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# HUMANITIES DOCTORATES IN THE UNITED STATES

## 1989 PROFILE

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The Survey of Doctorate Recipients (SDR) project is under the administrative supervision of Susan Mitchell. Prudence Brown and Daniel Pasquini analyzed survey results and prepared this report. Martha Bohman prepared all appendix tables for the publication. The following people from the Supporting Services Office collected and processed all returns: Eileen Milner, manager; Mary Wanyoike, coding and editing supervisor; and Abraham Gedamu. George Boyce, manager of OSEP's Data Processing Section, with assistance from Cindy Woods and Joseph Finan, was responsible for the computer programming and processing. Linda S. Dix, OSEP's reports officer, edited the report. The talent and conscientious, effective efforts of these individuals have contributed to the quality of this report. All of their efforts are appreciated.

During the preparation of this report, Alan E. Fechter, executive director of OSEP, provided helpful guidance as did Pamela Ebert Flattau, OSEP's director of studies and surveys. The work of this project was overseen by OSEP's Advisory Committee on Studies and Analyses, which is concerned with those activities of the National Research Council that contribute to the effective development and utilization of the nation's scholars and research personnel. Comments and questions are welcome and may be directed to the project manager, Susan Mitchell.

Linda S. Wilson, Chair  
Office of Scientific and Engineering Personnel  
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## SUMMARY OF FINDINGS

This report is the seventh in a biennial series and is based on findings from the *1989 Survey of Humanities Doctorates*. It presents demographic and employment characteristics of humanities doctorates who earned their degrees from U.S. institutions between January 1946 and June 1988 and who were residing in the United States in February 1989. Data from earlier surveys are also introduced so that changes in the composition of the population over time may be observed. The major findings presented in this report are summarized below.

### **The U.S. Population of Humanities Doctorate Recipients**

- The estimated population of humanities doctorates in the United States in 1989 was 100,700, an increase of 6.0 percent over the 1987 figure. This two-year increase was slightly higher than the 4.9 percent growth observed between 1985 and 1987.
- Doctorates in English and American languages and literature constituted the largest proportion of the humanities population, 25.8 percent.
- Approximately one-third of the population of humanities doctorates was female, up from roughly one-quarter in 1977, the year the survey began.
- Minority groups continued to represent a small proportion of the total population of humanities doctorates in 1989, 6.8 percent. In 1977, minorities constituted 4.7 percent of the humanities population.
- The age distribution of the humanities population has changed markedly since 1977, when doctorates under age 40 constituted the largest proportion of the humanities population (36.5 percent); by 1989 this group represented only 14.9 percent of the total. Doctorates in their 40s, 50s, and 60s have all increased their shares of the population since 1977.

### **Employment Characteristics**

- Approximately 90 percent of humanities doctorates were employed in 1989, primarily in full-time positions. Since 1977, there have been increases in both the proportion employed in part-time jobs (from 4.9 percent to 7.8 percent) and in the proportion retired (from 5.8 percent to 8.8 percent).
- One-fourth of the employed humanities doctorates were working in a nonhumanities discipline in 1989. The majority of these were in education or professional fields.
- Humanities doctorates were most likely to be employed by educational institutions (81.0 percent) and were most likely to be engaged primarily in teaching (63.1 percent). Since 1977, both of these proportions have declined, however, from 89.9 percent and 69.5 percent, respectively.

- Between 1987 and 1989, the rate of increase in the median annual salaries of full-time employed humanities doctorates (8.0 percent) was slightly below that of the Consumer Price Index for the same period (9.0 percent).
- On average, men earned more than women; but the salaries of men and women who earned their degrees within the last five years were roughly the same.
- Humanists who were employed full-time in business/industry earned higher median annual salaries (\$45,800) than their counterparts in educational institutions (\$42,200) and government (\$42,100).

### **Academic Employment**

- The number of humanities Ph.D.s employed as full professors grew by nearly 55 percent between 1977 and 1989 (from 18,200 to 28,300). Over this same time period, the number of associate professorships increased by roughly 20 percent (15,200 in 1977 to 18,300 in 1989), while the number of assistant professors remained relatively unchanged. However, as a proportion of those academically employed, the share of both associate and assistant professors decreased (by 3.2 and 6.4 percentage points, respectively), while the proportion of full professorships increased by 5.3 percentage points—revealing a shift toward senior faculty.
- Of all men working in academe, 70.6 percent were holding tenured positions in 1989, compared to 49.3 percent of all women. However, when tenure status was examined by age, the disparity between men and women was small in the 35 and under group.
- Between 1977 and 1989, a major shift in the age composition of humanities faculty occurred, paralleling the shift in the humanities population overall. The proportion 45 years of age or younger dropped 20.1 percentage points, from 57.0 percent in 1977 to 36.9 percent in 1989. While the aging of faculty was evident in each of the broad field groupings, it was especially marked in history, where 71.2 percent of the faculty were 46 or older in 1989, compared with 43.4 percent in 1977.

### **Employment Dynamics**

The findings presented below are based on individuals who responded to two surveys four years apart (1977 and 1981, 1981 and 1985, 1985 and 1989). These findings show the extent to which humanities doctorates maintained or changed their job status over time. Four employment characteristics are examined: employment status, employment sector, field of employment, and primary work activity.

- Over 90 percent of those employed full-time or retired maintained their status four years later. In comparison, nearly 75 percent of those unemployed and seeking work during the first survey had secured either full- or part-time employment by the follow-up survey.
- The retention rate with respect to employment sector was highest among humanities doctorates employed in educational institutions. Of the nearly 10 percent who left educational institutions over a 4-year period, more than half left the work force

altogether. Sectoral mobility was highest for humanists employed in business/industry; between 8 and 14 percent were working in educational institutions four years later.

- Field mobility was relatively modest for all fields examined, with retention rates clustering in the 80-90 percent range. The exception was in the composite field "other humanities;" only 60 percent of those individuals working in this field in the first year were still working in it in the follow-up year. In general, humanists were more likely to leave the humanities fields altogether than to switch to another discipline within the humanities.
- Of those individuals who reported teaching as their primary work activity in the early year, nearly 80 percent continued to report it as their primary work activity in the follow-up year. Retention was highest for teaching, followed by management/administration, writing/editing, and research and development.





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## INTRODUCTION

This report presents results from the seventh in a biennial series of surveys conducted on humanities doctorate recipients. The humanities survey is part of the larger Survey of Doctorate Recipients (SDR) initiated by the National Research Council in 1973 in response to the needs of the federal government to obtain demographic and employment information on individuals trained in science and engineering at the doctorate level. The SDR was expanded to include individuals with doctorates in the humanities in 1977. At that time, a stratified random sample of humanities doctorates was selected from the Doctorate Records File (DRF)<sup>1</sup> and added to the group to be surveyed.

The purpose of the SDR has been, since its inception, to generate estimates of the number of holders of research doctorates who reside in the United States and to characterize their employment patterns. The survey data are collected through self-administered mail questionnaires designed to collect employment and demographic information about that highly educated segment of the United States labor force, including humanities doctorates.<sup>2</sup>

The SDR sample design provides for the assessment of both experienced degree-holders and new entrants into the doctoral labor force. With each cycle, a subset of Ph.D.s earned from U.S. institutions during the most recent two years is added to the sample, while recipients of degrees earned 43-44 years prior to the survey are deleted, thus maintaining a 42-year coverage of doctorate recipients from survey to survey. The survey is longitudinal in nature; in other words, individuals in the sample are resurveyed every two years. By 1989, humanities doctorates in the longitudinal panel had been surveyed between one and six times, depending on their degree years.

In March 1989, the questionnaire was mailed to a sample of 16,807 humanities doctorates, with follow-up mailings to nonrespondents in May and September (see Appendix A for a copy of the 1989 survey instrument). A total of 9,060 individuals responded, or about 54 percent of the survey sample. Responses were weighted to develop population estimates of humanities doctorates residing in the United States in February 1989 (the date of reference for most survey items on the 1989 questionnaire). Appendixes B, C, and D discuss the survey methods, including response rates, sampling error, and weighting procedures.

This report focuses on those doctorates who earned their degrees in a humanities field from a U.S. institution between January 1946 and June 1988. The report has been divided into four sections. The first section describes the size and composition of this population, including such characteristics as gender, race/ethnic identification, age, and citizenship. The second section presents an employment profile of the humanities

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<sup>1</sup>The Doctorate Records File, maintained by the National Research Council, contains a virtual census of all research doctorates earned in the United States since 1920.

<sup>2</sup>The doctoral degree categories that define the humanities include American history; "other history" (history and philosophy of science as well as all history except American history and art history); art history; music; speech/theater; philosophy; English/American languages and literature; classical languages and literature; modern languages and literature; and "other humanities" (linguistics, archeology, American studies, religious studies, and unspecified other humanities).

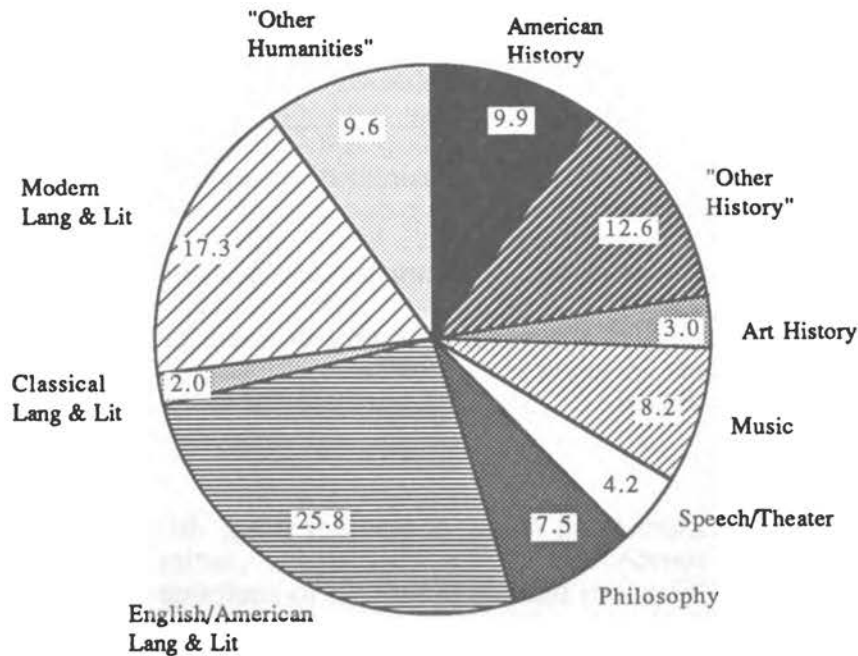
population in 1989 and includes data on employment status, type of employer, primary work activity, and median annual salary. For selected variables, data are presented both for recent graduates (those who earned their degrees between 1983 and 1988) and for the total group of humanities doctorates to permit comparisons of experienced degree-holders and recent entrants into the doctoral labor force. Selected characteristics of humanists employed in the academic sector (including 4-year colleges, universities, medical schools, and junior colleges) are presented in the third section. The final section of the report is dedicated to a longitudinal analysis of the portion of the survey panel who have responded to two surveys four years apart. Selections of their base year and follow-up year responses are presented to illustrate how the job world of humanities scholars has changed and how it has remained the same. Mobility and retention in four major areas are examined: employment status, employment sector, employment field, and primary work activity.

Throughout this report, comparisons are made with the humanities populations from earlier surveys in order to point out changes and consistencies in employment patterns over time. Tables supporting these time-series analyses are found in Appendix E.

## THE DOCTORAL POPULATION IN THE HUMANITIES

### By Field

The estimated population of humanities doctorates in 1989 was 100,700; this figure includes Ph.D.s who earned their degrees in a humanities field from a U.S. institution between January 1946 and June 1988 and were residing in the United States in February 1989. Between 1987 and 1989, the population of humanities doctorates living in the United States grew by 6.0 percent, a slight increase from the growth of 4.9 percent that occurred in the previous 2-year period (see Appendix Table E-1). The following fields grew more than the humanities population as a whole: music (11.2 percent), art history (9.6 percent), and the composite field "other humanities" (14.5 percent). Doctorates in English and American languages and literature continued to constitute the largest proportion of the population of humanities doctorates, 25.8 percent, followed by modern languages and literature at 17.3 percent (see Figure 1). Table 1 shows the distribution of humanities doctorates by degree field and by field of employment in 1989. Sixty-five percent of humanities doctorates were employed in a humanities specialty in 1989, while 22.5 percent were employed in other fields (this group will be explored in more detail in section 2 of this report). About 12 percent were not employed, which includes those who were retired.



NOTE: See Table 1.

FIGURE 1. Humanities Ph.D. population, by field of doctorate, 1989.

TABLE 1: Distribution of Humanities Doctorates in the United States (1946-1988 Graduates), by Field of Degree and Field of Employment, 1989

	Field of Degree		Field of Employment	
	No.	%	No.*	%
All Fields	100,700	100.0	100,700	100.0
American History	10,000	9.9	6,200	6.2
"Other History"	12,700	12.6	7,900	7.8
European History	6,000	6.0	3,400	3.4
History of Other Countries	4,600	4.5	3,200	3.2
History/Philosophy of Science	500	0.5	1,200	1.2
Unspecified History†	1,500	1.5	N/A	--
Art History	3,100	3.0	2,600	2.5
Music	8,300	8.2	6,400	6.4
Speech/Theater	4,200	4.2	2,300	2.3
Philosophy	7,500	7.5	4,400	4.4
English and American Lang/Lit	26,000	25.8	15,800	15.7
Classical Lang/Lit	2,000	2.0	1,400	1.4
Modern Lang/Lit	17,400	17.3	11,600	11.5
"Other Humanities"	9,600	9.6	6,700	6.7
Linguistics	3,100	3.1	1,400	1.4
American Studies	2,100	2.1	400	0.4
Religious Studies	2,300	2.3	1,800	1.7
Unspecified Other Humanities	2,200	2.2	3,100	3.1
Nonhumanities‡	N/A	N/A	22,700	22.5
No Report on Employment Field‡	N/A	N/A	900	0.9
Not Employed‡	N/A	N/A	11,700	11.6

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to totals.

\*Includes postdoctoral appointees as well as doctorates employed full-time and part-time. See Appendix F for a listing of fields.

†For some doctorates, the area of study within history was not known. This field does not apply to field of employment.

‡Not applicable to field of degree.



## Demographic Characteristics

### Gender

Women comprised 31.7 percent of the U.S. population of humanities doctorates in 1989, a proportion that has grown continuously since the survey began in 1977, when women constituted 23.9 percent of the population (see Appendix Table E-2). The representation of women has grown most noticeably in art history (from 40.8 percent in 1977 to 54.5 percent in 1989) and in modern languages and literature (from 35.3 percent to 45.7 percent). Little growth was observed in American history, where the proportion of women has varied from 14 to 16 percent since 1977, or in philosophy, which revealed a similar pattern.

### Race/Ethnic Groups

Gains have also been made by minorities—their proportion increased from 4.7 percent of the population in 1977 to 6.8 percent in 1989, a numerical increase of approximately 3,700. The only field with a notable representation of minorities in 1989 was modern languages and literature (15.3 percent), although the majority of these were Hispanics with doctoral degrees in Spanish and Portuguese (see Table 2). Blacks represented 1.8 percent of the humanities doctoral population overall; the fields with the highest concentration of blacks were music (3.3 percent) and speech/theater (2.8 percent). Across all fields, Asians comprised 1.6 percent of the total U.S. population of humanities doctorates; their highest percentages were in art history (3.3 percent) and "other humanities" (3.5 percent).

### Age in 1989

While the racial and ethnic mix of humanities doctorates has changed only slightly over the span of this survey, the age distribution of the humanities population has shifted considerably. In 1977, the group under age 40 constituted the largest segment of the population (36.5 percent); by 1989 this group was the smallest (14.9 percent). All other age groups have increased their shares since 1977 (see Figure 2). Two factors that probably contributed to the changing age distribution of the humanities population were the decline and eventual leveling off of Ph.D. production in the humanities since the peak in 1973 and the increasing median age at which humanists earn their degrees (from 32 years in 1973 to 35 years in 1988).<sup>3</sup>

Across fields, the age distribution varied considerably, with music and "other humanities" having the largest shares of doctorates under 40 and speech/theater having the largest share 60 or older in 1989 (see Table 2).

