



Office of Research
and
Information Services

Graduate Enrollment and Degrees: 1986 to 2005

Heath A. Brown
*Director of Research
and Policy Analysis*

Introduction

This report presents a summary of the findings of the 2005 CGS/GRE Survey of Graduate Enrollment, a joint project of the Council of Graduate Schools and the Graduate Record Examinations Board. The publication of this report marks the nineteenth year of the Survey that began in 1986. The Enrollment Survey is distributed each year to institutions that are members of the Council of Graduate Schools or one of the four regional associations – the Conference of Southern Graduate Schools (CSGS), the Midwestern Association of Graduate Schools (MAGS), the Northeastern Association of Graduate Schools (NAGS), and the Western Association of Graduate Schools (WAGS).

The survey results presented here are based upon responses from 643 (87%) of the institutions in the survey population of 741. The tables and analyses that follow are divided into two chapters. Chapter 1 highlights the results of the fall 2005 survey, including a profile of graduate enrollment for each of the four regional associations. Chapter 2 presents trends in graduate enrollment and degrees over the 1986 to 2005 period. The tables in Chapter 2 describing year-to-year changes in enrollment and degrees include data from the approximately 450 institutions that have consistently responded to the enrollment survey.

This report subdivides doctoral institutions into two cate-

gories, Research I (based on the 1994 Carnegie classification system) and Doctorate-Granting (all other institutions that grant the doctorate as their highest degree). This categorization was undertaken in response to requests from CGS members for data that are more directly comparable to individual institutions. Over the next year, CGS will take steps to incorporate the new Carnegie Classification system.

The 643 responding institutions represent 38 percent of the approximately 1,700 institutions in the U.S. that offer graduate programs. The responding institutions enroll 70 percent of the national total of 2.16 million graduate students, grant nearly 80 percent of the 530,000 master's degrees, and grant virtually all of the 45,000 doctorate degrees awarded by U.S. universities. Since the responding institutions represent such a large percentage of the total graduate enrollment and degrees, the trends reported here are consistent with overall national figures.

This document is part of the Council's continuing effort to provide information that is useful to graduate administrators. Comments or suggestions for improving this report – or for additional types of publications – are welcome.

¹ The survey population of the CGS/GRE Survey of Graduate Enrollment is limited to graduate institutions in the United States. Data on graduate enrollment and degrees in Canadian institutions are published by the Canadian Association for Graduate Studies at www.cags.ca.

Acknowledgements

We thank the Graduate Record Examinations program, especially David Payne for his support of this project and Dawn Piacentino for directing the project at ETS. We thank Cindy Evans of ETS for her work in the printing and mailing of the survey questionnaires, the processing of responses, and in developing the survey database. Janice Goggins in the CGS office deserves special mention for her management of the layout and publication of the final report. We thank Emily Neubig of CGS for assisting in the data collection and data analysis of the report. We also thank Robert Sowell, Cheryl Flagg, and Stuart Heiser of CGS for reviewing the final report.

Finally, we thank the graduate deans and their staffs for responding to the Survey of Graduate Enrollment. Their investment of time and effort is the basis for the completeness and accuracy of this report.

Chapter 1
Fall 2005 Graduate Enrollment

Table 1.1

Profile of fall 2005 graduate enrollment

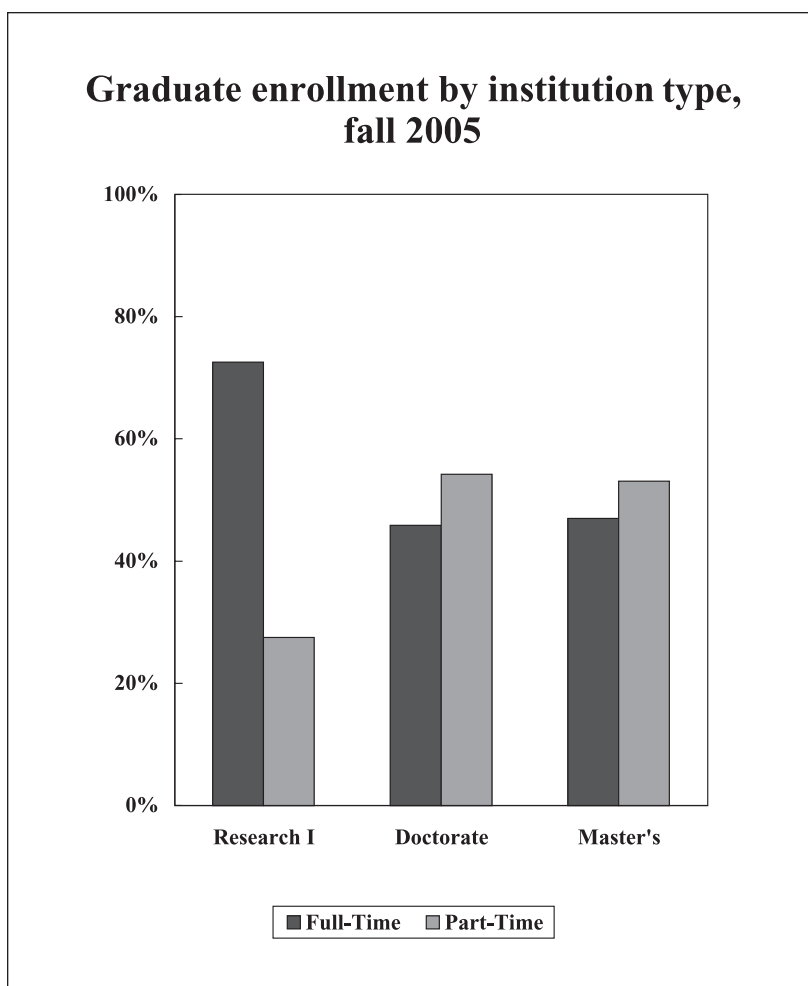
Institution Type	Total ¹	Men	Women	Full-Time	Part-Time				
Total	1,517,976	634,827	42%	869,331	58%	829,119	55%	681,612	45%
<i>Public</i>	954,537	396,916	42%	543,803	58%	495,922	52%	451,370	48%
<i>Private</i>	563,439	237,911	42%	325,528	58%	333,197	59%	230,242	41%
Research I*	496,023	250,279	50%	245,744	50%	359,745	73%	136,278	27%
<i>Public</i>	362,183	177,849	49%	184,334	51%	251,835	70%	110,348	30%
<i>Private</i>	133,840	72,430	54%	61,410	46%	107,910	81%	25,930	19%
Doctorate-Granting*	632,278	250,595	40%	373,179	60%	288,783	46%	341,359	54%
<i>Public</i>	394,487	155,516	40%	230,467	60%	182,805	47%	209,546	53%
<i>Private</i>	237,791	95,079	40%	142,712	60%	105,978	45%	131,813	55%
Master's-Granting*	389,675	133,953	35%	250,408	65%	180,591	47%	203,975	53%
<i>Public</i>	197,867	63,551	33%	129,002	67%	61,282	32%	131,476	68%
<i>Private</i>	191,808	70,402	37%	121,406	63%	119,309	62%	72,499	38%

¹NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known gender or enrollment status.

*Institutions are divided into three categories based on the 1994 Carnegie Classification of Institutions of Higher Education and degrees granted. Research I: The most research-intensive universities in the U.S. Annually, these institutions each convey at least 50 doctoral degrees and receive at least \$40 million in federal research support. Doctorate-Granting: Institutions that grant the doctorate as their highest degree but are not classified as Research I by the Carnegie system. This category includes institutions classified as Research II, Doctorate-Granting I and II, Comprehensive, Liberal Arts, and Other Professional. Master's-Granting: Institutions that grant the master's degree as their highest graduate degree.

Source: CGS/GRE Survey of Graduate Enrollment

Table 1.1



- CGS member and affiliated graduate institutions enrolled more than 1.5 million graduate students in the fall of 2005. Fifty-eight percent of graduate students were women, while men accounted for 42 percent of the total.
- Nearly two-thirds of students pursued graduate degrees at public institutions, which enrolled 954,537 graduate students in 2005.
- Doctorate-Granting institutions accounted for 41 percent of total graduate enrollment, followed by Research I institutions with 33 percent, and Master's-Granting institutions with 26 percent of graduate enrollment.
- More graduate students were enrolled on a full-time basis, 55 percent, than part-time, 45 percent.
- The figures in Table 1.1 highlight the enrollment differences across type of institution. The graduate student population at Research I institutions was evenly distributed between male and female students (50% each), but a larger percentage of students were enrolled full-time (73%) than part-time (27%). Doctorate-Granting institutions, in contrast, reported that 60 percent of their graduate students were women and 54 percent of their graduate students were part-time. At Master's-Granting institutions, women constituted 65 percent of graduate enrollment, and 53 percent of the graduate students attended on a part-time basis.

