II, and III, 73.8% of the part-time graduate students are U.S. citizens. For Group M, 88.2% of the part-time graduate students are U.S. citizens.

In addition, the third sentence in the last paragraph in the Highlights section, page 887, should read:

Group M had 1,801 part-time students, which makes up 53.1% of their graduate students.

### Reported and Revised Figures for Table 10A: Graduate Students, Fall 1999

	GROUP			
	M		I, II, III, & M	
	Reported	Revised	Reported	Revised
<b>Total Graduate Students</b>				
Number who are full-time	2146	1593	10162	9609
Number who are first-year	696	591	3182	3077
Number who are part-time	7254	1801	8509	3056
<b>Female Graduate Students</b>				
Number who are full-time	954	737	3440	3223
Number who are first-year	353	297	1219	1163
Number who are part-time	2968	819	3463	1314
<b>U.S. Citizen Graduate Students</b>				
Number who are full-time	1442	1169	5673	5400
Number who are first-year	472	437	1780	1745
Number who are part-time	6734	1589	7661	2516

### Definitions of the Groups

As has been the case for a number of years, much of the data in these reports is presented for departments divided into groups according to several characteristics, the principal one being the highest degree offered in the mathematical sciences. Doctoral-granting departments of mathematics are further subdivided according to their ranking of "scholarly quality of program faculty" as reported in the 1995 publication *Research-Doctorate Programs in the United States: Continuity and Change*.<sup>1</sup> These rankings update those reported in a previous study published in 1982.<sup>2</sup> Consequently, the departments which now comprise Groups I, II, and III differ significantly from those used prior to the 1996 survey.

The subdivision of the Group I institutions into Group I Public and Group I Private was new for the 1996 survey. With the increase in number of the Group I departments from 39 to 48, the Annual Survey Data Committee judged that a further subdivision of public and private would provide more meaningful reporting of the data for these departments.

Brief descriptions of the groupings are as follows:

Group I is composed of 48 departments with scores in the 3.00–5.00 range. Group I Public and Group I Private are Group I departments at public institutions and private institutions respectively.

Group II is composed of 56 departments with scores in the 2.00–2.99 range.

Group III contains the remaining U.S. departments reporting a doctoral program, including a number of departments not included in the 1995 ranking of program faculty.

Group IV contains U.S. departments (or programs) of statistics, biostatistics, and biometrics reporting a doctoral program.

Group V contains U.S. departments (or programs) in applied mathematics/applied science, operations research, and management science which report a doctoral program.

Group Va is applied mathematics/applied science; Group Vb, which is no longer surveyed as of 1998–99, was operations research and management science.

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 comprise these groups are available on the AMS website at [www.ams.org/employment/](http://www.ams.org/employment/).*

<sup>1</sup>Research-Doctorate Programs in the United States: Continuity and Change, edited by Marvin L. Goldberger, Brendan A. Maher, and Pamela Ebert Flattau, National Academy Press, Washington, DC, 1995.

<sup>2</sup>These findings were published in An Assessment of Research-Doctorate Programs in the United States: Mathematical and Physical Sciences, edited by Lyle V. Jones, Gardner Lindzey, and Porter E. Coggshall, National Academy Press, Washington, DC, 1982. The information on mathematics, statistics, and computer science was presented in digest form in the April 1983 issue of the Notices, pages 257–67, and an analysis of the classifications was given in the June 1983 Notices, pages 392–3.

M increased by 508 to 3,585, an increase of 16.5%. Full-time female graduate students in Groups I, II, III, and M increased from 3,223 to 3,952, a 22.6% increase. U.S. citizen full-time graduate students in these groups increased 14.5%. Part-time graduate students in these same groups increased 17.5% to 3,592.

Table 6B gives for Groups I, II, and III the total number of full-time, full-time first-year, full-time female, full-time male, full-time U.S. citizen, and full-time non-U.S. citizen graduate students for fall 1992 to fall 2000. For most of these categories there has been a downward or stable trend for the years 1992 through 1999. All of them had a substantial increase in 2000. The percentage increases from 1999 for Groups I, II, and III graduate students are:

Full-time	11.1%
First-year full-time	5.1%
Female full-time	12.0%
Male full-time	10.6%
U.S. citizen full-time	10.7%
Non-U.S. citizen full-time	11.5%

For the second year the number of part-time graduate students is reported for the various groups. Part-time graduate students in Groups I, II, and III increased from 1,255 to 1,501, a 19.6% increase. Group III has 686 (45.7%) of the part-time graduate students. For Groups I, II, and III, 75.3% of the part-time graduate students are U.S. citizens and 40.4% are females. Group M departments have 2,091 part-time graduate students compared to 2,486 full-time graduate students. For Group M, 81.4% of the part-time graduate students are U.S. citizens and 46.6% are females.

### Acknowledgments

The Annual Survey of the Mathematical Sciences 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 Annual Survey 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.