### Year of Doctorate

Highly correlated with age is the year in which the doctoral degree was awarded. Music and "other humanities," which had the highest proportions of young doctorates, also had the highest proportions of doctorates granted in the 1980-1988 time period,

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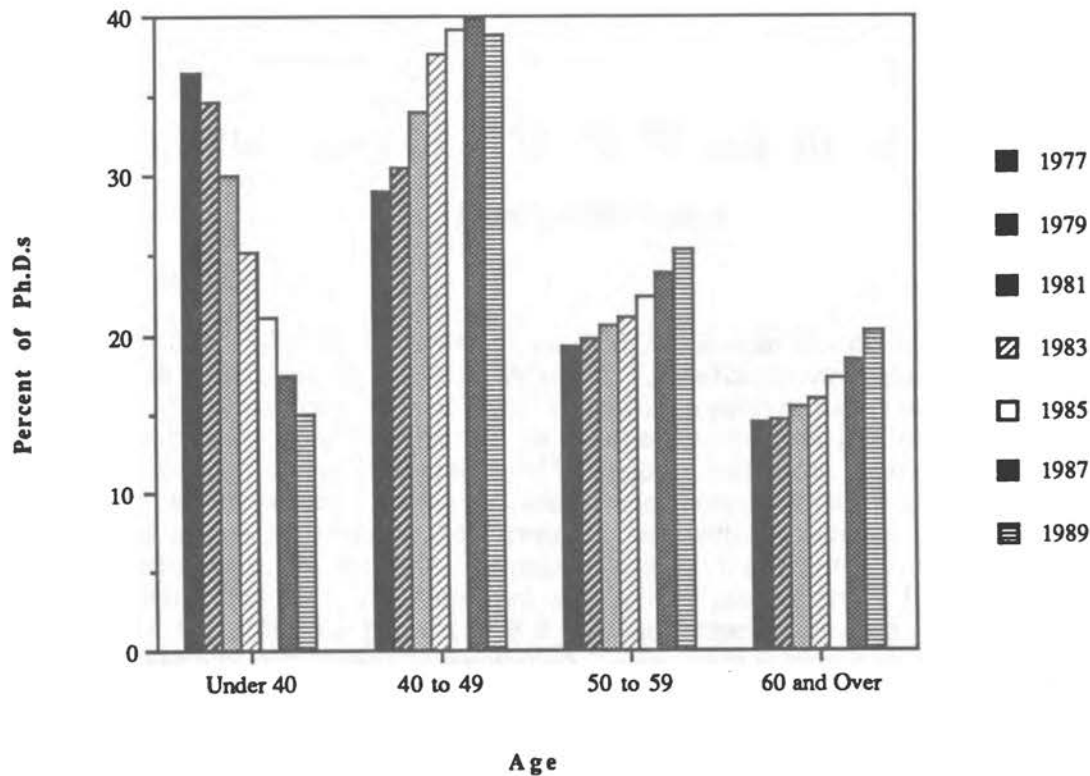
<sup>3</sup>Delores H. Thurgood and Joanne M. Weinman, *Summary Report 1988: Doctorate Recipients from United States Universities*, Washington, D.C.: National Academy Press, 1989.

Table 2: Demographic Characteristics of Humanities Ph.D.s (1946-1988 Graduates), by Field of Doctorate, 1989 (in percent)

Demographic Characteristics	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
Total Population (No.)	100,700	10,000	12,700	3,100	8,300	4,200	7,500	26,000	2,000	17,400	9,600
Gender											
Male	68.3	84.5	78.7	45.5	75.5	73.2	83.8	62.6	70.0	54.3	65.3
Female	31.7	15.5	21.3	54.5	24.5	26.8	16.2	37.4	30.0	45.7	34.7
Racial/Ethnic Group											
White	92.7	95.8	93.1	93.5	93.5	95.0	95.4	96.0	98.6	84.2	90.4
Minority Group	6.8	3.9	6.5	6.3	5.8	4.6	4.3	3.8	1.4	15.3	8.1
Hispanic	3.2	0.5	2.3	1.7	1.0	0.6	1.5	1.3	0.5	11.6	2.0
Black	1.8	2.4	1.8	1.0	3.3	2.8	0.6	1.6	0.6	1.5	2.4
Asian	1.6	0.9	1.9	3.3	1.4	0.5	1.9	0.8	0.0	2.0	3.5
American Indian	0.2	0.1	0.6	0.3	0.2	0.7	0.3	0.0	0.4	0.2	0.2
Other	0.1	0.3	0.0	0.2	0.3	0.2	0.0	0.1	0.0	0.0	0.5
No Report	0.3	0.0	0.4	0.0	0.4	0.2	0.3	0.2	0.0	0.5	0.9
Age In 1989											
Under 30	0.2	0.2	0.1	0.0	0.7	0.1	0.4	0.1	0.5	0.1	0.4
30-34	3.8	2.8	2.1	2.0	7.1	3.0	6.0	3.3	5.5	3.3	5.2
35-39	10.9	7.3	10.3	13.7	14.8	8.5	10.5	9.8	9.7	10.2	16.6
40-49	38.8	38.2	38.6	45.6	38.7	27.8	40.6	37.3	40.6	38.9	44.1
50-59	25.4	27.4	27.7	21.5	21.1	28.5	24.6	25.7	23.9	27.0	21.4
60 and over	20.3	24.1	20.6	16.4	16.1	31.6	17.3	23.1	19.5	19.7	11.7
No Report	0.7	0.0	0.6	0.8	1.6	0.5	0.6	0.7	0.3	0.8	0.6
Year of Doctorate											
1946-1949	1.5	2.6	1.9	0.8	0.6	0.5	1.6	1.8	2.3	1.4	0.7
1950-1959	8.9	12.9	10.6	6.0	5.3	11.0	9.6	9.2	9.3	8.3	5.2
1960-1969	20.0	22.7	23.3	14.2	12.7	29.9	21.6	22.5	28.2	18.1	10.4
1970-1979	41.8	41.4	43.0	42.0	38.6	31.8	42.2	43.1	37.8	45.0	38.5
1980-1988*	27.8	20.4	21.3	36.9	42.8	26.8	25.0	23.4	22.4	27.2	45.2
Citizenship											
U.S.	96.7	98.9	98.4	95.3	97.7	99.1	96.8	98.6	96.8	91.3	95.5
Foreign	3.3	1.1	1.6	4.7	2.3	0.9	3.2	1.4	3.2	8.7	4.5

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Excludes Ph.D.s awarded from 7/88 to 12/88.



NOTE: See Appendix Table E-2.

FIGURE 2. Age distribution of humanities Ph.D.s, time-series, 1977-1989.

42.8 percent and 45.2 percent respectively. On the other hand, only 20.4 percent of American history and 21.3 percent of "other history" doctorates were held by 1980-1988 graduates.

For the humanities population overall, the proportion of Ph.D.s who had earned their degrees in the 1980s (27.8 percent) declined from the 1970s (41.8 percent). This tendency was true for American history, "other history," philosophy, and the language and literature fields. In art history, music, speech/theater, and "other humanities," however, the production of Ph.D.s in the 1980s kept pace with or increased from the 1970s levels.

### Citizenship Status

Only 3.3 percent of humanists were foreign citizens, although the distribution across fields varied. Modern languages and literature had the highest percentage of foreign citizens (8.7 percent); art history and "other humanities" were also above average with 4.7 percent and 4.5 percent, respectively. The field of speech/theater had the lowest proportion (0.9 percent) of foreign citizens. It should be noted that foreign-earned doctorates are not included in the survey of humanities doctorates; the foreign citizens tabulated here earned their doctoral degrees in the United States.



## EMPLOYMENT PATTERNS IN THE HUMANITIES

### Employment Status

#### Total Graduates

In February 1989, 80.1 percent of the 100,700 humanities doctorates in the United States were employed full-time. Another 7.8 percent were employed part-time,<sup>4</sup> 0.6 percent held postdoctoral appointments, and 11.6 percent were not employed because of retirement or for other reasons. Little change has occurred in this pattern since 1987 with the exception of the "not employed" category, where the retired group grew from 7.6 percent to 8.8 percent. However, when the employment status of humanities Ph.D.s is analyzed across all years of the survey, certain patterns emerge. The proportion of full-time employed, for example, decreased from 83.0 percent in 1977 to 80.1 percent in 1989, while the part-time employed and retired groups grew, from 4.9 percent to 7.8 percent and from 5.8 percent to 8.8 percent, respectively (see Appendix Table E-3). The changing demographics mentioned earlier—that is, the increasing representation of women and the aging of the humanities population—may help to explain the increase in the part-time employment<sup>5</sup> and retirement rates, respectively.

In Table 3, the 1989 employment status is presented by field of doctorate. Philosophy as well as classical languages and literature had the highest percentages of doctorate recipients who were employed full-time (85.5 percent and 85.8 percent, respectively), while only 73.8 percent of speech/theater Ph.D.s were employed full-time. Part-time employment was highest among music Ph.D.s (12.9 percent). In both American history and speech/theater, 14.7 percent of the doctorates were retired, resulting in these two fields having the highest percentages who were not employed (15.7 percent and 16.3 percent, respectively). Although the category "not employed" includes a mix of possible situations (as seen in Table 3), the majority of those not employed across all fields were retired.

#### Recent Graduates

Full-time employment among recent graduates (1983-1988 humanities doctorate recipients<sup>6</sup>) was roughly the same as for all humanities doctorates, approximately 80 percent, but a higher percentage of recent graduates were employed part-time (13.6 percent compared with 7.8 percent for the total cohort). As might be expected, very few (less than 1 percent) of the recent graduates were retired in 1989 (see Table 4).

Across fields, the distribution of recent graduates was similar between full-time and part-time employment, with two exceptions. Music Ph.D.s were employed part-time at the rate of 20.8 percent, compared with the average for recent graduates of

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<sup>4</sup>Retired individuals working part-time were classified as employed part-time.

<sup>5</sup>In 1989, 12.8 percent of female humanists were employed part-time, compared with 5.4 percent of men.

<sup>6</sup>This six-year time frame was selected to maintain consistency with earlier reports and to provide enough cases to permit disaggregation by field.

TABLE 3: Employment Status of Humanities Ph.D.s (1946-1988 Graduates), by Field of Doctorate, 1989 (in percent)

Employment Status	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
Total Population (No.)	100,700	10,000	12,700	3,100	8,300	4,200	7,500	26,000	2,000	17,400	9,600
Employed Full-Time	80.1	79.3	78.7	78.0	77.1	73.8	85.5	79.6	85.8	80.5	83.7
Employed Part-Time	7.8	4.2	9.6	9.3	12.9	9.7	6.5	7.1	5.5	7.2	7.5
Postdoctoral Appointment	0.6	0.8	0.4	1.5	0.1	0.2	0.8	0.6	0.6	0.4	0.9
Not Employed*	11.6	15.7	11.2	11.1	9.8	16.3	7.2	12.7	8.1	11.9	7.9
Seeking Employment	1.0	0.4	0.6	1.7	1.9	0.6	0.6	1.1	0.7	1.1	1.3
Not Seeking Employment	1.5	0.7	2.4	2.3	0.5	0.9	1.6	1.5	1.9	2.0	1.4
Retired	8.8	14.7	8.2	6.1	7.1	14.7	4.6	10.0	5.4	8.4	4.7
Other	0.2	0.0	0.1	1.0	0.4	0.2	0.4	0.1	0.1	0.4	0.6
No Report	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Percentages are not unemployment rates because they are based on the total population, which includes those retired, those not seeking employment, and those not reporting status, none of whom is considered part of the labor force in this report. Unemployment rates are shown in Table 5.

TABLE 4: Employment Status of Humanities Ph.D.s (1983-1988 Graduates), by Field of Doctorate, 1989 (in percent)

Employment Status	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
Total Population (No.)	17,600	1,200	1,600	700	2,400	800	1,200	3,700	300	2,900	2,800
Employed Full-Time	80.0	80.9	77.0	80.9	76.4	80.2	79.7	79.1	87.0	83.3	81.7
Employed Part-Time	13.6	11.1	13.6	11.2	20.8	15.9	13.1	14.0	3.5	11.9	10.8
Postdoctoral Appointment	1.3	2.1	0.1	3.2	0.4	0.6	2.7	0.8	3.9	0.7	2.5
Not Employed*	5.1	5.9	9.4	4.7	2.4	3.2	4.5	6.1	5.5	4.1	5.0
Seeking Employment	1.8	2.9	2.2	2.3	1.0	0.3	1.1	1.6	1.6	2.1	2.3
Not Seeking Employment	2.3	3.0	7.2	2.4	0.8	2.2	3.4	2.7	2.0	1.7	0.6
Retired	0.8	0.0	0.0	0.0	0.3	0.8	0.0	1.8	2.0	0.3	1.4
Other	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.6
No Report	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Percentages are not unemployment rates because they are based on the total population, which includes those not seeking employment, and those not reporting status, none of whom is considered part of the labor force in this report. Unemployment rates are shown in Table 6.

13.6 percent, and 87.0 percent of classical language and literature Ph.D.s were employed full-time, compared with 80.0 percent for all recent graduates.

## **Labor Force Status**

### **Total Graduates**

For the purposes of this analysis, the labor force consists of those either employed, on postdoctoral appointments, or unemployed but seeking employment. By excluding retirees and those not employed and not seeking employment, it is possible to calculate the employment and unemployment rates for the labor force.

In 1989, 90,000 humanities doctorates were in the labor force. Of these, 89.6 percent were full-time employed, 8.7 percent were part-time employed, less than 1 percent were on postdoctoral appointments, and 1.1 percent were unemployed but seeking employment (see Table 5). By field of doctorate, the proportion of humanists employed full-time was highest in American history (93.6 percent) and in classical languages and literature (92.6 percent), while the proportion employed part-time was highest in music (14.0 percent). Across all fields, the majority of those employed part-time were not seeking full-time employment (62.7 percent), although the margin was slim in philosophy (51.5 percent). Postdoctoral training does not play a strong role in the humanities as evidenced by the small portion of the humanities labor force thus engaged in 1989. Only art history doctorates were pursuing postdoctoral training at a rate of more than 1 percent.

Music doctorates had the highest unemployment rate (2.1 percent) and the highest percentage of those employed part-time but seeking full-time employment (5.2 percent). Art history revealed a similar pattern, 1.8 percent unemployed but seeking employment and 4.5 percent employed part-time but seeking full-time work.

### **Recent Graduates**

Among recent graduates, 1.9 percent were unemployed but seeking employment at the time of the survey, a rate only slightly higher than that for the total group of humanities doctorates (1.1 percent). However, of the recent graduates who were employed part-time, the percentage who were seeking full-time employment was considerably higher than that for all humanists: 8.7 percent compared with 3.2 percent, respectively (see Table 6).

American history had the highest share of recent graduates unemployed but seeking employment (3.0 percent) and a high percentage employed part-time and seeking full-time employment. Other fields with higher than average rates of recent graduates working part-time but seeking full-time work included music, philosophy, and speech theater.

## **Geographic Differences in Labor Force Status**

By geographic region, the unemployment rate ranged from a low of 0.3 percent in the East South Central region (Kentucky, Alabama, Mississippi, and Tennessee) to a high of 1.8 percent in the Pacific region (Alaska, California, Hawaii, Oregon, and Washington). With the exception of the U.S. possessions, the Pacific region also had



TABLE 5: Employment and Unemployment of Humanities Ph.D.s (1946-1988 Graduates) in the United States Labor Force, by Field of Doctorate, 1989 (in percent)

Employment Status	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
1989 Ph.D. Labor Force* (No.)	90,000	8,500	11,300	2,800	7,600	3,500	7,000	22,900	1,800	15,500	9,000
Employed Full-Time	89.6	93.6	88.1	86.3	83.8	87.6	91.5	90.1	92.6	90.3	89.6
Employed Part-Time†	8.7	5.0	10.8	10.3	14.0	11.5	7.0	8.0	5.9	8.1	8.0
Seeking Full-Time	3.2	1.9	3.6	4.5	5.2	3.6	3.4	3.0	1.3	3.5	2.1
Not Seeking Full-Time	4.9	1.8	6.5	4.7	8.1	7.9	3.3	4.4	4.6	4.3	5.0
Postdoctoral Appointment	0.6	1.0	0.5	1.6	0.1	0.3	0.9	0.6	0.7	0.5	0.9
Unemployed/Seeking	1.1	0.4	0.6	1.8	2.1	0.7	0.7	1.2	0.8	1.2	1.4

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Includes full-time and part-time employed, postdoctoral appointees, and those seeking employment.

†Includes those who did not report whether they were seeking full-time employment.

TABLE 6: Employment and Unemployment of Humanities Ph.D.s (1983-1988 Graduates) in the United States Labor Force, by Field of Doctorate, 1989 (in percent)

Employment Status	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
1989 Labor Force* (No.)	17,000	1,100	1,500	700	2,400	800	1,100	3,600	200	2,800	2,700
Employed Full-Time	82.7	83.4	83.0	82.9	77.5	82.7	82.5	82.8	90.6	85.0	83.9
Employed Part-Time†	14.1	11.5	14.6	11.4	21.1	16.4	13.5	14.7	3.7	12.1	11.1
Seeking Full-Time	8.7	11.2	7.9	9.8	11.6	10.0	11.8	8.1	1.6	8.4	5.1
Not Seeking Full-Time	5.1	0.0	5.5	1.7	8.2	6.4	1.7	6.6	2.0	3.7	5.8
Postdoctoral Appointment	1.4	2.2	0.1	3.3	0.5	0.7	2.8	0.9	4.1	0.7	2.6
Unemployed/Seeking	1.9	3.0	2.3	2.3	1.0	0.3	1.2	1.7	1.6	2.1	2.4

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Includes those employed full-time or part-time, postdoctoral appointees, and those seeking employment.

†Includes those who did not report whether they were seeking full-time employment.

the highest percentage of humanities doctorates employed part-time and the lowest percentage employed full-time (see Table 7). The rate of full-time employment was highest in the East South Central region and the South Atlantic region (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia) at 93.3 percent each, followed closely by the West North Central region (Iowa, Kansas, Minnesota, Missouri, North Dakota, Nebraska, and South Dakota) where the rate of full-time employment was 92.3 percent.

### Field Mobility

In this report, the percentage of employed individuals with degrees in a particular field who were also working in that field is called the "retention rate" of the field.<sup>7</sup> In 1989, the retention rates ranged from highs of 85.8 percent in music and 82.5 percent in art history to a low of 40.1 percent in the composite field "other humanities" (see Table 8). A review of specific fields included in "other humanities" (see footnote 2) shows a wide variation in retention rates, but all were below 50 percent.

In the humanities population overall, there was little mobility between humanities fields. The only fields with more than 5 percent of their doctorates employed in another humanities discipline were American history (9.0 percent employed in "other history"), "other history" (6.5 percent employed in American history), and English and American languages and literature (6.6 percent employed in "other humanities").