Table 1.2

Graduate enrollment by field, fall 2005

Major Field	Total	Men	Women	Full-Time	Part-Time				
Total	1,517,976	634,827	42%	869,331	58%	829,119	55%	681,612	45%
Biological Sciences*	68,952	32,112	47%	36,331	53%	53,608	78%	15,266	22%
Business	219,953	124,310	57%	94,932	43%	123,961	57%	95,379	43%
Education	306,704	79,824	26%	224,459	74%	115,998	38%	190,706	62%
Engineering	108,086	83,570	78%	23,596	22%	72,778	68%	34,411	32%
Health Sciences	111,846	25,775	23%	85,763	77%	71,391	64%	40,361	36%
Humanities & Arts	100,678	42,676	43%	57,601	57%	67,797	67%	32,702	33%
Physical Sciences	105,170	70,846	68%	33,674	32%	72,621	69%	31,983	31%
Public Administration and Services	54,309	13,262	25%	40,718	75%	31,133	57%	23,176	43%
Social Sciences	115,345	43,216	38%	71,232	62%	75,633	66%	39,673	34%
Other Fields**	104,933	39,265	38%	63,934	62%	48,639	47%	55,777	53%

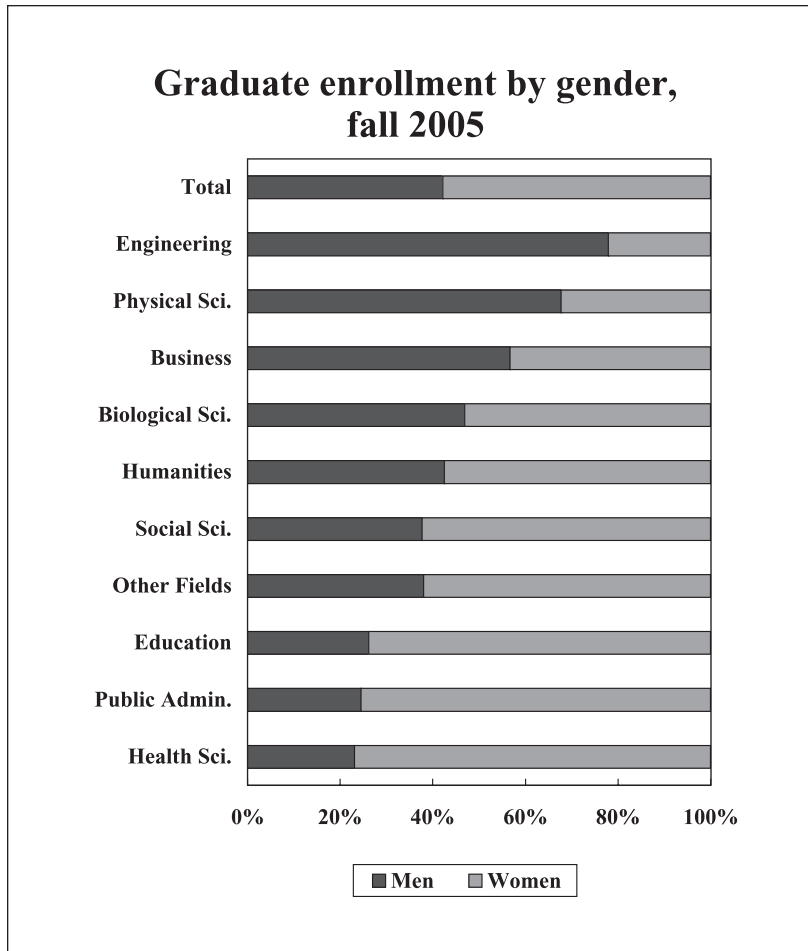
NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages by field are based on total of known gender or enrollment status.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library science, and religion.

Source: CGS/GRE Survey of Graduate Enrollment

Table 1.2



- The fields of education and business enrolled the largest numbers of graduate students, accounting for 20 percent and 14 percent of fall 2005 graduate enrollment, respectively. These two fields, and public administration, also had the highest proportions of part-time students of the fields shown in Table 1.2. At the same time, education and business contrast markedly in their percentages of male and female students. Graduate enrollment in business was 57 percent male; in education it was 74 percent female.
- Consistent with previous years, the fields of engineering, physical sciences, and business enrolled the highest percentages of men, while the health sciences, public administration, and education had the highest percentages of women.

Table 1.3

**Fall 2005 graduate enrollment
by institution type and citizenship**

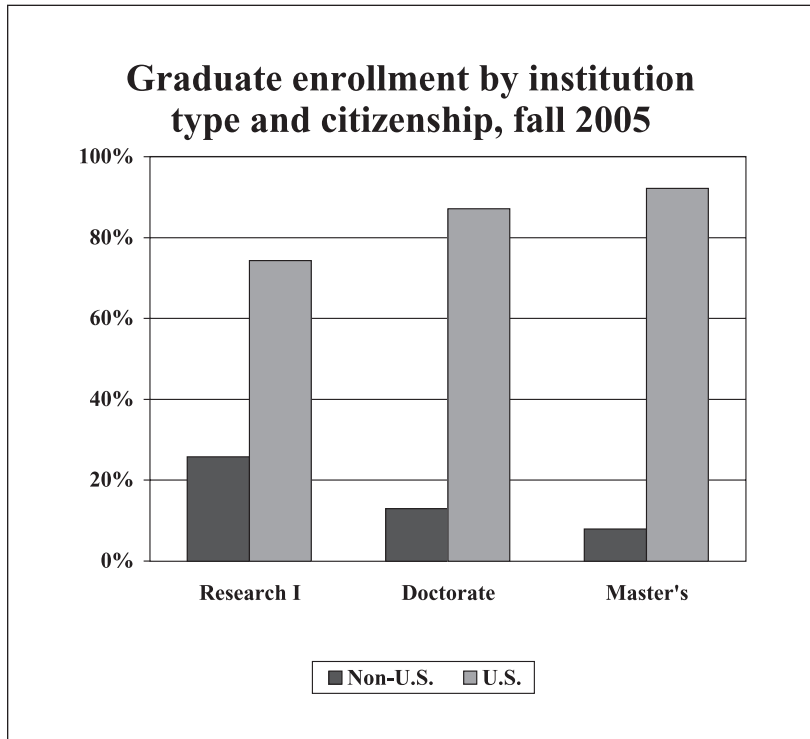
Institution Type	Total	U.S. Citizens and Permanent Residents		Non-U.S. Citizen Temporary Residents	
Total	1,517,976	1,154,534	84%	221,878	16%
<i>Public</i>	954,537	760,659	84%	143,669	16%
<i>Private</i>	563,439	393,875	83%	78,209	17%
Research I*	496,023	349,190	74%	121,020	26%
<i>Public</i>	362,183	265,074	76%	83,873	24%
<i>Private</i>	133,840	84,116	69%	37,147	31%
Doctorate-Granting*	632,278	512,027	87%	75,838	13%
<i>Public</i>	394,487	324,323	86%	50,850	14%
<i>Private</i>	237,791	187,704	88%	24,988	12%
Master's-Granting*	389,675	293,317	92%	25,020	8%
<i>Public</i>	197,867	171,262	95%	8,946	5%
<i>Private</i>	191,808	122,055	88%	16,074	12%

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

Percentages are based on total of known citizenship.

*For explanation of institution type categories, see Table 1.1 on page 2.

Source: CGS/GRE Survey of Graduate Enrollment



- In the fall of 2005, 221,878 non-U.S. citizens were enrolled in CGS member and affiliated institutions, accounting for 16 percent of total graduate enrollment. Public and private institutions had similar percentages of international students enrolled in graduate programs.
- Reflecting the concentration of international students in doctoral programs in science and engineering fields, more than one-half of non-U.S. graduate students (121,020) were enrolled at Research I institutions, representing 26 percent of graduate enrollment on those campuses. International students accounted for 13 percent of enrollment at Doctorate-Granting institutions, and just 8 percent at Master's-Granting institutions.

Table 1.4

**Fall 2005 graduate enrollment
by field and citizenship**

Major Field	Total	U.S. Citizens and Permanent Residents		Non-U.S. Citizen Temporary Residents	
Total	1,517,976	1,154,534	84%	221,878	16%
Biological Sciences*	68,952	48,373	73%	17,711	27%
Business	219,953	150,115	83%	31,550	17%
Education	306,704	271,648	96%	12,182	4%
Engineering	108,086	53,642	52%	48,649	48%
Health Sciences	111,846	92,477	91%	9,577	9%
Humanities & Arts	100,678	79,478	86%	13,309	14%
Physical Sciences	105,170	59,365	60%	40,188	40%
Public Administration and Services	54,309	47,663	95%	2,358	5%
Social Sciences	115,345	88,798	84%	16,609	16%
Other Fields**	104,933	86,949	90%	9,778	10%

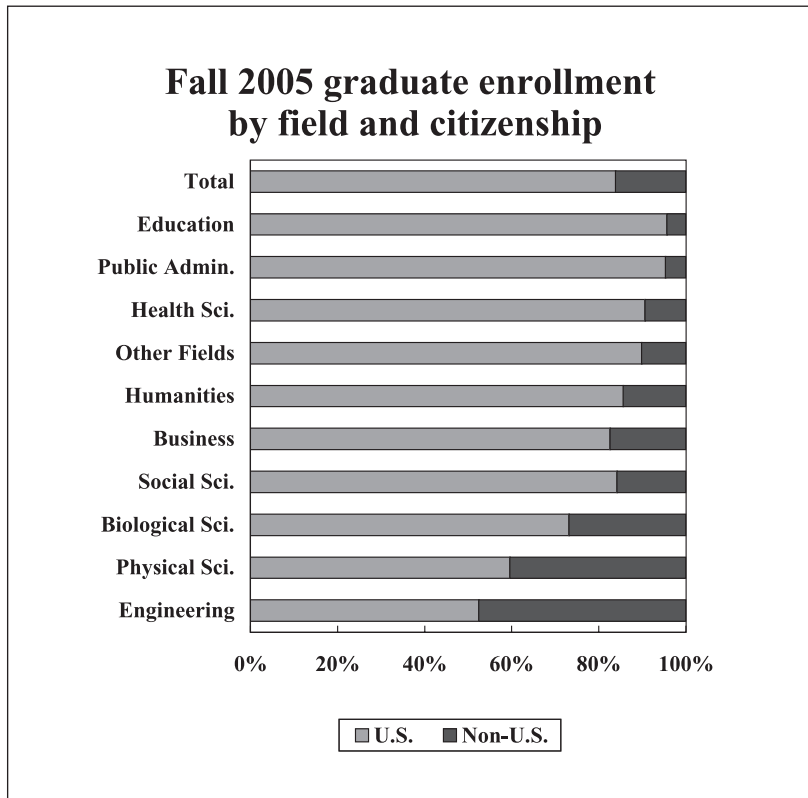
NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages by field are based on total of known citizenship.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library science, and religion.