Approximately one-fourth of all humanities doctorates were employed in a nonhumanities discipline. The fields with the highest proportions of doctorates working in a nonhumanities specialty were "other history" (29.4 percent), speech/theater (30.9 percent), philosophy (32.9 percent), and "other humanities" (36.4 percent). A closer look at the disciplines in which these doctorates were working revealed some differences in the distributions. Doctorates in "other history" working outside the humanities fields were concentrated in the social sciences and education; doctorates in speech/theater were also clustered in the social sciences, primarily in communications. Doctorates in philosophy working in nonhumanities fields were found mainly in mathematics, computer sciences, law/jurisprudence, and education. Finally, "other humanities" doctorates were concentrated in social sciences, theology, and education, a reasonable mix given that "other humanities" includes primarily doctorates in religious studies, American studies, and linguistics.

For all humanities doctorates combined, education was the single most popular nonhumanities employment specialty, attracting 21.7 percent of the humanists working outside the humanities areas (see Figure 3). A review of the work activities of these individuals revealed that more than one-half of them were engaged primarily in the management/administration of educational programs, some of which were probably in the humanities.

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<sup>7</sup>For the calculation of the "retention rate," employed individuals includes those either employed full-time or part-time or on postdoctoral appointments.

TABLE 7: Labor Force Status of Humanities Ph.D.s (1946-1988 Graduates) in the United States, by Region, 1989 (in percent)

1989 Location (Region)	Total Ph.D. Labor Force (No.)*	Employed Full-time	Employed Part-time	Postdoctoral Appointment	Unemployed & Seeking Employment
All Regions	90,000	89.6	8.7	0.6	1.1
New England	8,400	89.4	9.2	0.7	0.7
Middle Atlantic	16,400	88.5	9.0	0.9	1.6
East North Central	14,300	90.4	7.6	0.8	1.3
West North Central	7,100	92.3	6.7	0.3	0.7
South Atlantic	15,700	93.3	5.7	0.3	0.7
East South Central	4,100	93.3	6.3	0.2	0.3
West South Central	7,200	90.1	7.9	1.0	1.0
Mountain	4,300	86.6	12.1	0.2	1.1
Pacific	12,000	83.6	13.9	0.8	1.8
U.S. Possessions	300	71.6	26.6	1.8	0.0

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total. Regions by state areas follows: New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont); Middle Atlantic (New Jersey, New York, Pennsylvania); East North Central (Illinois, Indiana, Michigan, Ohio, Wisconsin); West North Central (Iowa, Kansas, Minnesota, Missouri, North Dakota, Nebraska, South Dakota); South Atlantic (Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia); East South Central (Kentucky, Alabama, Mississippi, Tennessee); West South Central (Arkansas, Louisiana, Oklahoma, Texas); Mountain (Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming); and Pacific (Alaska, California, Hawaii, Oregon, Washington).

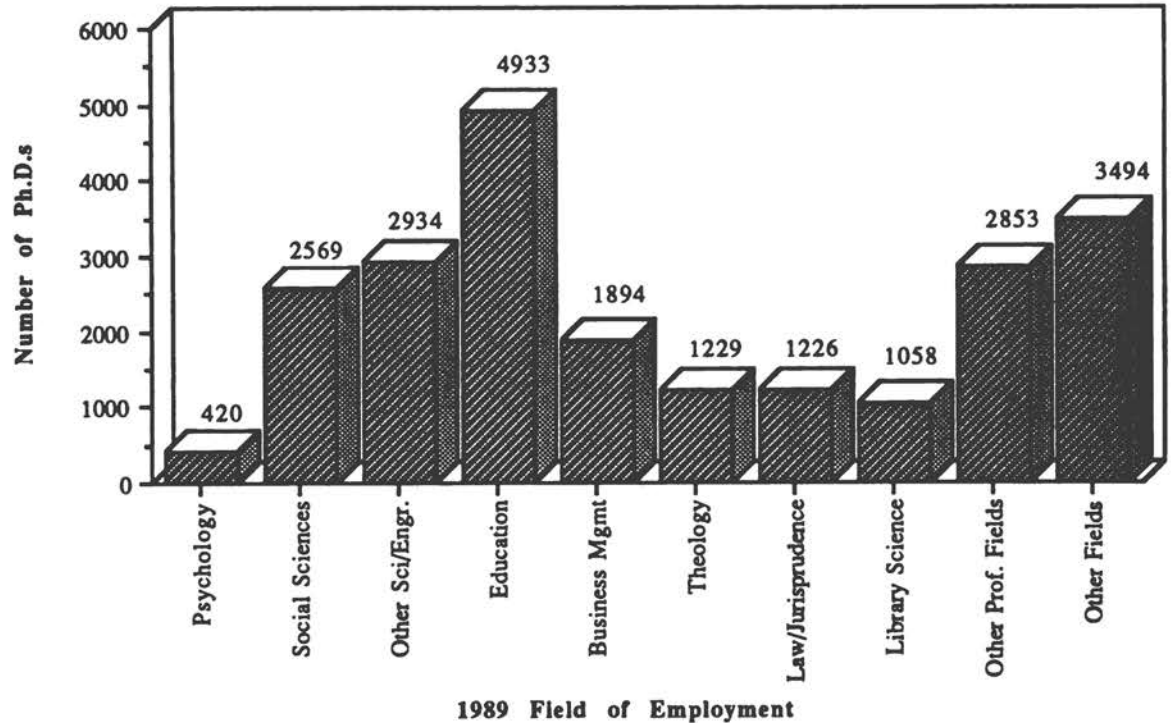
\*Includes those employed full-time or part-time, postdoctoral appointees, and those seeking employment.

TABLE 8: Field Retention and Mobility of Employed Humanities Doctorates (1946-1988 Graduates), 1989 (in percent)

1989 Field of Employment	Field of Doctorate										
	Total Employed	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
All Fields (No.)	89,000	8,400	11,200	2,700	7,500	3,500	7,000	22,700	1,800	15,300	8,900
American History	7.0	63.0	6.5	0.0	0.0	0.3	0.0	0.1	0.3	0.0	2.0
"Other History"	8.9	9.0	59.6	0.3	0.0	0.1	0.4	0.5	2.2	0.5	1.8
Art History	2.9	0.8	0.8	82.5	0.0	0.0	0.1	0.0	0.5	0.1	1.4
Music	7.2	0.0	0.0	0.0	85.8	0.1	0.0	0.0	0.0	0.1	0.3
Speech/Theater	2.6	0.0	0.1	0.0	0.0	60.2	0.1	0.7	0.0	0.2	0.2
Philosophy	5.0	0.0	0.5	0.3	0.0	0.0	61.3	0.0	0.7	0.1	0.6
English/Amer Lang & Lit	17.8	0.0	0.1	0.3	0.1	3.2	1.0	62.3	0.6	3.4	10.9
Classical Lang & Lit	1.5	0.0	0.2	0.0	0.0	0.1	0.0	0.0	62.8	0.9	0.7
Modern Lang & Lit	13.0	0.0	0.6	0.0	0.3	0.7	0.2	2.1	3.3	68.8	4.4
"Other Humanities"	7.6	3.0	1.5	2.5	0.5	3.2	3.0	6.6	4.8	4.8	40.1
Nonhumanities	25.5	23.0	29.4	12.9	12.2	30.9	32.9	26.9	24.1	19.9	36.4
No Report	1.0	1.2	0.8	1.2	1.2	1.1	1.0	0.8	0.7	1.1	1.3

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Includes postdoctoral appointees as well as Ph.D.s employed full-time and part-time.



NOTE: See Appendix Table F-1.

FIGURE 3. Distribution of humanities Ph.D.s employed in nonhumanities fields, 1989.

## Employment Sector

### Total Graduates

Since 1977, humanities doctorates employed full-time or part-time were most likely to be employed in educational institutions,<sup>8</sup> followed by business/industry and the nonprofit sectors. However, between 1977 and 1987, the proportion employed in educational institutions declined from 89.9 percent to 81.0 percent as the proportion employed in the business sector grew from 3.2 percent to 9.8 percent (see Appendix Table E-4).

In 1989, more than three-fourths of the doctorates across all fields except "other humanities" were employed in educational institutions; the language and literature fields had the highest percentages, about 84 percent (see Table 9). Doctorates in speech/theater were more likely than other Ph.D.s to be employed in 2-year colleges (7.1 percent) and doctorates in classical languages and literature were more likely than other Ph.D.s to work in elementary/secondary schools (6.6 percent). Between 11 and 12 percent of doctorates in music, philosophy, speech/theater, English and American languages and literature, and "other humanities" were employed in business/industry,

<sup>8</sup>Educational institutions include 2-year and 4-year colleges, universities, medical schools, and elementary/secondary schools.

TABLE 9: Type of Employer of Humanities Ph.D.s (1946-1988 Graduates), by Field of Doctorate, 1989 (in percent)

Type of Employer	Total Employed	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
Employed Population* (No.)	88,400	8,300	11,200	2,700	7,400	3,500	6,900	22,500	1,800	15,300	8,800
Educational Institution	81.0	79.2	79.2	76.1	78.1	83.3	80.5	84.2	84.6	84.8	73.2
4-Year Coll/Univ	73.4	70.7	71.1	73.9	72.8	74.1	73.1	74.8	77.4	77.6	67.2
2-Year College	4.6	5.9	5.3	1.6	3.0	7.1	4.8	5.9	0.6	3.2	3.1
Elem/Secondary Schools	3.1	2.6	2.8	0.6	2.2	2.0	2.6	3.5	6.6	3.9	2.9
Business/Industry	9.8	5.7	8.0	8.5	12.0	11.8	11.2	11.0	7.4	8.8	11.6
Self-Employed	3.8	1.8	2.2	5.1	6.6	5.7	3.0	4.0	2.4	3.7	5.0
Not Self-Employed	6.0	4.0	5.8	3.3	5.4	6.1	8.2	7.0	5.0	5.1	6.5
U.S. Government	2.7	6.0	7.3	1.6	0.7	0.3	1.9	1.0	0.7	2.5	2.5
State/Local Government	1.1	0.7	0.7	0.9	0.5	0.2	1.1	0.9	1.8	0.9	3.2
Non-Profit Organization	5.1	8.0	4.7	12.8	8.1	4.4	4.9	2.7	5.5	2.8	8.9
No Report	0.2	0.0	0.0	0.0	0.7	0.0	0.3	0.2	0.0	0.1	0.2

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total. Percentages for those reporting "other" types of employers are not included in this table; therefore, totals may not add to 100 percent.

\*Includes those employed full-time or part-time.

including those self-employed. In fact, in art history and music, those self-employed constituted more than one-half of the business sector. Doctorates in art history had the highest proportion employed in the nonprofit sector (12.8 percent, compared to 5.1 percent for all humanities doctorates); most of them were employed in museums. American history doctorates were the most likely to be employed by the federal government (7.3 percent, compared to an overall average of 2.7 percent).

### **Recent Graduates**

The distribution across employment sectors for recent graduates in the humanities was similar to that for humanities doctorates overall: they were most frequently employed in 4-year colleges and universities, followed by business/industry and the nonprofit sector (see Table 10). However, within fields there were some notable differences between the distributions of the recent graduates and the total cohort. Both in classical languages and literature and also in English and American languages and literature, a much higher proportion of recent doctorates were employed in educational institutions (92.2 percent and 89.7 percent, respectively) than for those fields as a whole (84.6 and 84.2 percent). About 18 percent of the recent doctorates in "other humanities" were employed in business/industry in 1989 compared to 11.6 percent of the total cohort in that composite field. On the other hand, the business/industry sector accounted for only 6.0 percent of recent graduates in English and American languages and literature, compared to 11.0 percent of all doctorates in this field.

### **Primary Work Activity**

#### **Total Graduates**

In 1989, teaching was the primary work activity for 63.1 percent of the humanities doctorates who were employed full-time or part-time, followed by management/administration (14.9 percent) and research and development (5.2 percent). The remaining 15.6 percent of doctorates were distributed among a variety of primary work activities. This pattern of work activities has changed over time, paralleling the shift toward employment in noneducational settings. In 1977, 69.5 percent of the humanities doctorates were engaged primarily in teaching; by 1985 this figure had declined to 63.5 percent and has remained at approximately that level (see Appendix Table E-5). The percentage in management/administration, on the other hand, increased from 10.9 percent in 1977 to 14.9 percent in 1989.

By field of doctorate, there were variations in the proportions in the major work activities in 1989 (see Table 11). Teaching was the primary pursuit of 68.2 percent of the modern languages and literature doctorates and 67.7 percent of speech/theater doctorates, but of only 53.1 percent of the doctorates in "other humanities." Approximately 20 percent of the doctorates in American history and "other humanities" were engaged primarily in management/administration in 1989. Lower shares were evident for modern languages and literature and also for classical languages and literature doctorates (11.7 and 10.1 percent, respectively).

Research and development was the primary activity of 9.8 percent and 10.7 percent of the doctorates in classical languages and literature and "other humanities," respectively, while fewer than 2 percent of the doctorates in music and speech/theater were similarly engaged. Performing arts continued to be the primary activity for a sizable proportion of doctorates in music, 10.6 percent.



TABLE 10: Type of Employer of Humanities Ph.D.s (1983-1988 Graduates), by Field of Doctorate, 1989 (in percent)

Type of Employer	Total Employed	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum
Employed Population* (No.)	16,500	1,100	1,400	700	2,400	700	1,100	3,500	200	2,800	2,600
Educational Institution	81.9	82.1	79.0	75.6	77.4	82.9	82.3	89.7	92.2	87.9	70.9
4-Year Coll/Univ	73.7	69.9	76.6	73.4	70.1	75.8	71.2	78.4	80.4	78.9	65.5
2-Year College	4.1	4.4	2.5	1.5	2.7	6.2	8.3	5.5	0.0	4.6	2.3
Elem/Secondary Schools	4.1	7.7	0.0	0.7	4.6	0.9	2.8	5.8	11.7	4.4	3.1
Business/Industry	9.1	2.1	5.3	5.3	13.6	10.4	8.9	6.0	6.5	6.5	17.8
Self-Employed	4.2	2.1	1.6	2.0	7.9	7.8	2.1	1.6	0.4	3.2	8.7
Not Self-Employed	4.9	0.0	3.7	3.2	5.7	2.6	6.7	4.4	6.1	3.3	9.1
U.S. Government	2.5	4.4	11.2	1.8	0.0	0.0	4.5	0.0	0.0	2.3	2.8
State/Local Government	0.4	2.1	1.3	1.0	0.0	0.0	0.7	0.0	0.0	0.1	0.3
Non-Profit Organization	5.6	6.2	3.2	16.4	8.7	6.7	2.3	4.3	1.3	3.1	7.0
No Report	0.2	0.3	0.0	0.0	0.3	0.0	1.4	0.0	0.0	0.1	0.0

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total. Percentages for those reporting "other" types of employers are not included in this table; therefore, totals may not add to 100 percent.

\*Includes those employed full-time or part-time.

TABLE 11: Primary Work Activity of Humanities Ph.D.s (1946-1988 Graduates), by Field of Doctorate, 1989 (in percent)

Primary Work Activity	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
Employed Population* (No.)	88,400	8,300	11,200	2,700	7,400	3,500	6,900	22,500	1,800	15,300	8,800
Teaching	63.1	59.1	58.6	61.6	66.2	67.7	62.5	65.9	64.9	68.2	53.1
Management/Administration	14.9	20.5	17.0	16.7	11.0	14.5	12.6	14.5	10.1	11.7	19.0
Mgmt of Education Prog	9.2	11.0	11.3	7.5	8.7	10.5	7.4	9.5	6.0	8.6	7.5
Mgmt of Other Programs	5.7	9.4	5.7	9.2	2.4	4.0	5.2	5.1	4.1	3.1	11.5
Research & Development	5.2	5.4	6.8	5.6	1.9	1.5	8.6	2.6	9.8	4.9	10.7
Writing/Editing	4.5	6.6	5.4	2.7	1.5	2.0	2.9	6.7	3.6	3.9	2.1
Performing Arts	1.0	0.0	0.0	0.0	10.6	2.3	0.0	0.0	0.0	0.0	0.2
Consult/Professional Svcs	3.8	2.9	2.3	2.8	2.2	6.3	6.0	4.8	2.9	2.9	4.8
Other Activities	6.3	4.9	9.5	7.9	5.2	4.3	6.3	4.7	7.3	6.1	9.3
No Report	1.2	0.5	0.5	2.7	1.4	1.3	1.3	0.7	1.5	2.3	0.8

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Includes those employed full-time or part-time.

## Recent Graduates

While educational institutions employed approximately the same proportion of recent graduates as humanities doctorates overall, recent graduates were more likely than all humanities doctorates to be engaged primarily in teaching (69.9 percent and 63.1 percent, respectively). The incidence of teaching among recent graduates was higher across all fields as well—particularly in classical languages and literature, in which 82.6 percent of recent graduates reported teaching as their primary work activity, compared with 64.9 percent for the total cohort (see Table 12). As noted earlier, recent graduates in this field were also the most likely to be employed in educational institutions.

On the other hand, management/administration was less prevalent as a primary work activity for recent graduates, especially the management of educational programs (4.0 percent for the recent cohort, compared to 9.2 percent for the total cohort). Both the total cohort of American history doctorates and the recent graduates in this field had the highest proportion engaged primarily in management, but most recent graduates were managing programs in areas other than education.

Overall, recent humanities doctorates were engaged in writing/editing at the same rate as the total humanities population. However, the fraction of philosophy Ph.D.s engaged primarily in this work activity was larger among recent graduates (7.4 percent) than among all doctorates in this field (2.9 percent). Performing arts was the primary activity for a notable proportion of both the total cohort and recent cohort of music doctorates.

### Median Annual Salary, by Years Since Degree and Gender

The median annual salary<sup>9</sup> for humanities doctorates in 1989 was \$42,000, representing an 8.0 percent increase over the 1987 level of \$38,900 (see Appendix Table E-6). As shown in Table 13, there was nearly a \$10,000 spread between the median salaries earned by the highest paid group, American history doctorates (\$47,200), and the lowest paid group, music doctorates (\$37,400). Taking years since doctorate into account, the range across fields was fairly narrow for the most recent cohort (\$30,400-\$34,100) and broadest for the oldest cohorts.