Source: CGS/GRE Survey of Graduate Enrollment

Table 1.4



- As the two largest fields for U.S. citizen graduate enrollment, education and business accounted for 36 percent of U.S. students. In contrast, non-U.S. citizens were concentrated primarily in science and engineering fields.
- Two fields – engineering and the physical sciences – had the highest percentages of non-U.S. graduate enrollment, at 48 percent and 40 percent, respectively. The 48,649 international students in engineering and the 40,188 in the physical sciences represented 40 percent of total non-U.S. citizen graduate enrollment. At the same time, just 10 percent of U.S. graduate students enrolled in engineering and the physical sciences.
- Additional fields with substantial international student enrollment in 2005 were the biological sciences (27%), business (17%) and social sciences (16%).
- Education (4%) and public administration (5%) had the lowest percentages of foreign enrollment.

Table 1.5

U.S. graduate enrollment by ethnic group, fall 2005

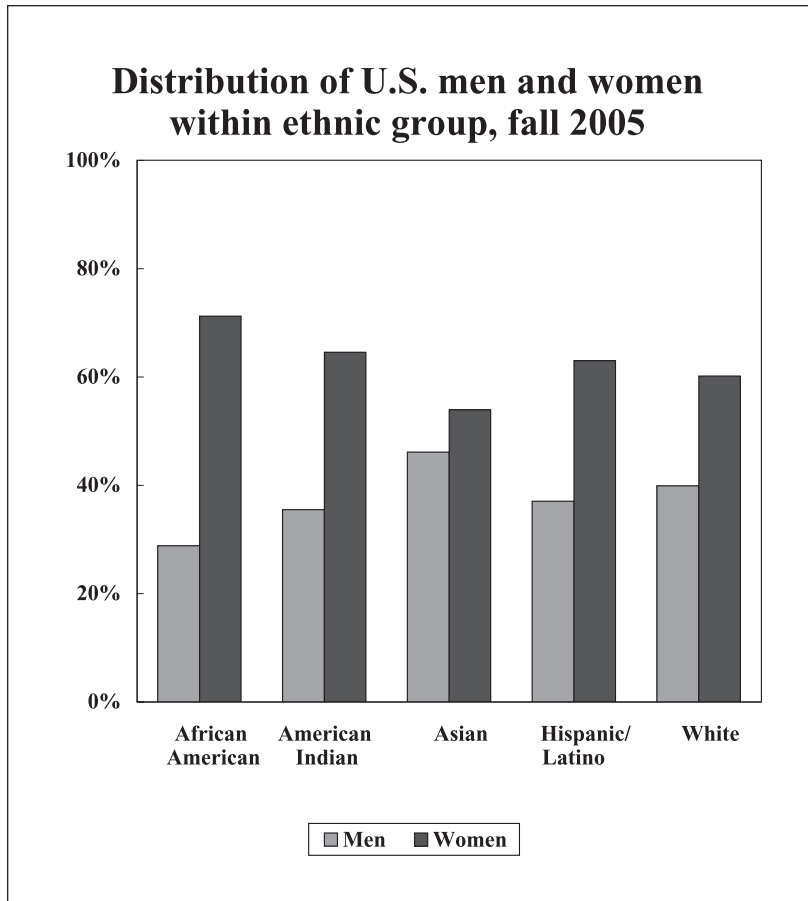
Ethnic Group	Total		Men		Women	
Total U.S. Citizens and Permanent Residents	1,154,534	100%	440,550	100%	697,691	100%
African American	135,020	12%	38,591	9%	95,428	14%
American Indian	8,164	1%	2,857	1%	5,194	1%
Asian	70,800	6%	32,282	7%	37,758	5%
Hispanic/Latino	85,764	7%	31,556	7%	53,633	8%
White	854,786	74%	335,264	76%	505,678	72%

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

Percentages by gender are based on total of U.S. citizens and permanent residents.

Source: CGS/GRE Survey of Graduate Enrollment

Table 1.5



- Of the 1,154,534 U.S. citizen and permanent resident graduate students enrolled in surveyed institutions, 299,748, or 26 percent, were members of minority groups.
- African Americans were the largest minority group among U.S. citizens, with 135,020 students, or 12 percent, of fall 2005 graduate enrollment.
- Hispanics/Latinos were the second largest minority group with 7 percent of the total graduate enrollment in fall 2005. Asians and American Indians were 6 percent and 1 percent, respectively.
- Women comprised over half of the enrollment of every minority group. African Americans had the highest percentage of female graduate students, with more than twice as many women as men enrolled in graduate programs (71% women and 29% men).

Table 1.6

**Graduate enrollment by ethnic group and field, fall 2005
(U.S. citizens and permanent residents only)**

Major Field	African American		American Indian		Asian		Hispanic/Latino		White	
Total	135,020	100%	8,164	100%	70,800	100%	85,764	100%	854,786	100%
Biological Sciences*	2,554	2%	334	5%	3,981	6%	2,758	4%	38,746	5%
Business	19,201	19%	936	13%	14,996	24%	10,790	15%	104,192	14%
Education	31,741	31%	2,041	29%	7,875	13%	22,483	31%	207,508	28%
Engineering	3,255	3%	253	4%	8,148	13%	3,253	4%	38,733	5%
Health Sciences	8,694	8%	669	10%	6,825	11%	4,757	7%	71,532	10%
Humanities and Arts	4,197	4%	540	8%	3,420	5%	5,830	8%	65,491	9%
Physical Sciences	3,605	4%	289	4%	6,556	11%	3,261	4%	45,654	6%
Public Administration and Services	8,494	8%	489	7%	1,803	3%	4,721	6%	32,156	4%
Social Sciences	9,865	10%	866	12%	4,930	8%	7,778	11%	65,359	9%
Other Fields**	10,801	11%	545	8%	3,844	6%	7,386	10%	64,373	9%

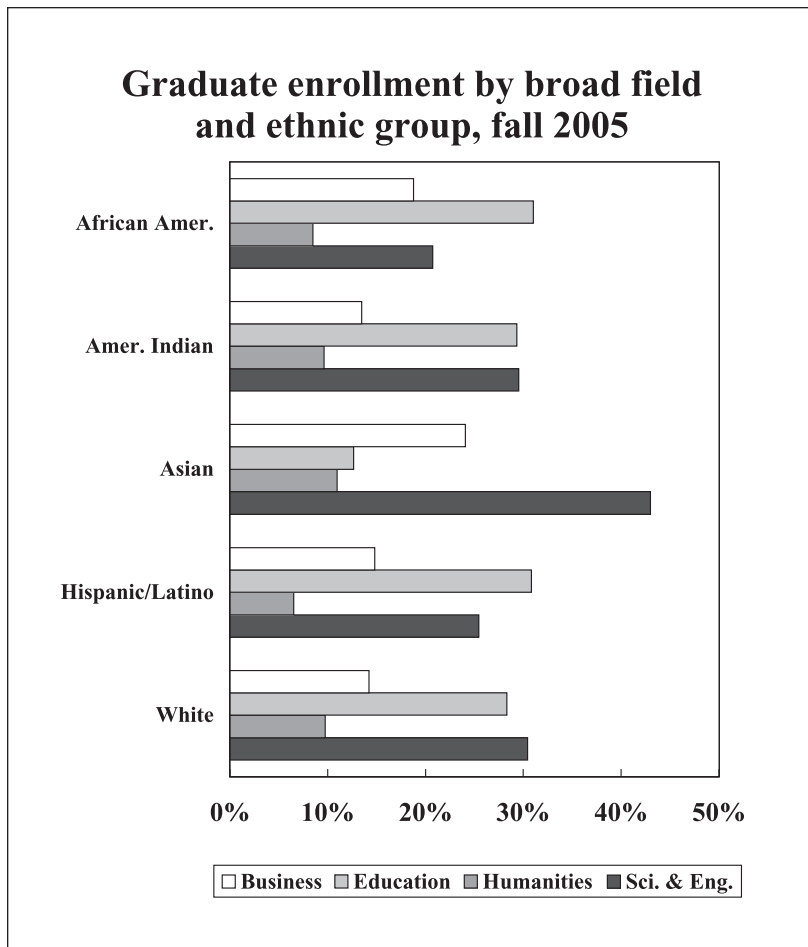
NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages by ethnicity are based on total of known field.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library science, and religion.

Source: CGS/GRE Survey of Graduate Enrollment

Table 1.6



- The concentration of graduate students in the fields of education and business (see Table 1.2) was reflected in enrollment patterns for all five U.S. ethnic groups. Asian U.S. citizens and permanent residents had the lowest percentage of any group (13%) in education and the highest in business (24%), engineering (13%) and the physical sciences (11%).
- Education was the primary field of choice for African Americans, Hispanics/Latinos, American Indians, and Whites, with the enrollment percentages ranging from 28 percent for Whites to 31 percent for African Americans and Hispanic/Latinos.
- Business was also a popular field for members of U.S. ethnic groups: Asians (24%), African Americans (19%), Hispanics/Latinos (15%), Whites (14%), and American Indians (13%).

Table 1.7

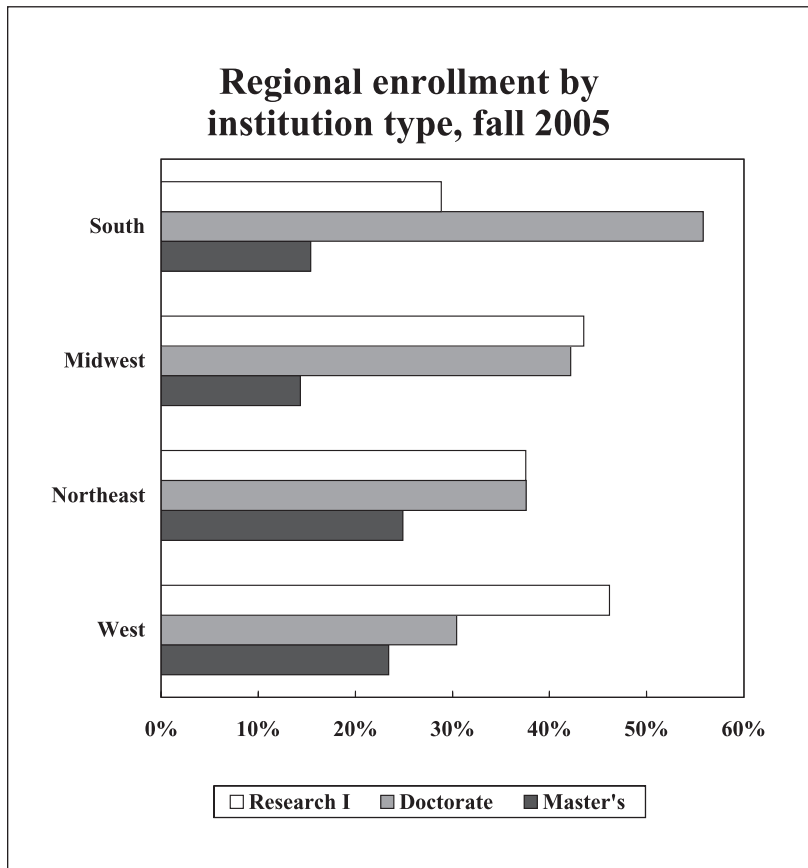
Regional profile of graduate enrollment, fall 2005

	CSGS*		MAGS*		NAGS*		WAGS*	
Total Enrollment	443,054	100%	355,343	100%	198,567	100%	225,378	100%
Public	367,936	83%	263,204	74%	110,059	55%	192,951	86%
Private	75,118	17%	92,139	26%	88,508	45%	32,427	14%
Research I	127,739	29%	154,588	44%	74,541	38%	104,053	46%
Doctorate-Granting	247,194	56%	149,846	42%	74,594	38%	68,585	30%
Master's-Granting	68,121	15%	50,909	14%	49,432	25%	52,740	23%
Men	179,694	41%	160,227	45%	83,432	42%	102,113	46%
Women	254,856	59%	194,911	55%	115,135	58%	118,156	54%
Full-Time	226,330	51%	189,618	53%	103,522	52%	140,633	64%
Part-Time	216,724	49%	165,725	47%	95,045	48%	77,500	36%
Non-U.S. Citizen Temporary Residents	61,275	14%	60,812	18%	33,545	19%	33,958	17%
U.S. Citizen and Permanent Residents**	371,825	86%	281,104	82%	143,830	81%	164,538	83%
<i>African American</i>	62,478	17%	25,138	9%	15,604	11%	7,406	5%
<i>American Indian</i>	2,378	1%	2,356	1%	587	0%	2,497	2%
<i>Asian</i>	15,215	4%	12,873	5%	9,112	6%	20,591	13%
<i>Hispanic/Latino</i>	28,695	8%	9,808	3%	6,173	4%	19,664	12%
<i>White</i>	263,059	71%	230,929	82%	112,354	78%	114,380	70%

NOTE: A number of institutions are members of more than one regional association and some institutions are not members of any of the regional associations, therefore the totals of the four regionals may sum to a number that is different from the total graduate enrollment as shown in Table 1.1.

*CSGS - Conference of Southern Graduate Schools; MAGS - Midwestern Association of Graduate Schools; NAGS - Northeastern Association of Graduate Schools; WAGS - Western Association of Graduate Schools.

Source: CGS/GRE Survey of Graduate Enrollment



- Consistent with previous years, of the four regional associations, CSGS institutions enrolled the largest number of students in fall 2005 (36% of the total), followed by MAGS (29%), WAGS (19%) and NAGS (16%).
- In contrast to the other three regions, where private institutions accounted for a quarter or less of graduate enrollment, in the NAGS region private institutions enrolled 45 percent of the graduate students, reflecting the concentration of private institutions of higher education in that region.
- WAGS institutions enrolled the highest percentage of full-time students (64%) and had the highest percentage of enrollment in Research I institutions (46%). This reflects the influence of large research-oriented campuses in the west, especially the University of California system.
- WAGS is also the most diverse of the four regions, with the highest percentages of Asian (13%) and Hispanic/Latino enrollment (12%). CSGS has the highest African American enrollment (17%).

Table 1.8

Graduate applications by field, fall 2005

Major Field	Total Applications	Accepted Applications	Accepted Applications	Applications Not Accepted	Applications Not Accepted
Total	1,290,635	588,510	46%	696,072	54%
Biological Sciences*	81,834	25,872	32%	55,593	68%
Business	152,147	79,313	52%	72,279	48%
Education	134,335	93,306	70%	40,150	30%
Engineering	153,102	60,682	40%	92,077	60%
Health Sciences	90,173	40,894	46%	48,608	54%
Humanities & Arts	135,696	45,870	34%	89,404	66%
Physical Sciences	141,326	52,677	37%	88,167	63%
Public Administration and Services	42,550	26,874	63%	15,557	37%
Social Sciences	166,593	56,271	34%	109,665	66%
Other Fields**	91,365	46,869	52%	43,260	48%

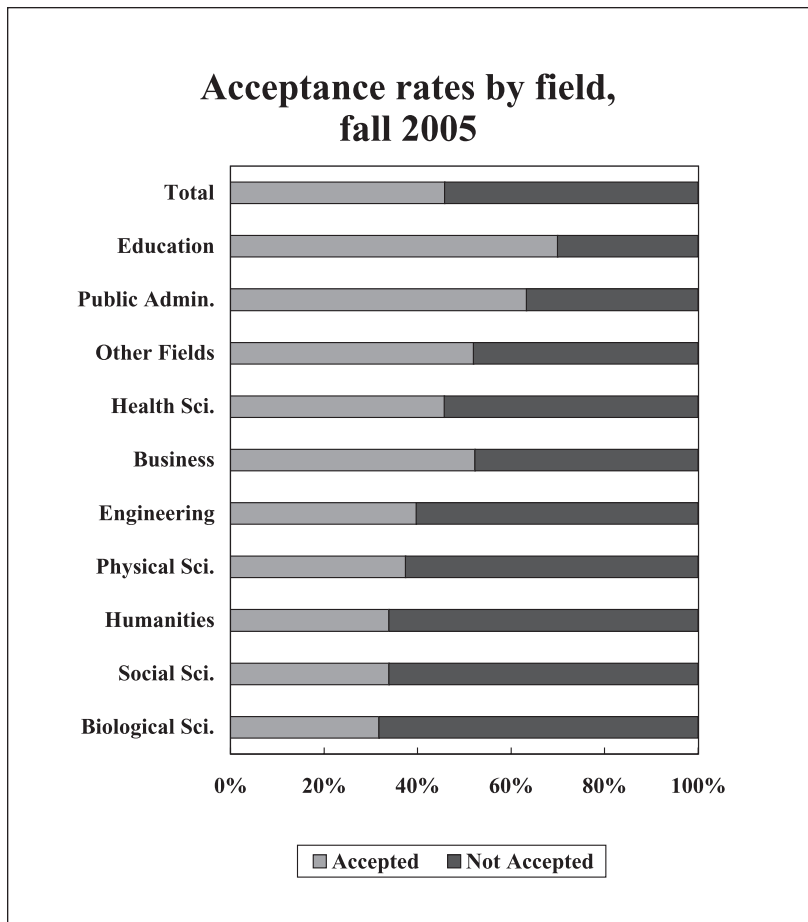
NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

Percentages are based on total of known acceptance status.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library sciences, and religion.

Source: CGS/GRE Survey of Graduate Enrollment



- CGS member and affiliated institutions received more than 1.2 million applications for graduate study for Fall 2005. The social sciences led in the number of applications, receiving 13 percent of the total. Business and engineering each received 12 percent of the total. The physical sciences received 11 percent of the total applications and the humanities and education each received 10 percent of the total.
- Of the 1,290,635 applications, fewer than one-half were offered admission. The wide range of acceptance rates – from a low of 32 percent for the biological sciences to a high of 70 percent in education – reflects the circumstance of each field. For example, the low overall acceptance rate in the social sciences (34%) reflects the fact that clinical psychology programs receive hundreds of applications for very few openings, thus generating a disproportionately low acceptance rate.
- Graduate programs in education are often part of the service mission of universities and therefore tend to have higher acceptance rates into graduate programs. Public administration (63%), which includes social work, is another field where the service mission of universities may result in a higher

Table 1.9

Graduate degrees awarded by field, 2004-2005

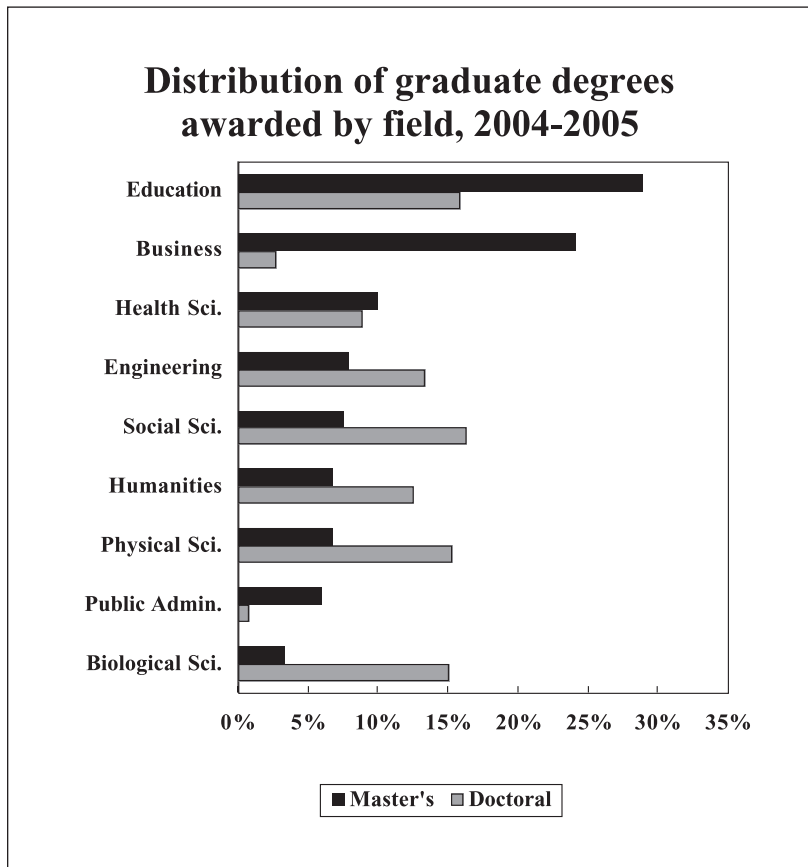
Major Field	Total	Master's				Doctoral				
		Men	Women	Men	Women	Total	Men	Women	Men	Women
Total	417,389	161,663	42%	226,950	58%	44,424	22,642	52%	20,563	48%
Biological Sciences*	9,950	4,260	44%	5,370	56%	5,565	2,919	54%	2,503	46%
Business	81,653	47,028	58%	33,472	42%	1,179	687	59%	480	41%
Education	104,061	24,947	25%	76,217	75%	6,239	2,083	34%	3,985	66%
Engineering	30,359	22,943	77%	6,751	23%	6,139	4,854	79%	1,252	21%
Health Sciences	25,638	5,472	22%	19,633	78%	4,133	1,394	35%	2,601	65%
Humanities & Arts	21,108	8,173	40%	12,414	60%	4,141	1,939	48%	2,140	52%
Physical Sciences	22,789	14,555	66%	7,649	34%	6,050	4,213	70%	1,781	30%
Public Administration and Services	18,614	4,159	23%	13,941	77%	443	145	34%	281	66%
Social Sciences	24,259	8,762	37%	15,025	63%	6,360	2,704	43%	3,544	57%
Other Fields**	24,558	9,037	39%	14,310	61%	1,716	813	49%	850	51%