An examination of salary differences by gender shows that women earned less than men overall, a pattern evident by field as well (see Figure 4). The difference was smallest among doctorates in music (\$35,400 for women, compared with \$37,900 for men) and largest in American history (\$40,900 for women, compared to \$48,300 for men). When years since doctorate were considered, the salaries of men and women were shown to be most disparate in the "21-30" and "over 30" years since doctorate groups. Within the most recent cohort (those with 5 or less years since earning the doctorate), salaries of women and men were roughly the same.

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<sup>9</sup>The median annual salaries examined in this report are for Ph.D.s employed full-time, excluding those in the military. Salaries of academics who were paid for a 9- to 10-month schedule are adjusted (by a factor of 11/9) to represent a full-time work year.

TABLE 12: Primary Work Activity of Humanities Ph.D.s (1983-1988 Graduates), by Field of Doctorate, 1989 (in percent)

Primary Work Activity	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
Employed Population* (No.)	16,500	1,100	1,400	700	2,400	700	1,100	3,500	200	2,800	2,600
Teaching	69.9	61.7	64.5	67.8	72.3	73.8	76.5	72.8	82.6	78.5	56.9
Management/Administration	8.2	14.2	6.8	9.8	4.5	7.9	5.2	11.1	1.7	5.6	10.3
Mgmt Education Prog	4.0	3.0	3.5	3.1	3.5	3.6	0.0	7.5	0.0	3.3	3.8
Mgmt of Other Programs	4.2	11.2	3.3	6.7	1.1	4.3	5.2	3.6	1.7	2.2	6.5
Research & Development	5.9	7.5	11.8	4.5	3.1	3.4	4.4	1.9	8.3	6.5	10.5
Writing/Editing	4.5	5.8	4.6	2.9	0.7	4.0	7.4	8.4	1.3	3.2	2.9
Performing Arts	2.0	0.0	0.0	0.0	11.9	4.4	0.0	0.0	0.0	0.1	0.4
Consulting/Professional Svcs	2.5	2.7	3.9	2.9	2.9	0.9	1.1	0.9	0.0	1.5	5.7
Other Activities	6.0	5.6	7.1	10.8	3.5	3.2	4.0	4.9	6.1	3.3	12.3
No Report	1.0	2.5	1.3	1.2	1.1	2.3	1.4	0.0	0.0	1.2	1.0

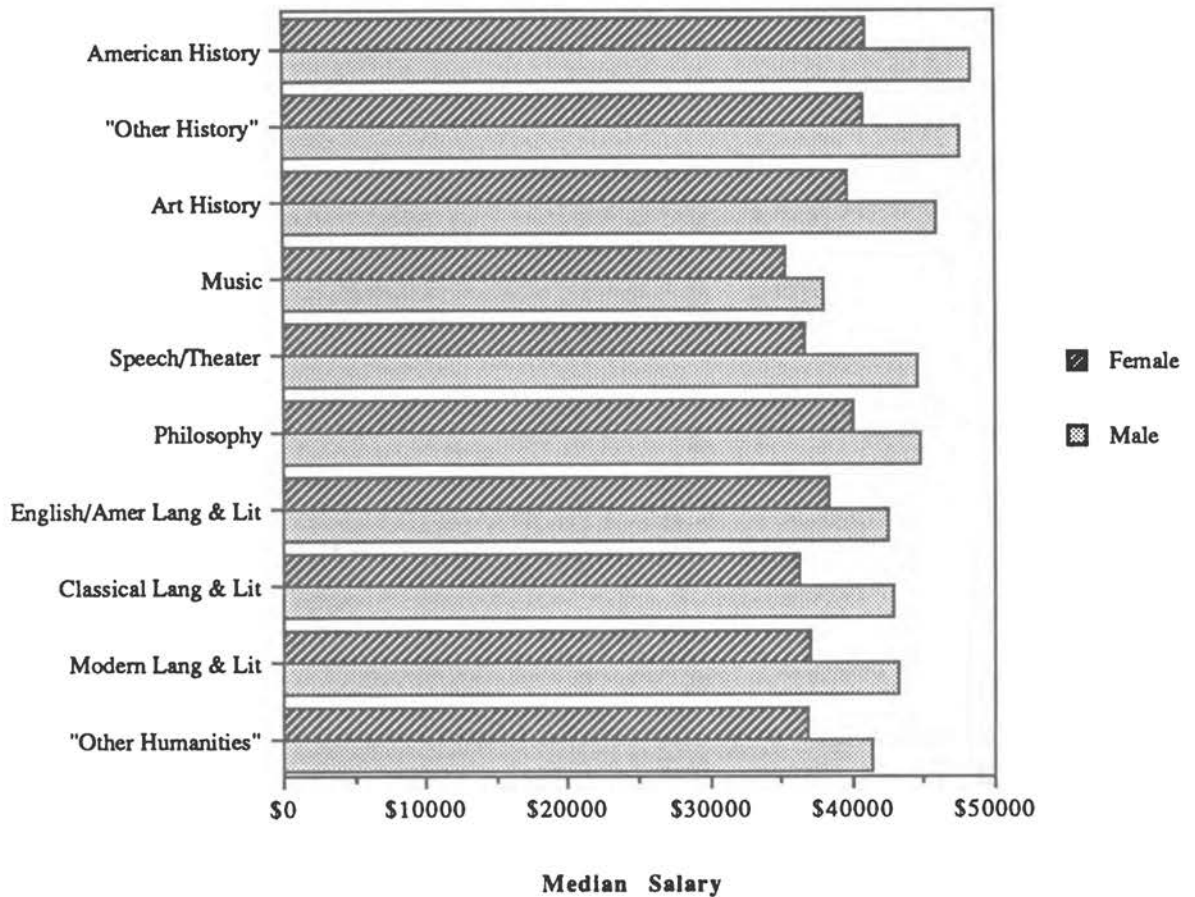
NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

\*Includes those employed full-time or part-time.

TABLE 13: Median Annual Salaries of Full-Time Employed Humanities Ph.D.s (1946-1988 Graduates), by Gender, Years Since Ph.D., and Field of Doctorate, 1989 (in thousands of dollars)

Gender and Years Since Ph.D.	All Fields	Amer Hist	"Other Hist"	Hist	Art Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
<u>Total</u>	\$42.0	\$47.2	\$45.6	\$42.3	\$37.4	\$43.3	\$43.5	\$40.9	\$40.6	\$40.8	\$40.1
5 or Less	31.2	32.6	32.7	31.7	30.4	30.4	30.4	31.0	30.9	30.7	34.1
6-10	36.7	40.1	39.1	40.4	36.3	38.3	40.5	35.7	35.0	34.8	39.2
11-15	41.3	43.5	41.8	42.7	40.6	42.6	42.6	39.4	40.0	40.1	42.4
16-20	47.0	50.3	48.0	48.2	46.9	48.0	45.2	44.7	42.9	46.9	46.0
21-30	55.0	57.2	53.3	58.5	55.2	50.8	55.7	50.9	55.3	55.5	63.4
Over 30	59.8						64.5	52.4		61.3	
<u>Male, Total</u>	\$43.2	\$48.3	\$47.5	\$45.8	\$37.9	\$44.6	\$44.7	\$42.4	\$42.8	\$43.2	\$41.3
5 or Less	31.1	30.6	33.4	33.0	30.6	30.4	30.0	30.9	30.9	30.8	34.4
6-10	37.5	39.4	38.5	43.5	36.5	39.9	41.3	36.3	35.8	35.0	40.2
11-15	42.0	45.0	41.6	48.4	41.0	44.5	42.6	40.3	40.3	40.4	42.5
16-20	47.3	50.2	47.9	48.7	50.6	48.1	45.2	44.5	45.5	47.9	46.3
21-30	55.6	56.8	52.6	59.6	55.6	50.6	57.3	52.9	56.2	55.8	
Over 30	60.8										
<u>Female, Total</u>	\$38.0	\$40.9	\$40.8	\$39.7	\$35.4	\$36.7	\$40.0	\$38.3	\$36.3	\$37.0	\$36.9
5 or Less	31.2		30.4	31.3	30.1	30.4	34.3	31.3	30.7	30.6	34.0
6-10	36.1	40.4	41.4	38.6	33.9	34.9	34.1	34.1	30.9	33.9	36.9
11-15	39.7	39.6	42.2	41.9	40.2	39.2	42.7	37.8	38.1	39.9	41.2
16-20	45.3	52.3	48.5	44.6	43.8	44.4	42.9	46.0	39.5	44.4	45.2
21-30	50.8		53.8	55.6	43.7		47.2	48.6		52.2	52.5
Over 30	55.1										

NOTE: Median salaries were computed only for Ph.D.s employed full-time, excluding those in the U.S. military. Academic salaries were multiplied by 11/9 to adjust for a full-time scale. Medians were not provided for cells with less than 20 cases reporting salary.



NOTE: See Table 13.

FIGURE 4. Median annual salaries of humanities Ph.D.s employed full-time, by field of doctorate and gender, 1989.

#### Median Annual Salary, by Employment Sector and Gender

Another factor to be considered when examining salaries is the sector of employment. Table 14 presents median annual salaries of humanities doctorates by degree field, gender, and five major employment sectors: 4-year colleges and universities, 2-year colleges, elementary/secondary schools, business/industry, and government. Humanists employed by business/industry earned the highest median salary (\$45,800), and those employed by elementary/secondary schools earned the lowest (\$36,700).

By field, the highest paid group were doctorates in American history working in the government sector (\$51,800). Music doctorates working in business/industry (including those self-employed) had the lowest median annual salary (\$31,600).

TABLE 14: Median Annual Salaries of Full-Time Employed Humanities Ph.D.s (1946-1988 Graduates), by Gender, Type of Employer, and Field of Doctorate, 1989 (in thousands of dollars)

Gender and Type of Employer	All Fields	Amer Hist	"Other Hist"	Art Hist	Music	Speech/Theater	Phil	Engl/Amer Lang & Lit	Class Lang & Lit	Modern Lang & Lit	"Other Hum"
<u>Total</u>	\$42.0	\$47.2	\$45.6	\$42.3	\$37.4	\$43.3	\$43.5	\$40.9	\$40.6	\$40.8	\$40.1
Educational Institution	42.2	47.3	47.1	42.5	39.3	43.6	42.6	41.0	41.4	41.1	39.7
4-Yr Coll/Univ	42.2	47.4	47.6	42.5	39.2	43.1	42.6	41.4	42.0	40.9	39.2
2-Year College	45.1	50.6	43.3			51.0	48.1	40.4		47.7	48.7
Elem/Secondary Schools	36.7							36.9	36.4	40.5	
Business/Industry*	45.8	47.4	47.2	50.2	31.6	50.7	52.2	41.7	43.0	44.5	50.9
Government	42.1	51.8	41.9				51.6	40.5		40.5	40.5
<u>Male, Total</u>	\$43.2	\$48.3	\$47.5	\$45.8	\$37.9	\$44.6	\$44.7	\$42.4	\$42.8	\$43.2	\$41.3
Educational Institution	43.8	48.5	48.2	45.6	39.8	44.6	42.9	42.4	44.5	43.7	41.7
4-Yr Coll/Univ	43.9	48.3	48.5	45.7	39.8	44.1	43.4	42.6	44.5	43.5	40.6
2-Year College	47.9							40.6		50.1	
Elem/Secondary Schools	36.7							40.1		45.6	
Business/Industry*	50.0				32.7		52.8	47.2		42.9	55.6
Government	42.2		41.9							40.9	
<u>Female, Total</u>	\$38.0	\$40.9	\$40.8	\$39.7	\$35.4	\$36.7	\$40.0	\$38.3	\$36.3	\$37.0	\$36.9
Educational Institution	37.9	41.9	39.8	39.6	36.5	37.5	39.5	38.0	37.3	36.9	36.8
4-Yr Coll/Univ	37.7	41.8	39.8	39.4	36.4	37.6	39.0	37.9	37.9	36.7	36.6
2-Year College	42.1							39.9		45.8	
Elem/Secondary Schools	36.9									37.4	
Business/Industry*	40.4				24.1		50.5	40.0		44.5	37.5
Government	40.7									35.2	

NOTE: Median salaries were computed only for Ph.D.s employed full-time, excluding those in the U.S. military. Academic salaries were multiplied by 11/9 to adjust for a full-time scale. Medians were not provided for cells with less than 20 cases reporting salary.

\*Includes those who were self-employed.

Men, on average, earned more than women in all sectors except elementary/secondary schools, where the median salaries of women and men were approximately equal. The largest discrepancy was in business/industry, where men earned a median figure of \$50,000 and women earned \$40,400.

As noted earlier, the growth in median salaries overall was 8.0 percent between 1987 and 1989. The increase in salaries for those employed in business/industry was closer to 17 percent. By field, the increase in salaries over the 2-year period ranged from approximately 8 percent to 12 percent—except in art history, where the growth was 15.9 percent, and in music, 5.1 percent. To put these increases in perspective, the Consumer Price Index (CPI) increased by 9.0 percent between February 1987 and February 1989, and the salaries of U.S. doctoral scientists and U.S. doctoral engineers increased by 9.4 percent and 7.2 percent, respectively, during this 2-year period.<sup>10</sup>

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<sup>10</sup>CPI-W data were provided by the Bureau of Labor Statistics, U.S. Department of Labor. Salary data on U.S. doctoral scientists and engineers are derived through the SDR project.



## ACADEMIC EMPLOYMENT OF HUMANISTS

In 1989, about 80 percent of humanities doctorates were employed in academe,<sup>11</sup> down approximately 10 percentage points from 1977. However, while the proportion has decreased, the total number employed in academe has increased in that 12-year period. In 1977, 51,500 humanists were academically employed, compared to 69,400 in 1989, a growth of almost 35 percent. As academic life typifies the humanities doctorate, the following characteristics are described below: academic rank, tenure status, and age of faculty.

### Academic Rank

The growth among the academic ranks was disproportionate to the growth for the academic sector as a whole. The number of full professors grew by nearly 55 percent between 1977 and 1989, well above the 35 percent growth of the academic sector overall (see Appendix Table E-7). In contrast, the number of associate professorships increased by only 20 percent. The number of instructors increased by approximately 9 percent in that same time span, while the number of assistant professors remained relatively unchanged.

Consequently, with the increase primarily in favor of senior faculty, the composition of the academically employed population has changed dramatically since 1977. Figure 5 displays the distribution of humanities faculty by academic rank. While the share employed as full professors increased by more than 5 percentage points between 1977 and 1989 (from 35.4 percent to 40.7 percent, respectively), the shares of associate professors, assistant professors, and instructors all dropped. This is not surprising given the changing composition of the humanities population (see Appendix Table E-2).

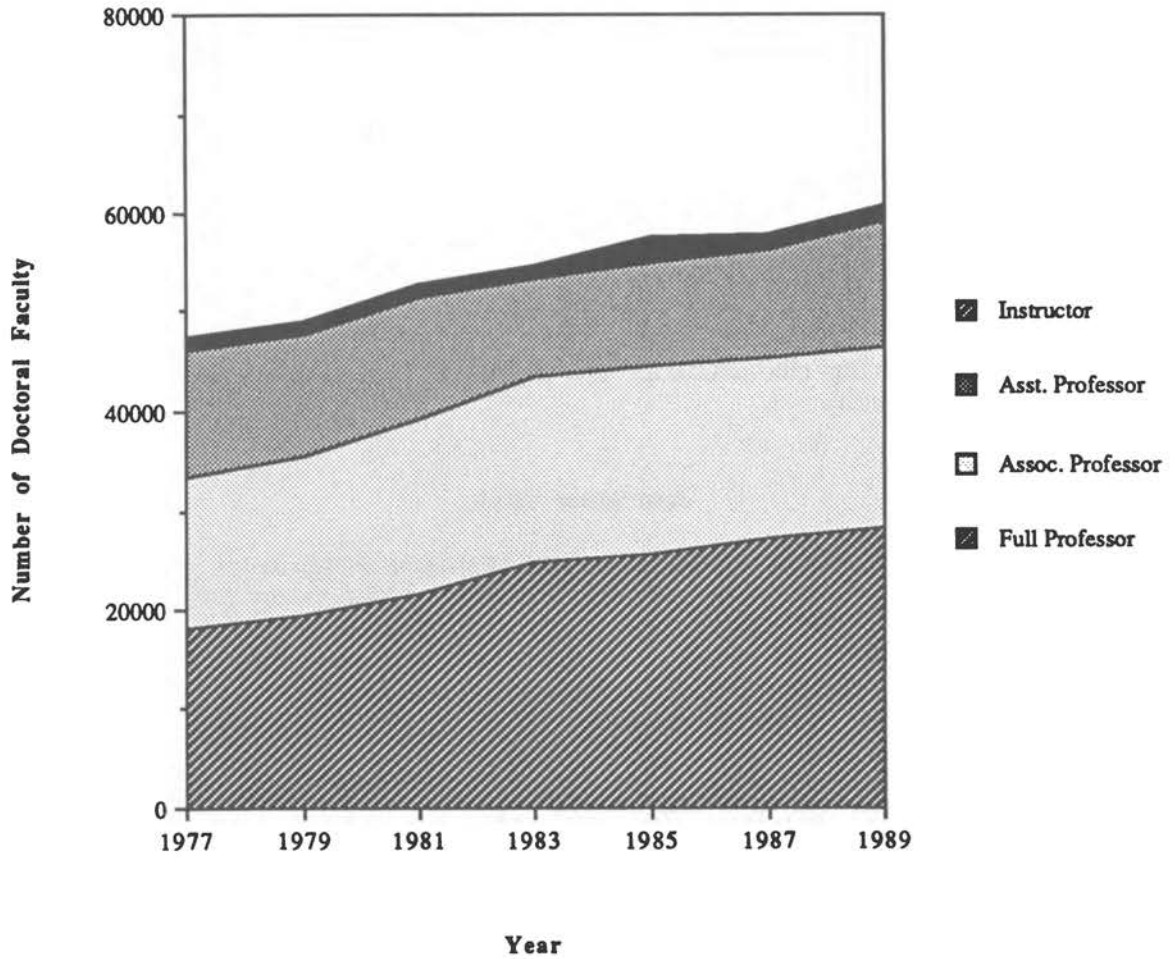
Comparisons of other ranks (lecturer, adjunct faculty, and "other faculty") are precluded because of changes in question wording between 1977 and 1989; however, the proportions of doctorates in these ranks in 1989 are shown in Table 15.