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages by field are based on total of known gender.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library science, and religion.

Source: CGS/GRE Survey of Graduate Enrollment



- Responding institutions awarded 417,389 master's degrees and 44,424 doctoral degrees in the 2004-2005 academic year.
- The largest numbers of master's degrees were awarded in the fields of education and business, representing 24 percent and 19 percent of the master's degrees granted by the responding institutions, respectively.
- Women earned more than half of the master's degrees awarded in 2004-2005. Women accounted for 78 percent of the master's degrees granted in health sciences, 77 percent of the master's degrees granted in public administration and 75 percent in education.
- The leading field in the number of doctoral degrees was the social sciences, representing 15 percent of the doctorates awarded in 2004-2005. Education, engineering, and physical sciences followed as the next three fields for the largest number of doctoral degrees awarded.
- Men earned 52 percent of the 44,424 total doctorates in 2004-2005. Although men earned the majority of doctoral degrees overall, women earned the majority of doctoral degrees in education, public administration, health sciences, social sciences, and humanities.

Chapter 2

Trends in Graduate Enrollment and Degrees 1986-2005

This chapter presents two types of data: total figures for 2005 and trend data from 1986 to 2005 described by annual percentage change. To be included in the percent change calculations, institutions must have consistently responded to the enrollment survey. In the Chapter 2 tables, the statistic “average annual percent change” represents the average percentage by which the graduate student population would change each year to account for the total change over the calculated period. The average percentage change statistic provides a convenient summary measure of change over time and, like a moving average, is not influenced by unusual single-year fluctuations in the enrollment data.

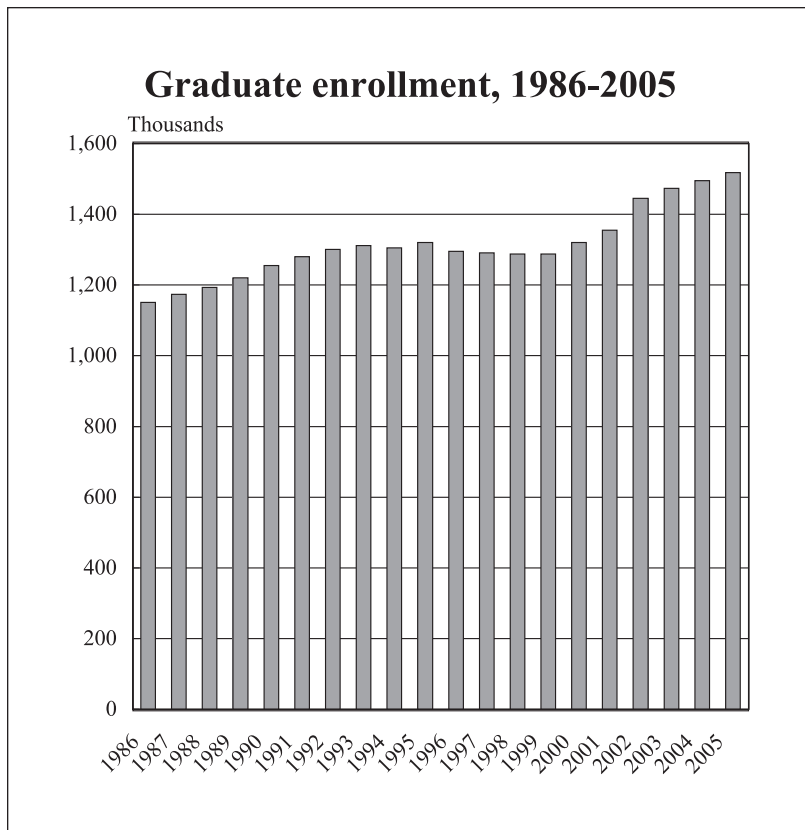
Table 2.1

Trends in graduate enrollment, 1986 to 2005

	2005	% Change 2004 to 2005	Average Annual % Change 1986 to 2005
Total Enrollment	1,517,976	2%	2%
<i>Men</i>	634,827	1%	1%
<i>Women</i>	869,331	3%	2%
<i>Full-time</i>	829,119	3%	3%
<i>Part-time</i>	681,612	-2%	1%
Citizenship			
<i>U.S. Citizens and Permanent Residents</i>	1,154,534	2%	1%
<i>Non-U.S. Citizen Temporary Residents</i>	221,878	-1%	3%

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

Source: CGS/GRE Survey of Graduate Enrollment



- Following a slight decline from 1996 to 1999, graduate enrollment entered a growth period. In the last year, that growth continued, rising by 2 percent.
- One of the chief reasons for the overall increase in graduate enrollment over the last two decades has been the sustained growth in the number of female students, increasing at a 2 percent average annual pace over the 1986-2005 period.
- There was a 2 percent jump in U.S. citizen and permanent resident enrollment from 2004 to 2005. At the same time, non-U.S. citizen enrollment declined by 1 percent. Overall, however, the number of international students has grown at a 3 percent average annual rate since 1986, while the number of U.S. students has grown, on average, by only 1 percent per year during the same period.

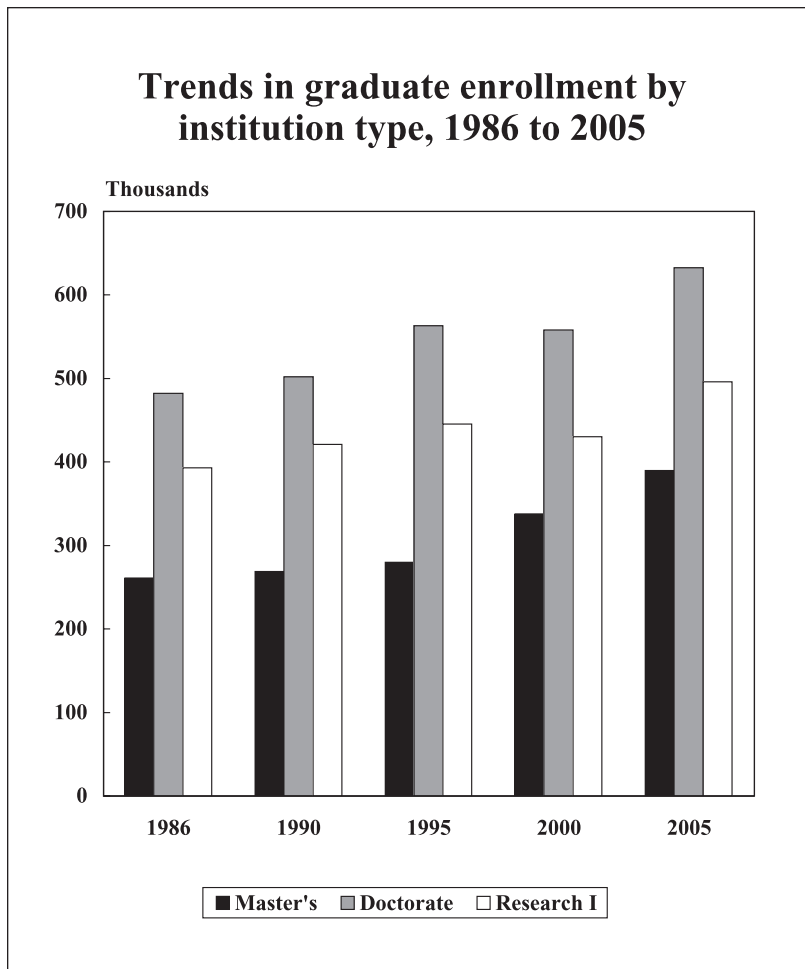
Table 2.2

**Trends in graduate enrollment by institution type,
1986 to 2005**

Institution Type	2005	Average Annual	
		% Change 2004 to 2005	% Change 1986 to 2005
Total Enrollment	1,517,976	2%	2%
<i>Public</i>	954,537	2%	2%
<i>Private</i>	563,439	4%	2%
Research I*	496,023	4%	1%
<i>Public</i>	362,183	1%	1%
<i>Private</i>	133,840	12%	2%
Doctorate-Granting	632,278	1%	2%
<i>Public</i>	394,487	1%	2%
<i>Private</i>	237,791	1%	1%
Master's-Granting	389,675	1%	2%
<i>Public</i>	197,867	3%	2%
<i>Private</i>	191,808	-4%	4%

*Institutions are divided into three categories based on the 1994 Carnegie Classification of Institutions of Higher Education and degrees granted. Research I: The most research-intensive universities in the U.S. Annually, these institutions each confer at least 50 doctoral degrees and receive at least \$40 million in federal research support. Doctorate-Granting: Institutions that grant the doctorate as their highest degree but are not classified as Research I by the Carnegie system. This category includes institutions classified as Research II, Doctorate-Granting I and II, Comprehensive, Liberal Arts, and Other Specialized. Master's-Granting: Institutions that grant the master's degree as their highest graduate degree.