### Gender Differences

When rank is examined by gender, clear differences emerge. Men were much more likely in 1989 to be employed as full professors than were women, 47.5 percent compared with 24.9 percent (see Table 15). This held true across each of the broad fields as well. The proportion holding associate professorships was roughly equivalent for men and women, but women were more likely than men to hold the ranks of assistant professor and instructor and to be in other types of academic positions, including lecturer, adjunct, and "other faculty." In part the disparities in the academic ranks held by women and men can be explained by the facts that women employed in academe were younger and more likely to be working part-time than their male counterparts.

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<sup>11</sup>Academe includes 2-year and 4-year colleges, universities, and medical schools.



NOTE: See Appendix Table E-7.

FIGURE 5. Academic position of humanities Ph.D.s, time-series, 1977-1989.

Although there were disparities between men and women in academic rank, the number of women employed in the sector overall nearly doubled between 1977 and 1989 from 10,900 to 21,000; the number of men increased by only 20 percent from 40,600 to 48,400 over the same period (see Appendix Table E-7). Correspondingly, during this time span, the share of women increased from 21.2 percent of the academically employed population in 1977 to 30.3 percent in 1989.

Gender differences within the academic positions were less pronounced among the recent graduates, but even among this cohort women had a tendency to hold the lower-ranking positions. Recent graduates in history deviated from this pattern by having higher proportions of women in the ranks of associate and assistant professor and higher proportions of men in the lower ranking positions.

TABLE 15: Academically Employed Humanities Doctorates, by Academic Position, Field of Doctorate, Gender, and Cohort, 1989 (in percent)

Year of Ph.D and Academic Position	All Fields		Eng/Amer Lang and Lit		History		Other Lang and Lit		Other Humanities	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<u>Total, 1946-1988 Ph.D.s (No.)</u>	48,400	21,000	11,800	6,500	12,500	2,500	8,000	5,800	16,100	6,200
Faculty	90.1	81.9	90.6	80.9	88.3	83.7	92.4	82.0	89.8	82.3
Professor	47.5	24.9	50.6	31.0	53.7	32.0	43.5	19.6	42.5	20.6
Associate Professor	26.0	27.2	23.6	26.8	22.5	22.4	30.6	28.6	28.0	28.3
Assistant Professor	14.9	26.6	13.7	18.0	10.6	28.2	17.2	31.3	17.9	30.6
Instructor	1.7	3.2	2.6	5.1	1.5	1.2	1.1	2.5	1.4	2.7
Lecturer	1.4	3.9	0.2	4.2	1.0	0.6	2.1	5.1	2.3	3.9
Adjunct	2.4	4.2	2.9	4.2	3.7	5.0	1.1	3.1	1.7	4.9
Other Faculty	2.5	4.4	1.9	6.1	3.3	3.2	2.0	4.4	2.5	3.1
Does Not Apply	2.5	3.2	3.1	3.0	2.8	5.0	1.7	2.5	2.4	3.4
Postdoctoral Appointment	0.6	0.9	1.0	0.0	0.6	2.0	0.3	0.9	0.6	1.3
No Report	0.5	1.4	0.3	1.6	0.4	0.6	0.4	1.9	0.7	1.2
<u>Total 1983-1988 Ph.D.s (No.)</u>	7,400	5,600	1,500	1,400	1,400	600	1,100	1,500	3,500	2,100
Faculty	81.1	75.5	83.7	65.1	71.6	75.9	86.5	81.0	82.1	78.5
Professor	3.5	2.4	0.0	2.9	4.3	0.3	4.2	1.2	4.5	3.4
Associate Professor	12.7	8.6	13.4	6.6	6.5	8.9	9.0	6.5	16.0	11.2
Assistant Professor	61.3	59.2	66.1	46.2	56.8	66.7	71.5	68.4	57.9	59.5
Instructor	3.6	5.3	4.3	9.4	4.0	0.0	1.7	4.8	3.7	4.4
Lecturer	4.8	5.2	0.7	6.9	6.1	2.0	4.9	7.6	6.2	3.3
Adjunct	5.4	7.9	4.5	11.6	10.7	3.8	3.7	3.6	4.1	9.6
Other Faculty	3.3	6.3	2.3	16.4	7.2	3.1	2.3	2.5	2.5	2.9
Does Not Apply	3.7	2.4	6.8	0.0	4.4	10.8	0.9	2.0	2.9	2.1
Postdoctoral Appointment	1.4	1.9	2.0	0.0	0.0	4.4	0.8	1.6	1.9	2.8
No Report	0.3	0.8	0.0	0.0	0.0	0.0	1.0	1.8	0.4	0.8

NOTE: Other Languages & Literature = Classical Languages and Modern Languages and Literature. Other Humanities = Art History, Music, Speech/Theater, Philosophy, and "Other Humanities." Numbers are rounded to the nearest hundred; therefore, subcategories may not add to totals.

## **Adjunct Faculty**

An option for adjunct faculty was first included on the questionnaire in 1987 and information was requested of this group in both 1987 and the 1989. From this, a general description of adjunct faculty may be constructed.

In 1989, approximately 2,000 humanities Ph.D.s reported principal employment as adjunct professors, nearly matching the number who reported adjunct status in 1987. Overall, adjunct positions accounted for 3 percent of those doctorates who were employed in academe. Over 75 percent of the adjunct faculty taught at only one institution. Furthermore, the average number of courses taught was four, with an average payment of \$1,600 per course, a modest increase of \$100 since 1987. Approximately 25 percent of the adjunct faculty held annual contracts with the institutions at which they taught, and 82 percent reported they would not have the opportunity to transfer from adjunct to regular status, if desired.

About 80 percent of those humanists holding adjunct positions were employed part-time, with the remaining 20 percent employed full-time. Men constituted more than half of all adjunct faculty. However, as a proportion of those academically employed, only 2.4 percent of men held adjunct positions compared with 4.2 percent of women. Approximately 40 percent of individuals reporting adjunct status were recent graduates who had earned their doctorates between 1983 and 1988. This proportion is well above the recent graduates' share of the total population of humanities doctorates (17.5 percent). Doctorates in history and English/American languages and literature constituted about 60 percent of all adjunct faculty; doctorates in these same fields represented 48 percent of those academically employed.

## **Tenure Status**

Examining the tenure status of the humanists working in academe in 1989, we again found gender differences: 70.6 percent of men but only 49.3 percent of women held tenure, a pattern that was true across all humanities fields (see Table 16). Of the women employed in academe in 1989, 47.2 percent were not tenured, although 20.9 percent reported they were in tenure-track positions. When tenure status for humanities doctorates was examined by age, men and women aged 35 and younger showed some similarities—for example, 6.3 percent of the men and 5.6 percent of the women were tenured. Disparities become more apparent for older humanities Ph.D.s: among those aged 46 and older, for instance, 83.7 percent of academically employed men held tenured positions, while only 63.0 percent of the women held tenured positions. Again the fact that, in academe, a higher proportion of women were employed part-time than their male counterparts may help to explain the gender differences in tenure status.

## **Age of Faculty**

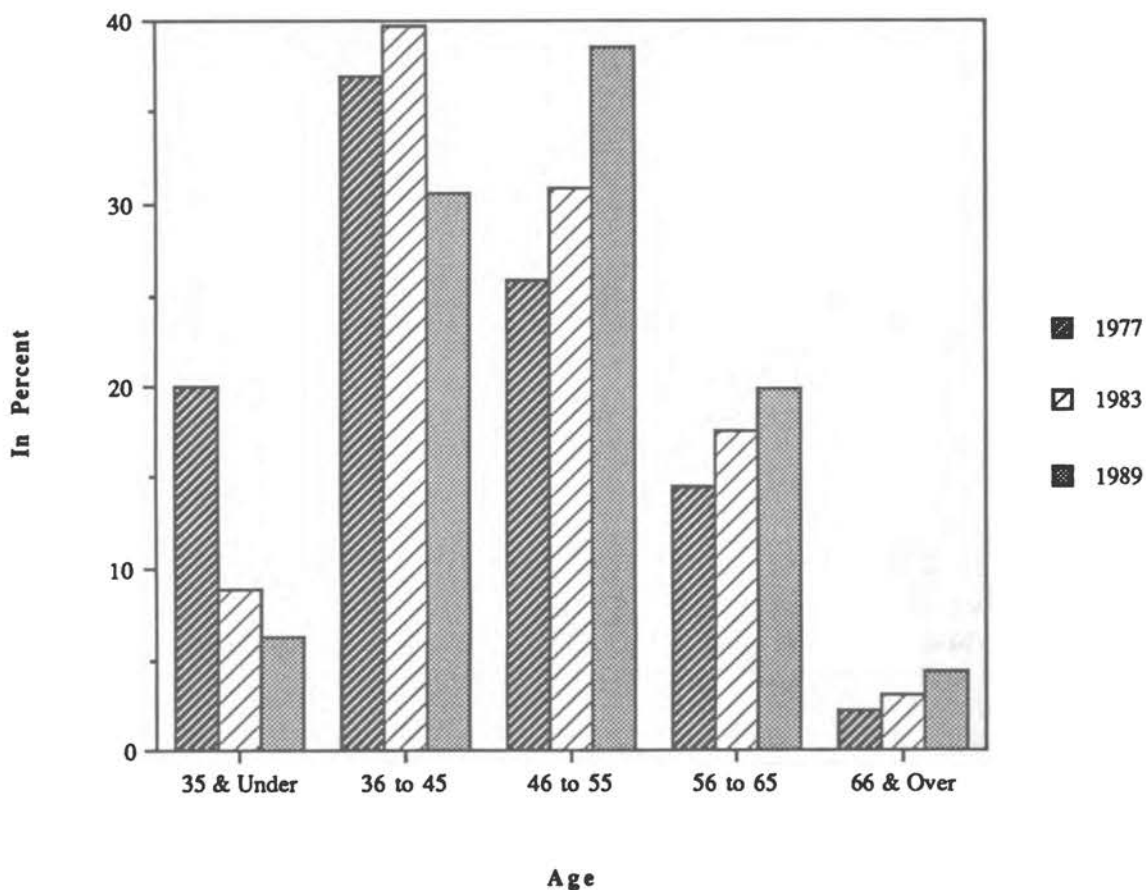
As shown in Figure 6, there was a major shift in the age distribution of humanities faculty between 1977 and 1989, paralleling the shift in the humanities population overall. In 1977, the largest proportion of humanities faculty were aged 36-45 (37.0 percent). By 1989, the largest proportion of faculty were in the 46-55 age group (38.5 percent). During this 12-year period, the proportion of faculty under 46 years of age dropped 20 percentage points, from about 57 percent in 1977 to about 37 percent in 1989.

TABLE 16: Tenure Status of Academically Employed Humanities Ph.D.s (1946-1988 Graduates), by Field of Doctorate, Age, and Gender, 1989 (in percent)

Age and Tenure	All Fields		Eng/Amer Lang and Lit		History		Other Lang and Lit		Other Humanities	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>Total Employed (No.)</b>	48,400	21,000	11,800	6,500	12,500	2,500	8,000	5,800	16,100	6,200
Tenured	70.6	49.3	72.2	53.4	71.9	49.7	73.8	47.7	66.8	46.3
Not Tenured	26.8	47.2	25.4	43.2	24.6	47.5	23.6	48.9	31.1	49.8
Tenure Track	12.1	20.9	12.2	15.2	8.4	23.9	13.1	23.2	14.5	23.5
Non-Tenure Track	6.2	13.7	2.1	13.6	8.1	9.5	6.4	14.9	7.4	14.3
Tenure Not Applicable	8.5	12.7	11.1	14.4	8.2	14.1	4.0	10.8	9.2	12.0
No Report	2.6	3.5	2.4	3.4	3.4	2.8	2.7	3.4	2.1	4.0
<b>Age 35 and Under (No.)</b>	2,700	1,700	600	400	500	200	400	400	1,200	600
Tenured	6.3	5.6	2.9	15.9	0.0	1.0	11.0	2.5	8.8	2.0
Not Tenured	91.3	93.7	95.2	84.1	100.0	99.0	86.6	96.3	87.6	96.9
Tenure Track	64.7	58.0	77.0	29.1	60.8	74.4	64.1	69.1	61.0	64.9
Non-Tenure Track	19.7	18.7	18.2	19.6	22.8	12.1	19.9	19.0	19.1	20.0
Tenure Not Applicable	6.8	17.1	0.0	35.3	16.4	12.6	2.6	8.2	7.5	12.0
No Report	2.4	0.7	2.0	0.0	0.0	0.0	2.4	1.1	3.6	1.1
<b>Age 36 to 45 (No.)</b>	13,600	8,000	3,500	1,900	2,800	1,000	2,000	2,400	5,200	2,800
Tenured	53.0	39.6	61.1	35.9	45.2	33.7	53.2	42.7	51.6	41.7
Not Tenured	43.8	57.2	34.7	60.8	50.6	64.6	43.0	54.5	46.6	54.3
Tenure Track	22.3	31.8	20.4	31.7	18.4	36.8	26.8	30.0	23.8	31.4
Non-Tenure Track	11.1	13.8	2.7	17.7	18.4	13.8	10.4	12.3	13.2	12.4
Tenure Not Applicable	10.4	11.7	11.6	11.4	13.7	14.0	5.8	12.2	9.6	10.5
No Report	3.2	3.2	4.2	3.3	4.2	1.6	3.8	2.8	1.8	4.0
<b>Age 46 and Older (No.)</b>	32,000	11,200	7,700	4,200	9,200	1,300	5,600	3,000	9,500	2,800
Tenured	83.7	63.0	83.0	65.6	83.9	68.9	86.0	58.8	82.8	60.5
Not Tenured	13.9	32.9	15.4	30.5	12.8	26.9	11.7	36.9	15.2	34.8
Tenure Track	3.2	7.6	3.0	6.5	2.5	6.5	4.2	10.5	3.3	6.6
Non-Tenure Track	2.9	12.5	0.7	10.4	4.2	6.0	4.0	16.2	2.8	14.9
Tenure Not Applicable	7.8	12.8	11.7	13.7	6.0	14.4	3.5	10.2	9.1	13.3
No Report	2.4	4.2	1.6	3.9	3.4	4.2	2.3	4.2	2.0	4.6

NOTE: Other Languages & Literature = Classical Languages and Modern Languages and Literature. Other Humanities = Art History, Music, Speech/Theater, Philosophy, and "Other Humanities." Numbers are rounded to the nearest hundred; therefore, subcategories may not add to total.

While the shift is evident over each of the broad field groupings (see Appendix Table E-8), it is especially apparent in the fields of history and English/American languages and literature. Over 70 percent of the faculty in history were 46 or older in 1989 compared to 43 percent in 1977. Faculty aged 35 and under employed in English/American languages and literature represented 21.1 percent of all faculty in 1977, while 12 years later the proportion had dropped to only 5.5 percent.



NOTE: See Appendix Table E-8.

FIGURE 6. Age distribution of humanities faculty, time-series, 1977, 1983, 1989.

## EMPLOYMENT DYNAMICS OF THE HUMANITIES LABOR FORCE

The objective of this report has been, thus far, to profile humanities doctorates residing in the United States in 1989. Time-series data were provided as a context for interpreting and evaluating the status of humanities doctorates at present. However, the discrete snapshots afforded by time-series data, though informative in their own right, provide limited insight into the dynamics of the humanities labor market.

To cite one example, time-series data on retirement rates shed little light on those who retire: do retirees come disproportionately from the full-time work force, or is the humanities doctorate more likely to leave the work force gradually, working part-time before retiring? Further, what proportion of retirees, if any, return to the work force once they have retired?

This section will focus on change and continuity reported by individuals responding in each of two survey years with respect to four critical areas of employment: employment status, employment sector, employment field, and primary work activity. So that patterns may be examined, change and continuity rates will be provided for three time periods: 1977-1981, 1981-1985, and 1985-1989. A 4-year time span was chosen to provide enough time for change to occur, while at the same time allowing a sample size large enough for reliable analysis. For each of the three time periods, the respondent's status in the early year is cross-tabulated with his or her status in the later year to which it is paired. The narrative analysis is not limited to a specific 4-year period but, rather, looks at patterns across all three time periods.

Although this analytic method allows tracking of individuals over time, it is limited to only those individuals who responded to two surveys. Consequently, meaningful estimates of population size cannot be constructed. Finally, consistent with the data presented in the earlier sections on employment sector, employment field, and primary work activity, these longitudinal data will include only those individuals employed full- or part-time in the early year.

### Employment Status

Table 17 shows employment status in the early year cross-tabulated by employment status in the later year. More than 90 percent of those employed full-time in the early year retained their status four years later, with the largest proportions of those changing status becoming retired (3 to 5 percent) or switching to part-time status (3 percent).

Between 1985 and 1989, individuals employed part-time tended either to remain employed part-time or to retire. In contrast, individuals employed part-time in 1977 tended to move to full-time employment by 1981, retiring at only one-third the rate observed in 1989. Of those individuals who were employed part-time in Time 1 and who remained as such in Time 2, between 34 percent and 45 percent reported they were seeking full-time employment in the early year.

TABLE 17: Rates of Change and Continuity in Employment Status of Humanities Doctorates, Longitudinal Data from 1977-1981, 1981-1985, and 1985-1989 (in percent)\*

	<u>Full-Time in Time 1</u>				<u>Part-Time in Time 1</u>		
	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>		<u>Status in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>
<u>Status in Time 2</u>				<u>Status in Time 2</u>			
Full-Time	90.8	91.9	91.1	Full-Time	48.0	40.9	32.0
Part-Time	3.3	3.3	3.1	Part-Time	36.6	42.5	44.9
Postdoctoral Appointment	0.5	0.2	0.4	Postdoctoral Appointment	0.6	0.0	0.5
Unemployed/Seeking	0.8	0.5	0.4	Unemployed/Seeking	4.4	4.5	1.5
Not Employed/Not Seeking	0.5	0.6	0.3	Not Employed/Not Seeking	3.5	2.1	4.2
Retired	3.1	3.5	4.5	Retired	5.7	8.9	16.1
Other	0.2	0.2	0.2	Other	0.0	1.1	0.8
No Report	0.6	0.0	0.0	No Report	0.9	0.0	0.0
<u>Postdoctoral Appointment in Time 1</u>				<u>Unemployed/Seeking in Time 1</u>			
<u>Status in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>	<u>Status in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>
Full-Time	77.2	84.6	84.5	Full-Time	54.3	47.2	47.6
Part-Time	9.8	6.4	5.4	Part-Time	20.2	24.0	27.4
Postdoctoral Appointment	6.2	1.0	0.0	Postdoctoral Appointment	1.2	0.0	2.8
Unemployed/Seeking	2.5	1.4	3.6	Unemployed/Seeking	10.2	15.3	12.1
Not Employed/Not Seeking	3.1	3.1	0.0	Not Employed/Not Seeking	11.6	10.8	5.5
Retired	0.0	2.7	6.5	Retired	0.0	1.0	3.9
Other	0.0	0.8	0.0	Other	0.0	1.6	0.8
No Report	1.2	0.0	0.0	No Report	1.2	0.0	0.0
<u>Not Employed/Not Seeking in Time 1</u>				<u>Retired in Time 1</u>			
<u>Status in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>	<u>Status in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>
Full-Time	38.7	25.4	35.0	Full-Time	1.0	0.0	0.5
Part-Time	14.3	14.1	10.6	Part-Time	3.4	4.5	3.5
Postdoctoral Appointment	3.1	0.3	0.0	Postdoctoral Appointment	0.0	0.0	0.0
Unemployed/Seeking	2.6	10.3	8.3	Unemployed/Seeking	0.8	0.0	0.0
Not Employed/Not Seeking	31.6	38.5	33.3	Not Employed/Not Seeking	1.6	3.3	2.7
Retired	9.4	10.7	12.1	Retired	93.1	92.0	93.1
Other	0.0	0.6	0.6	Other	0.0	0.1	0.0
No Report	0.0	0.0	0.0	No Report	0.2	0.0	0.3

\*These data are based on responses to two surveys. As individuals who fail to satisfy this criterion are eliminated from this analysis, meaningful estimates of population size cannot be drawn.



On average, about 80 percent of postdoctoral appointees had secured full-time employment, with an additional 5-10 percent working part-time in any follow-up year.

Nearly 75 percent of those unemployed and seeking work had found either full-time or part-time employment in the 4-year interval. Of those not employed/not seeking employment, 40-50 percent became employed full-time or part-time four years later.

More than any other group, retirees were likely to retain their original employment status (92-93 percent), with less than 5 percent re-entering the work force in any comparison period.

### **Employment Sector**

As noted earlier (see also Appendix Table E-4), a declining proportion of the humanities population overall were employed in educational institutions (81.0 percent in 1989, compared with 89.9 percent in 1977), while the proportion employed in other sectors increased. As Table 18 reveals, the education sector continues to have very high retention rates: about 90 percent of the survey respondents employed in educational institutions in the first comparison year reported similar employment in the second survey year. Of the roughly 10 percent who left educational employment in any comparison period, more than half left the work force altogether. Retention rates are high for those employed in 4-year colleges and universities: 88-90 percent remained employed in this sector four years later. On the other hand, retention in 2-year colleges and elementary/secondary schools averaged about 77 percent and 68 percent respectively. Movement was limited, for the most part, to employment in other educational institutions.

Retention rates for those employed in business/industry and federal government employees were between 73 and 84 percent. The largest proportions of those leaving these sectors moved into educational institutions (9-14 percent of those employed in business/industry and 5-12 percent of federal government employees). Thus, educational institutions employing humanities doctorates may have benefited from the influx of humanities personnel from other employment settings.

### **Field Mobility**

Table 19 shows that once employed in a humanities field, humanities doctorates had a tendency to remain employed in the same field 4 years later. The retention rates were between 56 and 95 percent across all fields. Retention was highest in the field of music, 90-95 percent, and lowest for the "other humanities," 56-59 percent. Similarly, Chapter 2, which examined mobility between Ph.D. and employment fields, revealed that the highest and lowest retention rates were for doctorates in music and "other humanities," respectively.

Humanities doctorates were more likely to leave employment in a humanities field altogether rather than to switch to another humanities field. The sole exception was American history, where a higher proportion moved into the field "other history" than into nonhumanities fields. As noted, field retention was lowest in the field "other humanities." Even though many of these individuals (8-23 percent) left the humanities fields outright, a sizable portion (10-14 percent) moved into English/American languages and literature, with the residual distributed throughout the remaining fields.

TABLE 18: Rates of Change and Continuity in Employment Sector of Humanities Doctorates, Longitudinal Data from 1977-1981, 1981-1985, and 1985-1989 (in percent)\*

<u>Educational Institution in Time 1†</u>				<u>4-Year Coll/Univ in Time 1†</u>			
	1977-1981	1981-1985	1985-1989		1977-1981	1981-1985	1985-1989
<u>Employer in Time 2</u>	<u>1981</u>	<u>1985</u>	<u>1989</u>	<u>Employer in Time 2</u>	<u>1981</u>	<u>1985</u>	<u>1989</u>
Educational Institution	88.3	91.1	90.0	Educational Institution	89.1	91.2	89.9
4-Year Coll/Univ	81.3	83.4	82.4	4-Year Coll/Univ	88.1	90.2	89.3
2-Year College	5.0	5.2	5.2	2-Year College	0.5	0.6	0.5
Elem/Secondary Schools	2.0	2.6	2.4	Elem/Secondary Schools	0.5	0.4	0.2
Business/Industry	2.6	1.8	1.1	Business/Industry	2.2	1.8	1.1
U.S. Government	0.3	0.3	0.4	U.S. Government	0.3	0.3	0.5
State/Local Government	0.6	0.1	0.1	State/Local Government	0.6	0.1	0.0
Hospital/Clinic	0.0	0.1	0.0	Hospital/Clinic	0.0	0.1	0.0
Other Nonprofit	0.9	0.9	0.8	Other Nonprofit	0.9	0.9	0.8
No Report	0.8	0.1	0.1	No Report	0.6	0.1	0.1
Postdoctoral Appointment	0.6	0.2	0.5	Postdoctoral Appointment	0.6	0.2	0.4
Not Employed	5.8	5.4	6.9	Not Employed	5.7	5.3	7.0

<u>2-Year College in Time 1†</u>				<u>Elem/Secondary School in Time 1†</u>			
	1977-1981	1981-1985	1985-1989		1977-1981	1981-1985	1985-1989
<u>Employer in Time 2</u>	<u>1981</u>	<u>1985</u>	<u>1989</u>	<u>Employer in Time 2</u>	<u>1981</u>	<u>1985</u>	<u>1989</u>
Educational Institution	83.3	93.1	92.4	Educational Institution	71.1	86.9	86.9
4-Year Coll/Univ	9.3	11.7	13.4	4-Year Coll/Univ	7.9	13.6	13.2
2-Year College	73.9	80.2	78.9	2-Year College	1.0	3.5	1.6
Elem/Secondary Schools	0.1	1.1	0.1	Elem/Secondary Schools	62.2	69.8	72.1
Business/Industry	5.1	2.1	0.2	Business/Industry	11.5	1.6	3.2
U.S. Government	0.0	0.0	0.0	U.S. Government	1.8	0.0	0.0
State/Local Government	1.7	0.0	0.0	State/Local Government	1.0	0.6	0.9
Hospital/Clinic	0.2	0.0	0.0	Hospital/Clinic	0.0	0.0	0.3
Other Nonprofit	1.0	0.1	0.4	Other Nonprofit	1.8	1.1	1.6
No Report	2.3	0.0	0.0	No Report	2.0	0.0	0.0
Postdoctoral Appointment	0.4	0.0	1.7	Postdoctoral Appointment	0.0	0.0	0.0
Not Employed	5.9	4.7	5.2	Not Employed	10.9	9.8	7.1

<u>Business/Industry in Time 1†</u>				<u>U.S. Government in Time 1†</u>			
	1977-1981	1981-1985	1985-1989		1977-1981	1981-1985	1985-1989
<u>Employer in Time 2</u>	<u>1981</u>	<u>1985</u>	<u>1989</u>	<u>Employer in Time 2</u>	<u>1981</u>	<u>1985</u>	<u>1989</u>
Educational Institution	13.6	8.6	9.4	Educational Institution	4.8	6.1	11.6
4-Year Coll/Univ	11.2	8.0	7.7	4-Year Coll/Univ	4.8	6.1	4.3
2-Year College	2.4	0.0	0.7	2-Year College	0.0	0.0	2.8
Elem/Secondary Schools	0.0	0.6	1.1	Elem/Secondary Schools	0.0	0.0	4.5
Business/Industry	76.4	78.0	76.8	Business/Industry	8.8	4.5	5.5
U.S. Government	0.0	1.8	1.1	U.S. Government	72.7	84.1	77.7
State/Local Government	1.2	2.0	1.1	State/Local Government	0.0	0.3	0.2
Hospital/Clinic	0.0	0.0	0.6	Hospital/Clinic	0.0	0.0	0.0
Other Nonprofit	1.2	3.2	4.4	Other Nonprofit	1.9	0.6	2.9
No Report	1.3	0.1	0.2	No Report	0.0	0.0	0.0
Postdoctoral Appointment	0.0	0.2	0.0	Postdoctoral Appointment	0.0	0.0	0.0
Not Employed	6.2	6.0	6.3	Not Employed	11.9	4.1	2.1

\*These data are based on responses to two surveys. As individuals who fail to satisfy this criterion are eliminated from this analysis, meaningful estimates of population size cannot be drawn.

†Based on individuals who were in the full- or part-time work force in Time 1.

TABLE 19: Rates of Change and Continuity in Employment Field of Humanities Doctorates, Longitudinal Data from 1977-1981, 1981-1985, and 1985-1989 (in percent)\*

Field of Employment in Time 2	Field of Employment in Time 1														
	<u>American History</u>			<u>"Other History"</u>			<u>Art History</u>			<u>Music</u>			<u>Speech/Theater</u>		
	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989
American History	78.3	86.7	82.4	5.0	6.3	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3
"Other History"	7.9	9.4	8.1	80.6	81.9	85.4	0.1	0.0	0.5	0.0	0.2	0.0	0.0	0.0	0.0
Art History	0.4	0.0	1.3	0.4	0.0	0.1	87.7	92.4	88.8	0.0	0.1	0.0	0.0	0.0	0.0
Music	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	91.2	90.1	94.7	0.0	0.2	0.1
Speech/Theater	0.0	0.0	0.0	0.1	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.0	79.3	81.1	86.2
Philosophy	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
English/Amer Lang & Lit	0.5	0.0	0.6	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.1	0.0	0.7	9.3	0.1
Classical Lang & Lit	0.0	0.0	0.0	0.0	0.6	0.3	0.0	0.4	0.3	0.0	0.3	0.0	0.0	0.0	0.0
Modern Lang & Lit	0.2	0.0	0.1	0.0	0.2	0.8	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
"Other Humanities"	2.5	0.0	1.2	0.8	0.0	0.7	2.7	2.5	0.3	0.4	1.0	0.7	6.2	0.3	1.6
Nonhumanities	4.9	3.9	6.1	10.4	10.4	7.1	4.1	4.4	5.3	3.6	6.8	3.9	11.2	8.4	11.7
No Report	4.7	0.1	0.1	2.0	0.4	0.2	5.0	0.3	1.3	4.6	0.6	0.7	2.6	0.0	0.0
Not Employed	5.8	6.1	7.6	5.3	4.6	9.6	10.2	8.6	7.7	8.2	4.6	8.7	7.7	5.2	9.5

Table 19 (Continued)

	Philosophy			English/Amer Lang & Lit			Classical Lang & Lit			Modern Lang & Lit			"Other Humanities"		
	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989	1977- 1981	1981- 1985	1985- 1989
American History	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.3	0.9
"Other History"	0.0	0.0	0.0	0.0	0.1	0.5	1.5	2.8	0.3	0.1	0.0	0.0	2.6	0.4	0.6
Art History	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.0	1.3	1.8	0.5
Music	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.0	0.5	0.9
Speech/Theater	0.0	0.0	0.1	0.9	0.1	0.3	0.0	0.0	0.0	0.3	0.1	0.0	3.2	2.6	0.0
Philosophy	88.8	86.0	91.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.2	1.3
English/Amer Lang & Lit	0.1	0.0	0.0	82.8	84.1	85.0	0.0	0.0	0.4	2.9	2.6	1.2	14.3	11.9	9.9
Classical Lang & Lit	0.0	0.0	0.0	0.1	0.1	0.1	81.5	81.8	92.6	0.1	0.2	0.4	1.2	0.8	0.9
Modern Lang & Lit	0.0	0.0	0.0	1.8	1.9	3.0	3.8	2.0	1.5	83.7	88.3	90.4	3.8	5.2	5.2
"Other Humanities"	1.4	2.4	2.5	2.7	6.3	6.5	4.4	4.0	1.2	2.0	4.6	3.3	58.7	57.3	56.3
Nonhumanities	6.1	9.0	5.1	8.8	6.6	4.2	3.3	8.8	3.9	4.6	3.7	4.0	7.9	15.1	22.8
No Report	3.6	2.6	0.7	2.6	0.5	0.3	5.6	0.2	0.0	6.0	0.6	0.8	3.4	1.9	0.4
Not Employed	2.8	3.4	5.6	6.2	7.0	10.3	4.5	5.7	4.8	5.6	6.8	7.0	12.0	6.2	5.8

\*These data are based on responses to two surveys. As individuals who fail to satisfy this criterion are eliminated from this analysis, meaningful estimates of population size cannot be drawn.

†Based on individuals who were in the full- or part-time work force in Time 1.

### **Primary Work Activity**

Nearly 80 percent of those individuals with teaching as their primary work activity in the earlier year were similarly engaged in the follow-up year (see Table 20). Between 5 and 6 percent moved into positions in management/administration, with smaller proportions engaged primarily in other work activities. Retention between work activities was highest for teaching, followed by management/administration, writing/editing, and research and development (R&D). Most humanities Ph.D.s in these latter three work activities who switched over the 4-year periods moved into teaching. The proportion of those initially reporting R&D but then teaching four years later was even greater than the proportion who were still engaged primarily in R&D.

TABLE 20: Rates of Change and Continuity in Primary Work Activity of Humanities Doctorates, Longitudinal Data from 1977-1981, 1981-1985, and 1985-1989 (in percent)\*

<u>Teaching in Time 1†</u>				<u>Management/Administration in Time 1†</u>			
<u>Primary Work Activity in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>	<u>Primary Work Activity in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>
Teaching	78.4	78.0	79.0	Teaching	27.2	18.7	22.8
Management/Administration	5.1	6.1	6.3	Management/Administration	44.1	58.2	56.5
Research & Development	2.7	3.0	2.7	Research & Development	2.7	3.7	3.7
Consulting/Professional Services	1.0	0.7	0.8	Consulting/Professional Services	3.9	5.9	1.5
Writing/Editing	2.4	2.7	1.6	Writing/Editing	2.0	3.2	3.1
Other Activities	2.6	1.3	1.2	Other Activities	11.4	5.6	7.5
No Report	1.8	2.3	0.8	No Report	4.3	2.1	0.8
Postdoctoral Appointment	0.5	0.2	0.4	Postdoctoral Appointment	0.1	0.0	0.6
Not Employed	5.6	5.7	7.3	Not Employed	4.4	2.5	3.5

<u>Research &amp; Development in Time 1†</u>				<u>Writing/Editing in Time 1†</u>			
<u>Primary Work Activity in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>	<u>Primary Work Activity in Time 2</u>	<u>1977-1981</u>	<u>1981-1985</u>	<u>1985-1989</u>
Teaching	60.8	38.1	31.3	Teaching	46.5	28.9	21.6
Management/Administration	5.3	13.4	9.9	Management/Administration	8.1	12.1	10.8
Research & Development	14.9	27.1	25.7	Research & Development	5.5	4.3	8.7
Consulting/Professional Services	2.5	3.5	4.0	Consulting/Professional Services	3.0	1.1	3.6
Writing/Editing	6.6	3.6	5.4	Writing/Editing	24.4	33.4	38.9
Other Activities	2.7	6.2	13.8	Other Activities	4.3	7.1	8.6
No Report	2.9	2.9	1.6	No Report	0.9	2.8	2.1
Postdoctoral Appointment	1.4	0.0	0.8	Postdoctoral Appointment	0.0	1.4	0.0
Not Employed	2.9	5.3	7.5	Not Employed	7.3	9.0	5.7

\*These data are based on responses to two surveys. As individuals who fail to satisfy this criterion are eliminated from this analysis, meaningful estimates of population size cannot be drawn.

†Based on individuals who were in the full- or part-time work force in Time 1.