Source: CGS/GRE Survey of Graduate Enrollment



- In the last year, graduate enrollment increased by 4 percent at Research I institutions, while enrollment at Master's-Granting institutions and Doctorate-Granting institutions increased by 1 percent. Though few in terms of number of institutions, the largest growth was in private Research I institutions where graduate enrollment grew by 12 percent.
- The overall 1986 to 2005 increase in graduate enrollment occurred across all institutional types. In addition, there was only a small difference between overall enrollment growth at public and private institutions.
- Over the last 19 years, graduate enrollment at Master's-Granting and Doctorate-Granting institutions has grown by an average of 2 percent annually, while Research I institutions have had a 1 percent average annual growth since 1986.

Table 2.3

Trends in graduate enrollment by field, 1986 to 2005

Major Field	2005	Average Annual	
		% Change 2004 to 2005	% Change 1986 to 2005
Total	1,517,976	2%	2%
Biological Sciences*	68,952	2%	1%
Business	219,953	-1%	1%
Education	306,704	0%	2%
Engineering	108,086	0%	2%
Health Sciences	111,846	12%	4%
Humanities and Arts	100,678	1%	2%
Physical Sciences	105,170	0%	1%
Public Administration and Services	54,309	0%	2%
Social Sciences	115,345	1%	2%
Other Fields**	104,933	6%	1%

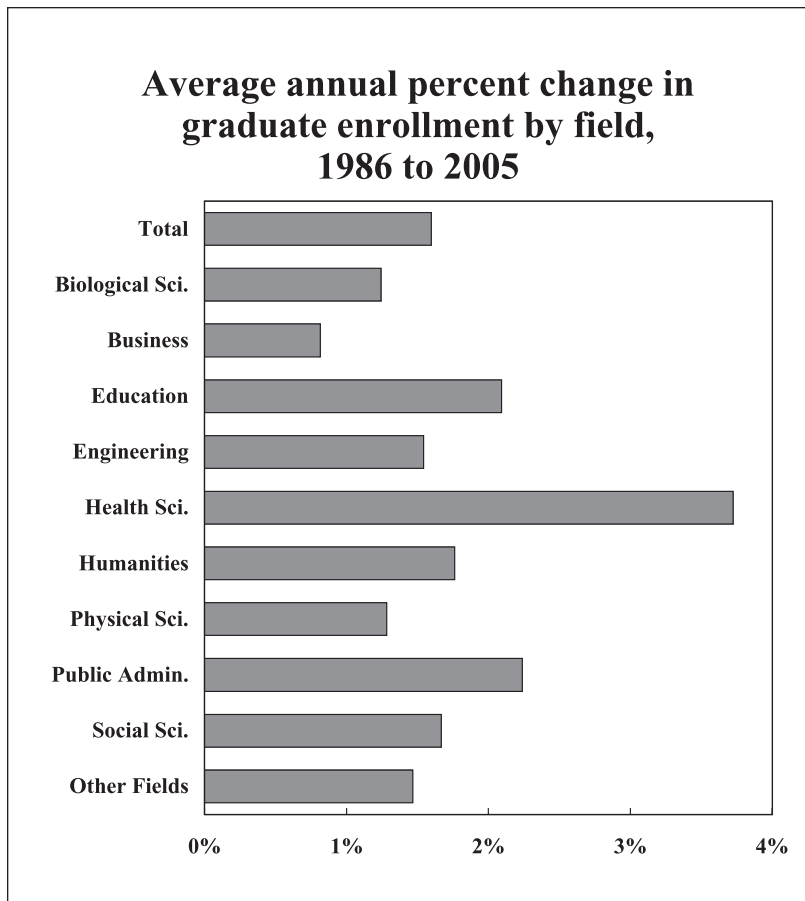
NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library science, and religion.

Source: CGS/GRE Survey of Graduate Enrollment

Table 2.3



- The overall average annual growth of graduate enrollment over the last 19 years is reflected across all ten major fields displayed in Table 2.3.
- Since 1986, enrollment in the health sciences has grown most rapidly, rising at an average annual rate of 4 percent.
- Between 2004 to 2005, there were considerable differences in growth by field. Enrollment growth was led by the field of health sciences, which increased by 12 percent, and Other Fields, which grew by 6 percent. Enrollment in only one field, business, decreased over the last year.
- One of the major contributing factors to lack of growth in engineering and the physical sciences has been the decrease in the number of international students enrolled in U.S. graduate programs. As shown in Table 1.4, these are the fields with the highest concentration of international students, accounting for over two-fifths of international graduate enrollment.

Table 2.4

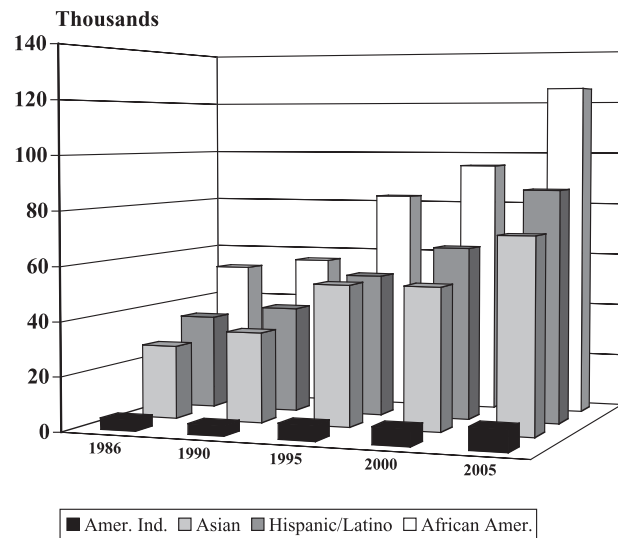
**Trends in graduate enrollment by ethnicity, 1986 to 2005
(U.S. citizens and permanent residents only)**

	2005	% Change 2004 to 2005	Average Annual % Change 1986 to 2005
Total U.S. Enrollment	1,154,534	3%	1%
<i>Men</i>	440,550	2%	0%
<i>Women</i>	697,691	3%	2%
African American	135,020	6%	5%
<i>Men</i>	38,591	6%	4%
<i>Women</i>	95,428	5%	5%
American Indian	8,164	2%	4%
<i>Men</i>	2,857	0%	3%
<i>Women</i>	5,194	3%	4%
Asian	70,800	2%	5%
<i>Men</i>	32,282	2%	4%
<i>Women</i>	37,758	3%	7%
Hispanic/Latino	85,764	2%	6%
<i>Men</i>	31,556	0%	5%
<i>Women</i>	53,633	3%	7%
White	854,786	2%	0%
<i>Men</i>	335,264	1%	0%
<i>Women</i>	505,678	2%	1%

NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

Source: CGS/GRE Survey of Graduate Enrollment

Trends in graduate enrollment by ethnicity, 1986 to 2005



- As with total graduate enrollment, U.S. citizen enrollment increased from 1986 to 2005. This consistent 1 percent average annual growth has been driven by steady increases in the number of women and minority students. In contrast, the number of U.S. men enrolled in graduate programs has been relatively steady since 1986.
- One of the most notable trends in graduate education over the past 19 years has been the growth in the number of U.S. minority students pursuing graduate degrees. Enrollment by African American, American Indian, Asian, and Hispanic/Latino groups grew at an average annual rate between 4 and 6 percent from 1986 to 2005, while White enrollment was virtually unchanged.
- As with total enrollment, the number of women in underrepresented groups enrolled in graduate programs has grown at a faster pace than has the number of men.

Table 2.5

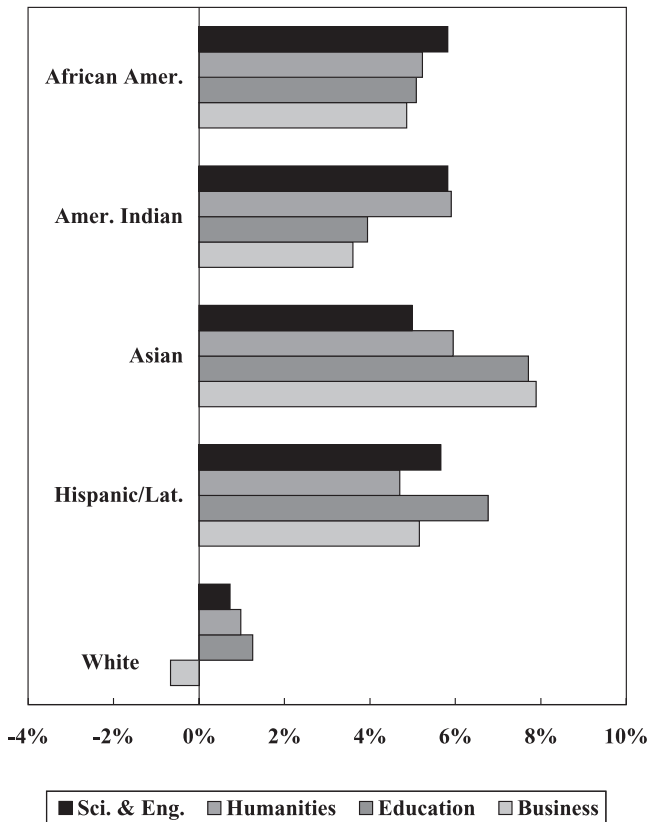
Graduate enrollment by ethnic group and field 1986 to 2005 (U.S. citizens and permanent residents only)