**APPENDIX A: 1989 SURVEY OF HUMANITIES DOCTORATES**

**1989 SURVEY OF HUMANITIES DOCTORATES**  
**CONDUCTED BY THE NATIONAL RESEARCH COUNCIL WITH THE SUPPORT OF**  
**THE NATIONAL ENDOWMENT FOR THE HUMANITIES**

OMB No 3145-0020  
 Expires: 12-31-90

NOTE: THIS INFORMATION IS SOLICITED UNDER THE AUTHORITY OF THE NATIONAL FOUNDATION ON THE ARTS AND HUMANITIES ACT OF 1965 AS AMENDED. ALL INFORMATION YOU PROVIDE WILL BE TREATED AS CONFIDENTIAL, WILL BE SAFEGUARDED IN ACCORDANCE WITH THE PROVISIONS OF THE PRIVACY ACT OF 1974, AND WILL BE USED FOR STATISTICAL PURPOSES ONLY. INFORMATION WILL BE RELEASED ONLY IN THE FORM OF STATISTICAL SUMMARIES OR IN A FORM WHICH DOES NOT IDENTIFY INFORMATION ABOUT ANY PARTICULAR PERSON. YOUR RESPONSE IS ENTIRELY VOLUNTARY AND YOUR FAILURE TO PROVIDE SOME OR ALL OF THE REQUESTED INFORMATION WILL IN NO WAY ADVERSELY AFFECT YOU.  
PUBLIC REPORTING BURDEN FOR THIS COLLECTION OF INFORMATION IS ESTIMATED TO AVERAGE 12 MINUTES PER RESPONSE, INCLUDING THE TIME FOR REVIEWING INSTRUCTIONS, SEARCHING EXISTING DATA SOURCES, GATHERING AND MAINTAINING THE DATA NEEDED, AND COMPLETING AND REVIEWING THE COLLECTION OF INFORMATION. SEND COMMENTS REGARDING THIS BURDEN ESTIMATE OR ANY OTHER ASPECT OF THIS COLLECTION OF INFORMATION, INCLUDING SUGGESTIONS FOR REDUCING THIS BURDEN, TO INGRID FOREMAN, NATIONAL ENDOWMENT FOR THE HUMANITIES, ROOM 202, 1100 PENNSYLVANIA AVENUE, NW, WASHINGTON, D.C. 20506, AND TO THE OFFICE OF MANAGEMENT AND BUDGET PAPERWORK REDUCTION PROJECT (OMB NO. 3145-0020), WASHINGTON, D.C. 20503.

Please check the following information that is requested and please provide the requested information in the appropriate box.

Institution Year of Doctorate: _____	_____ _____ _____ _____ _____
Date of Birth: _____	

**PART I - EMPLOYMENT PROFILE**

1. During February 1989, what was your employment status (includes postdoctoral appointment\*)?
- |   |   |
|---|---|
| 1 ___ Employed full-time (Go to #6)<br>2 ___ Employed part-time (Go to #2)<br>3 ___ Postdoctoral appointment*<br>A ___ Full-time (Go to #6)    B ___ Part-time (Go to #2) | 4 ___ Unemployed and seeking full-time or part-time employment (Go to #4)<br>5 ___ Not employed and not seeking employment (Go to #5)<br>6 ___ Retired and not employed (Go to #23)<br>7 ___ Other, specify _____ |
|---|---|

*\*Temporary appointment in academia, industry, or government, the primary purpose of which is to provide for continued education or experience in research.*

2. If you held a part-time position during February 1989: A) Were you seeking a full-time position? 1 ___ Yes    2 ___ No B) How many part-time positions did you hold? _____ C) On average, how many hours per week did you work? _____Hrs	3. What was the MOST important reason for holding a part-time position? 1 ___ Part-time position preferred 2 ___ Full-time position not available 3 ___ Family responsibilities 4 ___ Part-time position is temporary 5 ___ Other, specify _____ <p align="right">(Go to #6)</p>
4. If you were unemployed but seeking employment during February 1989, which of the following factors MOST restricted your job search? 1 ___ Geographic location 2 ___ Family responsibilities 3 ___ Need for part-time employment 4 ___ Other, specify _____ 5 ___ No restrictions <p align="right">(Go to #16)</p>	5. If you were not employed and not seeking work during February 1989, what was the MOST important reason for not seeking work? 1 ___ Temporarily absent for health or personal reasons 2 ___ Family responsibilities 3 ___ Suitable job not available 4 ___ Other, specify _____ <p align="right">(Go to #16)</p>



## PART I - EMPLOYMENT PROFILE - Continued

6. Please give the name of your principal employer (company, organization, postdoctoral institution, etc. or, if self-employed, write "self") and actual place of employment during FEBRUARY 1989.

Name of Employer	City	County	State or Foreign Country	ZIP
------------------	------	--------	-----------------------------	-----

7. From the Employment Specialities List on page 4, select and enter both the number and title of the employment field most closely related to your principal employment or postdoctoral appointment during FEBRUARY 1989. Write your employment field if it is not on the list.

Number	Employment Field
--------	------------------

8. If you were employed during FEBRUARY 1989 in a specialty field other than your Ph.D. field, what was the MOST important reason for your decision to take that position?

- 1 \_\_\_ Better pay
- 2 \_\_\_ More attractive career options
- 3 \_\_\_ Preferred specific geographic location
- 4 \_\_\_ Constraints due to family status
- 5 \_\_\_ Position in Ph.D. field not available
- 6 \_\_\_ Change in career/professional interests
- 7 \_\_\_ Other, specify \_\_\_\_\_

9. Which category best describes the type of your principal employment OR postdoctoral appointment during FEBRUARY 1989?

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>0 ___ Self-employed</li> <li>1 ___ Business or industry</li> <li>2 ___ Junior college, 2-year college, technical institute</li> <li>3 ___ Medical school (including university affiliated hospital or medical center)</li> <li>4 ___ 4-year college</li> <li>5 ___ University, other than medical school</li> <li>6 ___ Elementary, middle, or secondary school system</li> <li>7 ___ Hospital or clinic</li> <li>8 ___ U.S. military service</li> </ul> | <ul style="list-style-type: none"> <li>9 ___ U.S. government, civilian employee</li> <li>10 ___ State, local, or other government, specify _____</li> <li>11 ___ Trade association/professional association</li> <li>12 ___ Private foundation</li> <li>13 ___ Museum</li> <li>14 ___ Historical organization</li> <li>15 ___ Research center/library/archives</li> <li>16 ___ Other nonprofit organization</li> <li>17 ___ Other, specify _____</li> </ul> |
|---|---|

10. If you were employed in a nonacademic job in FEBRUARY 1989, what was the MOST important reason for your decision to enter the job?

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1 ___ Better pay</li> <li>2 ___ Preferred other career options</li> <li>3 ___ Preferred specific geographic location</li> <li>4 ___ Constraints due to family status</li> </ul> | <ul style="list-style-type: none"> <li>5 ___ Academic position not available</li> <li>6 ___ Change in career/professional interests</li> <li>7 ___ Other, specify _____</li> </ul> |
|--|--|

11. If you were employed by an institution of higher education in February 1989:

A) What was your faculty rank?

- 1 \_\_\_ Professor
- 2 \_\_\_ Associate professor
- 3 \_\_\_ Assistant professor
- 4 \_\_\_ Instructor
- 5 \_\_\_ Lecturer
- 6 \_\_\_ Adjunct faculty
- 7 \_\_\_ Other, specify \_\_\_\_\_
- 8 \_\_\_ Does Not Apply Title

B) What was your tenure status?

- 1 \_\_\_ Tenured, in 19\_\_\_
- 2 \_\_\_ Not tenured, in tenure track
- 3 \_\_\_ Not tenured, not in tenure track
- 4 \_\_\_ Tenure not applicable

12. If your rank is "adjunct faculty" or equivalent, please answer the following questions; otherwise skip to #13.

- A) How many years have you been employed in the adjunct status? \_\_\_ Yrs.
- B) How many courses do you teach in a year? \_\_\_\_\_
- C) What was the average payment per course? \$\_\_\_\_\_
- D) Do you teach on an annual contract?  
1 \_\_\_ Yes    2 \_\_\_ No
- E) At how many institutions do you teach? \_\_\_\_\_
- F) Do you have an opportunity to transfer (if you wish) from adjunct to regular status?  
1 \_\_\_ Yes    2 \_\_\_ No

**PART I - EMPLOYMENT PROFILE - Continued**

13. From the activities listed below, select your primary and secondary work activities for your principal job (as reported in #6), in terms of time devoted during a typical week. Enter the appropriate code (1-19) for each in the specified space.

\_\_\_\_\_ Primary activity      \_\_\_\_\_ Secondary activity

1. Teaching
2. Basic research
3. Applied research
4. Development of equipment, products, systems, data
5. Writing
6. Editing
7. Professional service to individuals
8. Management administration of educational programs
9. Management administration of R&D
10. Management administration of other programs
11. Consulting
12. Operations—production, maintenance, construction, installation
13. Information management (including record management and archival work)
14. Sales, marketing, purchasing, customer and public relations
15. Statistical work—survey work, forecasting, statistical analysis
16. Computer applications
17. Institutional fund raising
18. Performing arts
19. Other, specify \_\_\_\_\_

14. During a typical week, what percentage of your professional work time did you devote to the items listed in #13?

Entries should total 100%

- \_\_\_\_\_ % Primary work activity  
 \_\_\_\_\_ % Secondary work activity  
 \_\_\_\_\_ % Other work activities  
 100% = TOTAL

15. What was the basic annual salary\* associated with your principal professional employment during FEBRUARY 1989? If you were on a postdoctoral appointment (see question #1 for definition), what was your stipend plus allowances?

\$\_\_\_\_\_ per year

Check whether salary was for \_\_\_ 9-10 months or \_\_\_ 11-12 months

*\*Basic salary is your annual salary before deduction for income tax, social security, retirement, etc., but does not include bonuses, overtime, summer teaching, or other payment for professional work.*

16. Since receiving the doctorate, how many full-time equivalent (FTE) years of professional work experience have you had? \_\_\_ Year(s)

17a. Was any of the work in which you were engaged during the past year supported or sponsored by U.S. Government funds?

- 1 \_\_\_ Yes      2 \_\_\_ No      3 \_\_\_ Don't Know

17b. If YES, which of the following supported your work? Mark all that apply.

- 1 \_\_\_ National Endowment for the Humanities
- 2 \_\_\_ National Endowment for the Arts
- 3 \_\_\_ Department of Defense
- 4 \_\_\_ Department of Education
- 5 \_\_\_ Smithsonian Institution
- 6 \_\_\_ Other, specify \_\_\_\_\_
- 7 \_\_\_ Don't know source agency

18. During your graduate program, did you receive formal training in the use of computers for research or teaching?

- 1 \_\_\_ Yes      2 \_\_\_ No

19. After receiving your doctorate, did you have to acquire formal training in any of the following areas in order to obtain your present position?

- 1 \_\_\_ Yes      If YES, specify below:  
 2 \_\_\_ No      1 \_\_\_ Foreign languages  
                   2 \_\_\_ Computer science  
                   3 \_\_\_ Management and administration  
                   4 \_\_\_ Survey research and statistics  
                   5 \_\_\_ Other, specify \_\_\_\_\_

20. During the past 2 years, have you published any professional scholarly writing (or had it accepted for publication)?

- 1 \_\_\_ Yes      2 \_\_\_ No

If YES, how many in each category?

- 1 \_\_\_ Book or monograph (author or co-author)
- 2 \_\_\_ Book or monograph (editor or co-editor)
- 3 \_\_\_ Chapter in a scholarly book
- 4 \_\_\_ Article in a refereed journal
- 5 \_\_\_ Book review in a refereed journal
- 6 \_\_\_ Article in newspaper magazine

21. Have you served on a scholarly committee (not including one at your educational institution) during the past 2 years?

- 1 \_\_\_ Yes      2 \_\_\_ No

If YES, in what capacity?

- 1 \_\_\_ Chair
- 2 \_\_\_ Member
- 3 \_\_\_ Other, specify \_\_\_\_\_

22. With reference to your job reported in #6, how would you rate your job satisfaction?

- 1 \_\_\_ Very high
- 2 \_\_\_ High
- 3 \_\_\_ Average
- 4 \_\_\_ Low
- 5 \_\_\_ Very low

## PART II - DEMOGRAPHIC CHARACTERISTICS

**23. Citizenship**

- 1 \_\_\_ U.S. Native Born
- 2 \_\_\_ U.S. Naturalized
- 3 \_\_\_ Non-U.S., Immigrant (Perm. Res.)
- 4 \_\_\_ Non-U.S., Non-Immigrant (Temp. Res.)

IF NON-U.S., specify country of citizenship

\_\_\_\_\_

**24a. What is your racial background?**

- 1 \_\_\_ American Indian or Alaskan Native
- 2 \_\_\_ Asian or Pacific Islander
- 3 \_\_\_ Black
- 4 \_\_\_ White

**24b. Is your ethnic heritage Hispanic?**

- 1 \_\_\_ Yes      If YES, is it:
- 2 \_\_\_ No      1 \_\_\_ Mexican American
- 2 \_\_\_ Puerto Rican
- 3 \_\_\_ Other Hispanic

**25. What is your marital status?**

- 1 \_\_\_ Never Married
- 2 \_\_\_ Married
- 3 \_\_\_ Separated, Divorced
- 4 \_\_\_ Widowed

**26. Do you have any children living with you who are:**

Under 6 years of age?

1 \_\_\_ Yes      How many? \_\_\_\_\_

2 \_\_\_ No

From 6 to 17 years of age?

1 \_\_\_ Yes      How many? \_\_\_\_\_

2 \_\_\_ No

27. Thank you for completing the questionnaire. Please return the completed form in the enclosed envelope to the National Research Council, GR442, 2101 Constitution Avenue, N.W., Washington, D.C. 20418

### EMPLOYMENT SPECIALTIES LIST

**MATHEMATICAL SCIENCES**

- 030 - Logic
- 099 - Mathematics, Other

**COMPUTER AND INFORMATION SCIENCES**

- 073 - Hardware Systems
- 081 - Information Sci. & Systems\*
- 074 - Intelligent Systems
- 072 - Software Systems
- 075 - Systems Analysis
- 071 - Theory
- 079 - Computer Sciences, Other\*

**PHYSICS & ASTRONOMY**

- 199 - Physics

**CHEMISTRY**

- 299 - Chemistry

**EARTH, ENVIRONMENTAL, AND MARINE SCIENCES**

- 399 - Earth Sciences
- 389 - Environmental Sciences
- 397 - Marine Sciences

**ENGINEERING**

- 499 - Engineering

**AGRICULTURAL SCIENCES**

- 519 - Agricultural Sciences

**MEDICAL SCIENCES**

- 530 - Audiology & Speech Pathology
- 520 - Medicine & Surgery
- 539 - Medical Sciences, Other

**BIOLOGICAL SCIENCES**

- 599 - Biological Sciences

**PSYCHOLOGY**

- 600 - Clinical
- 610 - Counseling & Guidance
- 699 - Psychology, Other

**SOCIAL SCIENCES**

- 700 - Anthropology
- 703 - Archeology
- 745 - Area Studies\*
- 708 - Communications
- 760 - Criminology & Criminal Justice
- 730 - Demography
- 725 - Econometrics
- 720 - Economics
- 740 - Geography
- 775 - History & Philosophy of Sci.
- 755 - International Relations
- 709 - Linguistics
- 751 - Political Sci. & Government
- 752 - Public Administration
- 753 - Public Policy Studies
- 727 - Social Statistics
- 710 - Sociology
- 770 - Urban & Regional Planning
- 798 - Social Sciences, General
- 799 - Social Sciences, Other\*

**HUMANITIES**

- 811 - American Literature
- 827 - Classics
- 836 - Comparative Literature
- 813 - English Language
- 814 - English Literature
- 823 - French
- 821 - German
- 826 - Italian
- 822 - Russian
- 824 - Spanish & Portuguese
- 829 - Languages, Other\*
- 839 - Letters, Other\*

- 804 - History, American
- 805 - History, European
- 806 - History, Other\*

- 808 - American Studies
- 802 - Art History & Criticism
- 830 - Music
- 834 - Philosophy (see also 030)
- 833 - Religious Studies (see also 881)
- 831 - Speech & Debate
- 809 - Theatre & Theatre Criticism
- 878 - Humanities, General
- 879 - Humanities, Other\*

**EDUCATION AND PROFESSIONAL FIELDS**

- 801 - Applied Art
- 888 - Architec. & Environ. Design
- 882 - Business & Management
- 883 - Home Economics
- 884 - Journalism
- 886 - Law, Jurisprudence
- 891 - Library & Archival Sciences
- 887 - Social Work
- 881 - Theology (see also 833)
- 896 - Professional Fields, General
- 897 - Professional Fields, Other\*

938 - Education (other than teaching in a field listed above)

899 - Other Fields\*

*\*Identify the specific field in the space provided in #7 on the questionnaire.*



## APPENDIX B: RESPONSE RATES

TABLE B-1: Response Rates for the 1989 Survey of Doctorate Recipients in the Humanities

1989	Sampling Frame (N)	Sample (n)	Survey Sample (n)	Con-tacted (n)	Survey Responses (n)	Response Rates*	
						A (%)	B (%)
Total Sample	106783	17456	16807	15095	9060	53.9	60.0
Field of Doctorate/Employment							
History	24183	2049	1975	1787	1146	58.0	64.1
Art History	3061	1077	1033	942	561	54.3	59.6
Music	8174	1269	1209	1084	703	58.1	64.9
Speech	5013	960	845	776	483	57.2	62.2
Philosophy	7801	1532	1482	1350	792	53.4	58.7
English/American Literature	27713	2512	2430	2184	1288	53.0	59.0
Classical Language/Literature	2159	831	788	712	452	57.4	63.5
Modern Language/Literature	15520	3466	3366	3021	1783	53.0	59.0
Religious Studies	2393	567	559	506	329	58.9	65.0
Other Humanities	5430	1220	1196	1069	659	55.1	61.6
Languages†	1132	468	459	385	195	42.5	50.6
Other Humanities†	2412	1155	1124	993	528	47.0	53.2
Merged Fields†	1792	350	341	286	141	41.3	49.3
Year of Doctorate							
CY1942-CY1957	11272	1321	1028	943	573	55.7	60.8
CY1958-FY1969	23422	2638	2438	2243	1305	53.5	58.2
FY1970-FY1976	31245	6822	6703	6088	3567	53.2	58.6
FY1977-FY1982	21970	3361	3328	3006	1756	52.8	58.4
FY1983-FY1984	6367	1101	1100	953	577	52.5	60.5
FY1985-FY1986	6168	1060	1059	897	575	54.3	64.1
FY1987-FY1988	6334	1148	1146	961	706	61.6	73.5
Merged Cohorts†	5	5	5	4	1	20.0	25.0
Sex							
Male	74176	8631	8291	7472	4393	53.0	58.8
Female	32607	8825	8516	7623	4667	54.8	61.2
Race/Ethnic Group							
White/Unknown	101693	14610	14018	12627	7734	55.2	61.2
Minority Group‡	5090	2846	2789	2468	1326	47.5	53.7
Citizenship							
U.S.	89747	14411	14074	12694	7787	55.3	61.3
Foreign	5764	1724	1705	1458	700	41.1	48.0
Unknown	11272	1321	1028	943	573	55.7	60.8

NOTE: The sampling frame includes those deceased and those residing in foreign countries; hence, these numbers exceed the population estimates shown in the other tables of this report. The survey sample is the sample size minus persons known to be deceased or out-of-scope prior to the survey. The "out-of-scope" classification is assigned to an individual who indicated on a previous survey that he or she holds a Ph.D. from a foreign institution, is a foreign citizen, and resides in a foreign country. The number assumed contacted equals the survey sample minus those individuals for whom no valid address could be obtained or whose address information was discovered to be invalid. Responses include individuals found to be deceased or residing in a foreign country at the time the survey was conducted.