	Average Annual			Average Annual			Average Annual		
	2005	% Change 2004 to 2005	% Change 1986 to 2005	2005	% Change 2004 to 2005	% Change 1986 to 2005	2005	% Change 2004 to 2005	% Change 1986 to 2005
	<i>African American</i>			<i>American Indian</i>			<i>Asian</i>		
Total	135,020	6%	5%	8,164	2%	4%	70,800	2%	5%
Biological Sciences*	2,554	8%	5%	334	5%	6%	3,981	3%	6%
Business	19,201	3%	5%	936	8%	4%	14,996	3%	8%
Education	31,741	4%	5%	2,041	-1%	4%	7,875	0%	8%
Engineering	3,255	11%	6%	253	7%	5%	8,148	2%	3%
Health Sciences	8,694	16%	7%	669	14%	5%	6,825	10%	9%
Humanities and Arts	4,197	7%	5%	540	7%	6%	3,420	2%	6%
Physical Sciences	3,605	1%	5%	289	7%	5%	6,556	-2%	4%
Public Admin.& Serv.	8,494	1%	5%	489	-7%	5%	1,803	7%	8%
Social Sciences	9,865	2%	5%	866	1%	6%	4,930	3%	7%
Other Fields**	10,801	-1%	4%	545	11%	4%	3,844	-2%	5%
	<i>Hispanic/Latino</i>			<i>White</i>					
Total	85,764	2%	6%	854,786	2%	0%			
Biological Sciences*	2,758	16%	5%	38,746	1%	0%			
Business	10,790	12%	5%	104,192	0%	-1%			
Education	22,483	-2%	7%	207,508	0%	1%			
Engineering	3,253	-5%	5%	38,733	2%	0%			
Health Sciences	4,757	4%	8%	71,532	14%	3%			
Humanities and Arts	5,830	3%	5%	65,491	2%	1%			
Physical Sciences	3,261	0%	4%	45,654	2%	0%			
Public Admin.& Serv.	4,721	6%	3%	32,156	0%	2%			
Social Sciences	7,778	3%	5%	65,359	2%	1%			
Other Fields**	7,386	43%	4%	64,373	7%	1%			

NOTE: Because not all institutions responded to all items, detail variables may not sum to total. Percentages are based on total of known field.
 *"Biological Sciences" includes agriculture.
 **The category "Other Fields" includes architecture, communications, home economics, library science, and religion.
 Source: CGS/GRE Survey of Graduate Enrollment

Table 2.5

Average annual percentage change in graduate enrollment by ethnic group and broad field, 1986 to 2005



- Since 1986, graduate enrollment has increased across nearly all ethnic groups and fields, although some fields and ethnic groups experienced more substantial growth than others.
- Within ethnic groups, there is considerable variation in the percentage change in graduate enrollment across fields. For example, the percentage change from 2004 to 2005 for Asians varied from a 2 percent decline in physical sciences to a 10 percent increase in health sciences.
- Between 2004 and 2005, the leading growth field was health sciences for all groups except Hispanics/Latinos.

Table 2.6

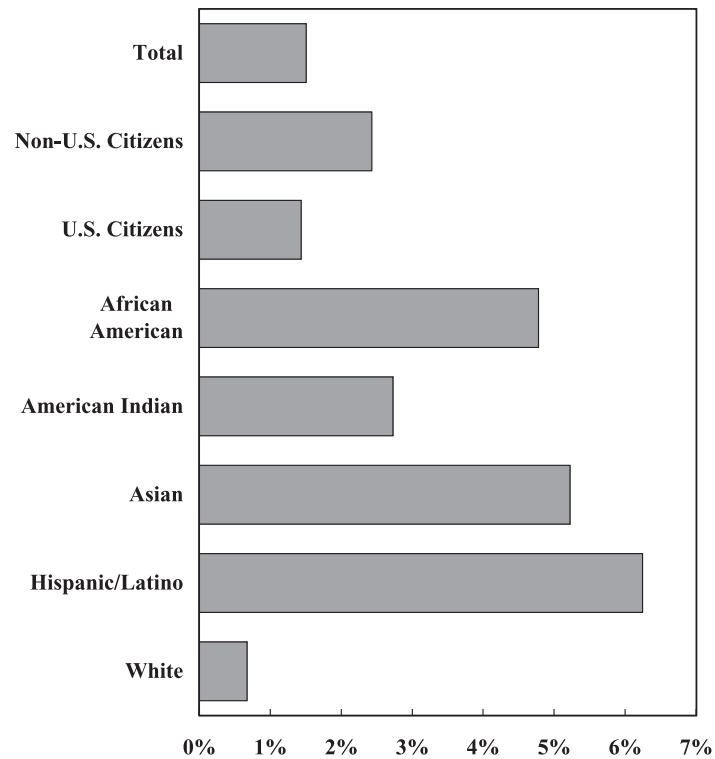
**First-time graduate enrollment by citizenship
and ethnic group, 1986 to 2005**

	2005	% Change 2004 to 2005	Average Annual % Change 1986 to 2005
Total First-Time Enrollment	367,729	2%	2%
Non-U.S. Citizen Temporary Residents	53,249	4%	2%
U.S. Citizens and Permanent Residents	280,919	2%	1%
African American	28,929	0%	5%
American Indian	1,951	8%	3%
Asian	18,858	-1%	5%
Hispanic/Latino	23,512	10%	6%
White	207,669	1%	1%

Source: CGS/GRE Survey of Graduate Enrollment

Table 2.6

Average annual percentage change in first-time enrollment by citizenship and ethnic group, 1986 to 2005



- The number of students enrolled in graduate programs for the first time increased at a 2 percent average annual rate over the 1986 to 2005 period.
- In the last year, overall first-time enrollment increased by 2 percent, driven by increases in non-US citizen temporary resident first-time enrollment (4%), the first increase in four years.
- Among ethnic groups, growth in first-time enrollment was strongest among Hispanics. Hispanic first-time enrollment increased by 10 percent, while Asian first-time enrollment declined by 1 percent.

Table 2.7

Trends in graduate applications by field, 1986 to 2005

Major Field	2005	% Change 2004 to 2005	Average Annual % Change 1986 to 2005
Total	1,290,635	0%	2%
Biological Sciences*	81,834	1%	2%
Business	152,147	-4%	1%
Education	134,335	0%	3%
Engineering	153,102	-4%	2%
Health Sciences	90,173	7%	3%
Humanities and Arts	135,696	1%	4%
Physical Sciences	141,326	0%	2%
Public Administration and Services	42,550	7%	3%
Social Sciences	166,593	1%	4%
Other Fields**	91,365	5%	2%

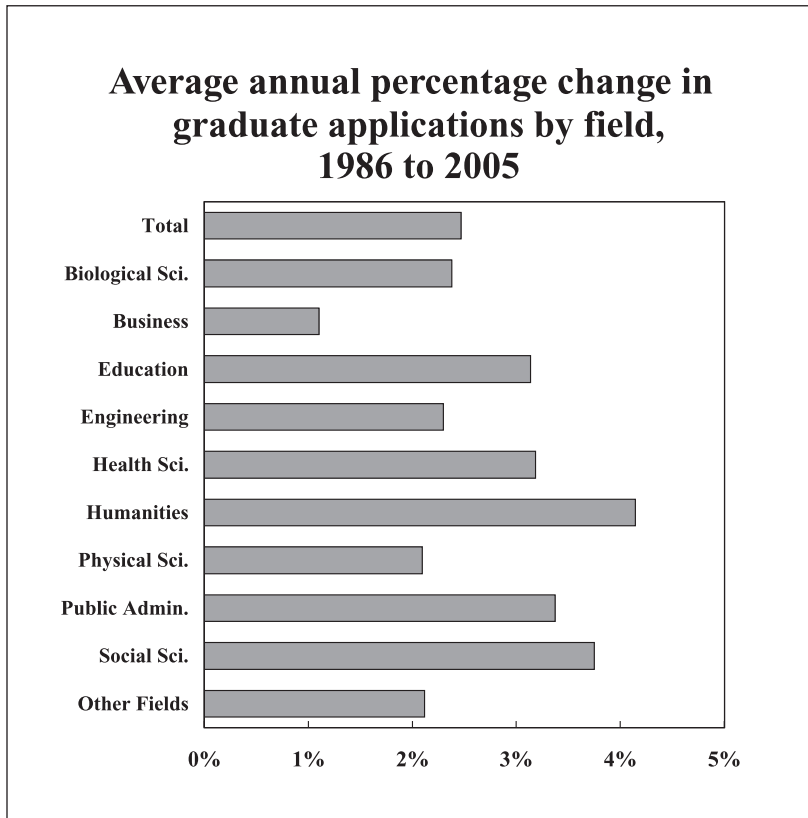
NOTE: Because not all institutions responded to all items, detail variables may not sum to total.

*"Biological Sciences" includes agriculture.

**The category "Other Fields" includes architecture, communications, home economics, library science, and religion.

Source: CGS/GRE Survey of Graduate Enrollment

Table 2.7



- In general, demand for graduate education has been strong over the 1986 to 2005 period, resulting in an average annual increase of 2 percent in applications submitted for graduate study. Average annual growth was between 1 percent and 4 percent across all fields.
- The recent trend is considerably different. There was no change in applications between 2004 from 2005, though this reflects a turnaround from the previous year's large decline.
- Applications increased most notably for health sciences and public administration, each experiencing a 7 percent increase from 2004 to 2005. Applications declined for business and engineering by 4 percent each.

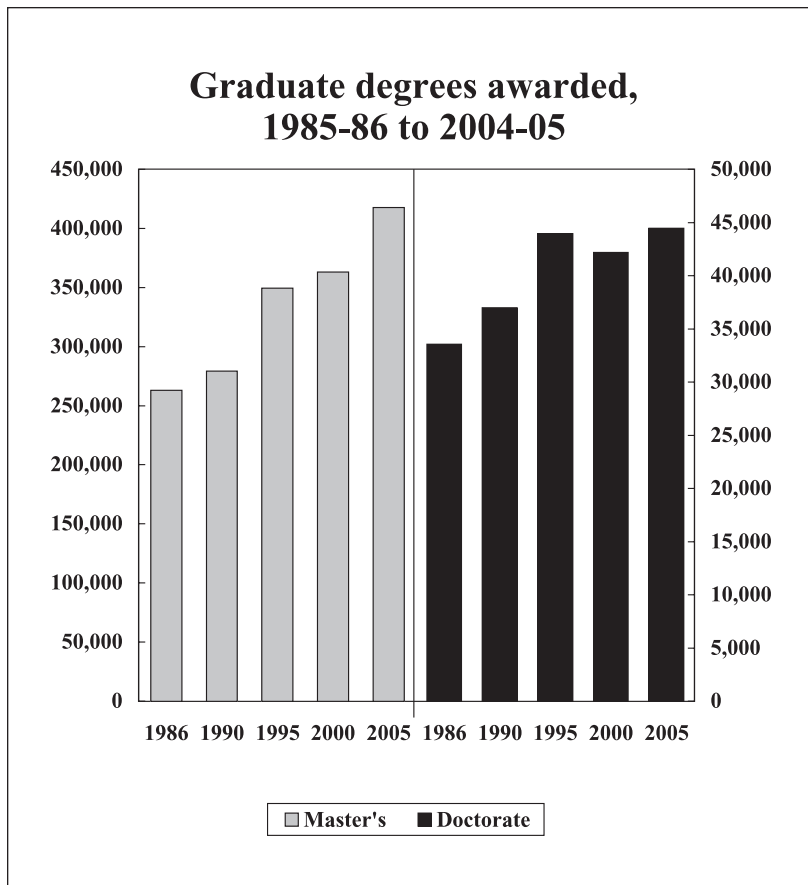
Note: Because these data track the number of applications and not applicants, some fraction of these trends may be the result of changes in the number of applications submitted per individual. However, absent a collective change on the part of students submitting applications to graduate school, it is likely that these data reflect actual changes in the number of students interested in graduate education.

Table 2.8**Graduate degrees awarded, 1986 to 2005**

	2005	% Change 2004 to 2005	Average Annual % Change 1986 to 2005
Master's Degrees	417,389	2%	3%
Public	259,316	4%	3%
Private	158,073	0%	3%
Research I	120,328	3%	3%
Doctorate-Granting	179,719	0%	3%
Master's-Granting	117,342	10%	4%
Doctoral Degrees	44,424	6%	2%
Public	30,032	6%	2%
Private	14,392	5%	1%
Research I	27,663	7%	2%
Doctorate-Granting	16,318	5%	2%

Source: CGS/GRE Survey of Graduate Enrollment

Table 2.8



- Over the 1986 to 2005 period, the number of master's degrees awarded increased by an average of 3 percent per year and the number of doctorates increased by an average of 2 percent per year.
- All institutional categories exhibited increases in the granting of master's degrees from 1986 to 2005, with the number of degrees granted by Research I, Doctorate-Granting, and Master's-Granting institutions rising by an annual average of between 3 and 4 percent.
- The number of master's degrees granted is closely tied to graduate enrollment trends in the preceding years. As shown in Figure 2.1, graduate enrollment began a new growth phase in 2000. That increase in the number of graduate students is reflected in the master's degree data: from 2004 to 2005 there was a 2 percent increase in the number of master's degrees granted.
- Doctoral degrees, representing a smaller portion of total graduate degrees, are normally not as sensitive to overall graduate enrollment trends. However, from 2004 to 2005, the number of doctoral degrees granted increased 6 percent, with public institutions increasing by 6 percent and private institutions increasing by 5 percent. Doctoral production at Research I institutions outpaced production at Doctorate-Granting institutions, with increases of 7 percent and 5 percent respectively.

Appendices

2005 CGS/GRE Survey of Graduate Enrollment Questionnaire

CGS/GRE Survey of Graduate Enrollment

2005 _____ Data Sheet

Institution: _____

GRE Institution Code: _____

I. Graduate Enrollment for 2005 Fall Term						
	First Time			Total (includes First Time)		
	Men	Women	Total	Men	Women	Total
Master's and Other*						
Doctorate						
Total						
Full Time						
Part Time						
Total						

II. Number of Degrees Conferred between July 1, 2004 and June 30, 2005			
	Men	Women	Total
Master's and Other*			
Doctorate			
Graduate Certificate			

III. Number of Completed Applications Submitted for 2005 Fall Term			
	Master's and Other*	Doctorate	Total
Accepted			
Not Accepted			
Total			

IV. Graduate Enrollment by Ethnicity for 2005 Fall Term							
		First Time			Total (includes First Time)		
		Men	Women	Total	Men	Women	Total
Non-Resident Aliens							
U.S. Citizens and Resident Aliens	American Indian / Alaskan Native						
	Asian / Pacific Islander						
	Black, African American						
	Hispanic, Latino						
	White						
Other or Unknown							
Total							



© 2005 ETS. All rights reserved.

*Other includes other non-doctoral programs (for example, graduate certificate programs and educational specialist programs) except in question 8 where graduate certificates are reported separately.

Instructions for Completing Enrollment Survey Data Sheets

Data for graduate programs offered by all divisions, schools, colleges, or departments of your institution should be reported in this survey. Please note the following:

- Data should be reported for all matriculated students in graduate programs that lead to master's or higher degrees other than first professional degrees.
- Do not include the J.D., M. Div., D.D.S., M.D., D.V.M., and D.P.T.
- Master's programs in such areas as business (e.g. M.B.A.), fine arts (e.g. M.F.A.), health sciences (e.g., M.P.H.), public administration (e.g. M.P.A.), and social work (e.g. M.S.W.) are part of this data collection effort.

Enrollment Status Definitions

First TimeStudents admitted and enrolled for the first time in graduate degree programs at your institution for the fall term.

Full TimeStudents enrolled for credit in graduate degree programs who are engaged full time in training activities in their field; these activities may embrace any appropriate combination of study, teaching, and research, depending on your institution's own policy.

Part TimeStudents who are enrolled in graduate degree programs who are NOT pursuing graduate work full time as defined above.

Ethnicity Definitions

Non-Resident AlienA person who is not a citizen or a national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.

American Indian or Alaskan NativeA person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.

Asian or Pacific IslanderA person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.

Black, Non Hispanic . . . A person having origins in any of the Black racial groups of Africa (except those of Hispanic origin).

Hispanic - TotalA person having origins in any of the original peoples of Puerto Rico, Mexico, Cuba, Central American, South America, or other Spanish culture, regardless of race. On the data sheet this total is further broken down into three Hispanic subgroups-Puerto Rican, Mexican Americans, and Other Hispanic (Cuban, Central American, South American or other Spanish culture.)

White, Non-Hispanic.....A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin).

CGS/GRE Survey of Graduate Enrollment Taxonomy

Biological Sciences	Engineering	Humanities and Arts	Public Administration and Services
Agriculture	Chemical	Arts–History, Theory, and Criticism	Public Administration
Biological Sciences	Civil	Arts–Performance and Studio	Social Work
	Electrical and Electronics	English Language and Literature	Social Sciences
Business	Industrial	Foreign Language and Literature	Anthropology
Accounting	Materials	History	Economics
Banking and Finance	Mechanicals	Philosophy	Political Science
Business Administration and Management	Engineering, Other	Humanities and Arts, Other	Psychology
Business, Other	Health Sciences		Sociology
	Health and Medical Sciences		Social Sciences, Other
Education		Physical Sciences	Other Fields
Administration		Chemistry	Architecture and
Curriculum and Instruction		Computer Sciences	Environmental Design
Elementary Education		Earth, Atmospheric, and Marine Science	Communications
Evaluation and Research		Mathematical Sciences	Home Economics
Higher Education		Physics and Astronomy	Library and Information Sciences
Secondary Education		Physical Sciences, Other	Religion and Theology
Special Education			All Other Fields
Student Counseling and Personnel Services			
Education, Other			

Appendix C

Council of Graduate Schools
One Dupont Circle, NW, Suite 430
Washington, DC 20036-1173
www.cgsnet.org

Contact: Ken Redd
phone: (202) 223-3791
email: kredd@cgs.nche.edu

Graduate Record Examinations Program
Educational Testing Service
Princeton, NJ 08541-6000
www.gre.org

Contact: Cindy Evans
phone: (609) 683-2035
email: cevans@ets.org

The CGS/GRE Survey of Graduate Enrollment

Since 1986, the Council of Graduate Schools and the Graduate Record Examinations Board have conducted an annual survey of graduate enrollment and degrees at the approximately 720 institutions that are members of the Council or its regional affiliates. These institutions account for 70 percent of graduate students enrolled in the U.S. and nearly 80 and 95 percent, respectively, of master's and doctoral degrees awarded by U.S. institutions.

Methodology

The survey is conducted each fall. Institutions provide data on graduate enrollment and applications for the fall term, and data on degrees conferred during the previous (12-month) school year. Total data, as well as data from up to 51 individual disciplines, are collected from each institution. Consistently, more than 85 percent of the institutions complete and return the survey.

Data

Enrollment: Includes enrollment by gender, ethnicity, citizenship, enrollment status (full-time and part-time), and first-time enrollment for the fall term. Racial/ethnic data reported in this

study are collected from institutional records that are based upon the self-report of the graduate students. Accordingly, the number of students in any given racial/ethnic category is subject to individual interpretation on the part of students as they complete registration forms. Applications: Includes the number of complete applications submitted for the fall term, applications accepted, and applications not accepted. Degrees: Includes the number of master's and doctoral degrees conferred by gender.

Reporting

The data are cross-referenced by institutional variables such as public or private affiliation, highest degree granted, and institution-type categories based on the Carnegie Classification system. Discipline data are grouped into nine broad fields plus "other." Trends in graduate enrollment and degrees since 1986 are reported in addition to the single-year data.

Data Availability

Survey results published in this annual Graduate Enrollment and Degrees report are available from CGS (www.cgsnet.org). Early release data and special reports are also published in the Council's monthly newsletter, the *Communicator*.

Council of Graduate Schools
One Dupont Circle NW
Suite 430
Washington, DC 20036-1173
Phone: (202) 223-3791
<http://www.cgsnet.org>

August 2006