\*Response rate "A" is the number of survey responses divided by the number in the survey sample. Response rate "B" is the number of survey responses divided by the number presumed to have been contacted.

†Merged fields and cohorts were created for certain small subgroups when sample was reduced.

‡Includes only those individuals whose racial/ethnic group was known at the time the sample was selected.

TABLE B-2: Response Rates for the 1987 Survey of Doctorate Recipients in the Humanities

1987	Sampling Frame (N)	Sample (n)	Survey Sample (n)	Contacted (n)	Survey Responses (n)	Response Rates*	
						A (%)	B (%)
Total	101047	16416	15828	14433	8941	56.5	61.9
Field of Doctorate/Employment							
History	23152	1961	1896	1752	1139	60.1	65.0
Art History	2834	1013	976	915	567	58.1	62.0
Music	7323	1158	1112	1027	674	60.6	65.6
Speech	4955	942	832	765	504	60.6	65.9
Philosophy	7511	1502	1455	1332	794	54.6	59.6
English/American Literature	26645	2437	2358	2152	1296	55.0	60.2
Classical Language/Literature	2114	802	761	701	446	58.6	63.6
Modern Language/Literature	14959	3279	3182	2905	1763	55.4	60.7
Religious Studies	2058	510	506	448	313	61.9	69.9
Other Humanities	4736	1089	1069	966	625	58.5	64.7
Languages†	954	393	387	323	181	46.8	56.0
Other Humanities†	2014	980	953	857	497	52.2	58.0
Merged Fields‡	1792	350	341	290	142	41.6	49.0
Year of Doctorate							
CY1944-CY1957	11869	1428	1135	1046	627	55.2	59.9
CY1958-FY1969	23422	2638	2463	2286	1390	56.4	60.8
FY1970-FY1976	31245	6822	6727	6159	3693	54.9	60.0
FY1977-FY1982	21968	3361	3336	3039	1883	56.4	62.0
FY1983-FY1984	6367	1101	1101	989	673	61.1	68.0
FY1985-FY1986	6171	1061	1061	910	675	63.6	74.2
Merged Cohorts†	5	5	5	4			
Gender							
Male	71116	8220	7913	7212	4348	54.9	60.3
Female	29931	8196	7915	7221	4593	58.0	63.6
Race/Ethnic Group							
White/Unknown	96611	13921	13384	12237	7695	57.5	62.9
Minority Group‡	4436	2495	2444	2196	1246	51.0	56.7
Citizenship							
U.S.	84060	13496	13216	12129	7662	58.0	63.2
Foreign	5118	1492	1477	1258	652	44.1	51.8
Unknown	11869	1428	1135	1046	627	55.2	59.9

NOTE: The sampling frame includes those deceased and those residing in foreign countries; hence, these numbers exceed the population estimates shown in the other tables of this report. The survey sample is the sample size minus persons known to be deceased or out-of-scope prior to the survey. The "out-of-scope" classification is assigned to an individual who indicated on a previous survey that he or she holds a Ph.D. from a foreign institution, is a foreign citizen, and resides in a foreign country. The number assumed contacted equals the survey sample minus those individuals for whom no valid address could be obtained or whose address information was discovered to be invalid. Responses include individuals found to be deceased or residing in a foreign country at the time the survey was conducted.

\*Response rate "A" is the number of survey responses divided by the number in the survey sample. Response rate "B" is the number of survey responses divided by the number presumed to have been contacted.

†Merged fields and cohorts were created for certain small subgroups when sample was reduced.

‡Includes only those individuals whose racial/ethnic group was known at the time the sample was selected.

TABLE B-3: Response Rates for the 1985 Survey of Doctorate Recipients in the Humanities

1985	Sampling Frame (N)	Sample (n)	Survey Sample (n)	Con-tacted (n)	Survey Responses (n)	Response Rates*	
						A (%)	B (%)
Total	95787	15504	14917	13560	9047	60.6	66.7
Field of Doctorate/Employment							
History	22537	1903	1833	1667	1166	63.6	69.9
Art History	2620	960	924	858	576	62.3	67.1
Music	6537	1055	1012	946	674	66.6	71.2
Speech	4970	936	827	762	515	62.3	67.6
Philosophy	7174	1467	1415	1289	844	59.6	65.5
English/American Literature	25420	2360	2281	2057	1380	60.5	67.1
Classical Language/Literature	2075	782	743	686	473	63.7	69.0
Modern Language/Literature	14359	3096	3002	2721	1782	59.4	65.5
Religious Studies	1731	458	456	413	312	68.4	75.5
Other Humanities	4065	964	941	858	585	62.2	68.2
Languages†	821	339	334	288	164	49.1	56.9
Other Humanities†	1686	834	807	717	426	52.8	59.4
Merged Fields†	1792	350	342	298	150	43.9	50.3
Year of Doctorate							
CY1942-CY1957	12856	1581	1253	1147	760	60.7	66.3
CY1958-FY1969	23422	2638	2482	2306	1526	61.5	66.2
FY1970-FY1976	31245	6822	6739	6126	3973	59.0	64.9
FY1977-FY1982	21968	3361	3341	3033	2071	62.0	68.3
FY1983-FY1984	6291	1097	1097	943	715	65.2	75.8
Merged Cohorts†	5	5	5	5	2	40.0	40.0
Gender							
Male	68390	7852	7554	6875	4518	59.8	65.7
Female	27397	7652	7363	6685	4529	61.5	67.7
Race/Ethnic Group							
White/Unknown	91915	13305	12766	11651	7886	61.8	67.7
Minority Group‡	3872	2199	2151	1909	1161	54.0	60.8
Citizenship							
U.S.	78317	12603	12357	11292	7705	62.4	68.2
Foreign	4614	1320	1307	1121	582	44.5	51.9
Unknown	12856	1581	1253	1147	760	60.7	66.3

NOTE: The sampling frame includes those deceased and those residing in foreign countries; hence, these numbers exceed the population estimates shown in the other tables of this report. The survey sample is the sample size minus persons known to be deceased or out-of-scope prior to the survey. The "out-of-scope" classification is assigned to an individual who indicated on a previous survey that he or she holds a Ph.D. from a foreign institution, is a foreign citizen, and resides in a foreign country. The number assumed contacted equals the survey sample minus those individuals for whom no valid address could be obtained or whose address information was discovered to be invalid. Responses include individuals found to be deceased or residing in a foreign country at the time the survey was conducted.

\*Response rate "A" is the number of survey responses divided by the number in the survey sample. Response rate "B" is the number of survey responses divided by the number presumed to have been contacted.

†Merged fields and cohorts were created for certain small subgroups when sample was reduced.

‡Includes only those individuals whose racial/ethnic group was known at the time the sample was selected.

TABLE B-4: Response Rates for the 1983 Survey of Doctorate Recipients in the Humanities

1983	Sampling Frame (N)	Sample (n)	Survey Sample (n)	Con-tacted (n)	Survey Responses (n)	Response Rates*	
						A (%)	B (%)
Total	91790	14979	14405	12925	9266	64.3	71.7
Field of Doctorate/Employment							
History	21752	1825	1760	1605	1189	67.6	74.1
Art History	2419	911	872	809	600	68.8	74.2
Music	5798	962	921	851	661	71.8	77.7
Speech	4952	919	817	752	523	64.0	69.5
Philosophy	6875	1428	1385	1224	854	61.7	69.8
English/American Literature	24463	2285	2209	1993	1410	63.8	70.7
Classical Language/Literature	2067	762	727	659	496	68.2	75.3
Modern Language/Literature	13786	2894	2804	2523	1784	63.6	70.7
Religious Studies	1439	409	409	299	216	52.8	72.2
Other Humanities	4214	1149	1106	991	765	69.2	77.2
Languages†	686	285	280	241	154	55.0	63.9
Other Humanities†	1533	792	764	677	432	56.5	63.8
Merged Fields‡	1806	358	351	301	182	51.9	60.5
Year of Doctorate							
CY1940-CY1957	14227	1811	1447	1331	941	65.0	70.7
CY1958-FY1969	23587	2760	2622	2449	1735	66.2	70.8
FY1970-FY1976	31681	6968	6903	6144	4325	62.7	70.4
FY1977-FY1980	15575	2365	2359	2082	1548	65.6	74.4
FY1981-FY1982	6715	1070	1069	915	715	66.9	78.1
Merged Cohorts†	5	5	5	4	2	40.0	50.0
Gender							
Male	66496	7686	7392	6608	4653	62.9	70.4
Female	25294	7293	7013	6317	4613	65.8	73.0
Race/Ethnic Group							
White/Unknown	88404	13009	12479	11232	8142	65.2	72.5
Minority Group‡	3386	1970	1926	1693	1124	58.4	66.4
Citizenship							
U.S.	73343	11977	11779	10611	7741	65.7	73.0
Foreign	4220	1191	1179	983	584	49.5	59.4
Unknown	14227	1811	1447	1331	941	65.0	70.7

NOTE: The sampling frame includes those deceased and those residing in foreign countries; hence, these numbers exceed the population estimates shown in the other tables of this report. The survey sample is the sample size minus persons known to be deceased or out-of-scope prior to the survey. The "out-of-scope" classification is assigned to an individual who indicated on a previous survey that he or she holds a Ph.D. from a foreign institution, is a foreign citizen, and resides in a foreign country. The number assumed contacted equals the survey sample minus those individuals for whom no valid address could be obtained or whose address information was discovered to be invalid. Responses include individuals found to be deceased or residing in a foreign country at the time the survey was conducted.

\*Response rate "A" is the number of survey responses divided by the number in the survey sample. Response rate "B" is the number of survey responses divided by the number presumed to have been contacted.

†Merged fields and cohorts were created for certain small subgroups when sample was reduced.

‡Includes only those individuals whose racial/ethnic group was known at the time the sample was selected.



TABLE B-5: Response Rates for the 1981 Survey of Doctorate Recipients in the Humanities

1981	Sampling Frame (N)	Sample (n)	Survey Sample (n)	Con-tacted (n)	Survey Responses (n)	Response Rates*	
						A (%)	B (%)
Total	85037	13676	13121	11738	7850	59.8	66.9
Field of Doctorate/Employment							
History	20790	1746	1682	1489	1040	61.8	69.8
Art History	2163	840	802	731	497	62.0	68.0
Music	5125	877	839	776	574	68.4	74.0
Speech	4920	902	795	725	500	62.9	69.0
Philosophy	6519	1393	1353	1160	737	54.5	63.5
English/American Literature	23259	2201	2127	1844	1232	57.9	66.8
Classical Language/Literature	2036	732	697	646	447	64.1	69.2
Modern Language/Literature	13093	2694	2611	2367	1527	58.5	64.5
Other Humanities	3496	1036	994	910	669	67.3	73.5
Languages†	563	236	231	198	114	49.4	57.6
Other Humanities†	1269	661	639	578	340	53.2	58.8
Merged Fields†	1804	358	351	314	173	49.3	55.1
Year of Doctorate							
CY1938-CY1957	15411	1950	1571	1442	978	62.3	67.8
CY1958-FY1965	12076	1456	1364	1292	877	64.3	67.9
FY1966-FY1969	11485	1304	1264	1177	783	61.9	66.5
FY1970-FY1974	22019	4037	4006	3538	2316	57.8	65.5
FY1975-FY1978	16914	3837	3824	3334	2192	57.3	65.7
FY1979-FY1980	7112	1087	1087	950	702	64.6	73.9
Merged Cohorts†	20	5	5	5	2	40.0	40.0
Gender							
Male	62518	7022	6744	6067	3974	58.9	65.5
Female	22519	6654	6377	5671	3876	60.8	68.3
Race/Ethnic Group							
White/Unknown	82243	12055	11529	10305	7001	60.7	67.9
Minority Group‡	2794	1621	1592	1433	849	53.3	59.2
Citizenship							
U.S.	65907	10699	10534	9417	6414	60.9	68.1
Foreign	3719	1027	1016	879	458	45.1	52.1
Unknown	15411	1950	1571	1442	978	62.3	67.8

NOTE: The sampling frame includes those deceased and those residing in foreign countries; hence, these numbers exceed the population estimates shown in the other tables of this report. The survey sample is the sample size minus persons known to be deceased or out-of-scope prior to the survey. The "out-of-scope" classification is assigned to an individual who indicated on a previous survey that he or she holds a Ph.D. from a foreign institution, is a foreign citizen, and resides in a foreign country. The number assumed contacted equals the survey sample minus those individuals for whom no valid address could be obtained or whose address information was discovered to be invalid. Responses include individuals found to be deceased or residing in a foreign country at the time the survey was conducted.

\*Response rate "A" is the number of survey responses divided by the number in the survey sample. Response rate "B" is the number of survey responses divided by the number presumed to have been contacted.

†Merged fields and cohorts were created for certain small subgroups when sample was reduced.

‡Includes only those individuals whose racial/ethnic group was known at the time the sample was selected.

TABLE B-6: Response Rates for the 1979 Survey of Doctorate Recipients in the Humanities

1979	Sampling Frame (N)	Sample (n)	Survey Sample (n)	Con-tacted (n)	Survey Responses (n)	Response Rates*	
						A (%)	B (%)
Total	79037	9948	9542	8809	6512	68.2	73.9
Field of Doctorate/Employment							
History	19627	1141	1088	1023	763	70.1	74.6
Art History	1893	666	643	603	470	73.1	77.9
Music	4395	686	660	618	496	75.2	80.3
Speech	4857	786	749	699	533	71.2	76.3
Philosophy	6158	804	774	708	492	63.6	69.5
English/American Literature	21782	1227	1158	1084	786	67.9	72.5
Classical Language/Literature	2036	635	602	561	402	66.8	71.7
Modern Language/Literature	12268	2156	2080	1892	1393	67.0	73.6
Other Humanities	2805	801	764	711	566	74.1	79.6
Languages†	453	194	190	170	103	54.2	60.6
Other Humanities†	959	494	480	434	308	64.2	71.0
Merged Fields†	1804	358	354	306	200	56.5	65.4
Year of Doctorate							
CY1936-CY1957	16515	2073	1743	1582	1192	68.4	75.3
CY1958-FY1965	12091	1456	1410	1320	974	69.1	73.8
FY1966-FY1969	11485	1304	1287	1188	858	66.7	72.2
FY1970-FY1974	22019	2659	2647	2444	1770	66.9	72.4
FY1975-FY1976	9003	1252	1251	1165	854	68.3	73.3
FY1977-FY1978	7919	1199	1199	1105	863	72.0	78.1
Merged Cohorts†	5	5	5	5	1	20.0	20.0
Gender							
Male	59146	5208	5009	4658	3394	67.8	72.9
Female	19891	4740	4533	4151	3118	68.8	75.1
Race/Ethnic Group							
White/Unknown	77004	8863	8478	7842	5864	69.2	74.8
Minority Group‡	2033	1085	1064	967	648	60.9	67.0
Citizenship							
U.S.	59177	7083	7012	6543	4890	69.7	74.7
Foreign	3345	792	787	684	430	54.6	62.9
Unknown	16515	2073	1743	1582	1192	68.4	75.3

NOTE: The sampling frame includes those deceased and those residing in foreign countries; hence, these numbers exceed the population estimates shown in the other tables of this report. In 1979, the sample size was reduced because of budgetary constraints. The survey sample is the sample size minus persons known to be deceased or out-of-scope prior to the survey. The "out-of-scope" classification is assigned to an individual who indicated on a previous survey that he or she holds a Ph.D. from a foreign institution, is a foreign citizen, and resides in a foreign country. The number assumed contacted equals the survey sample minus those individuals for whom no valid address could be obtained or whose address information was discovered to be invalid. Responses include individuals found to be deceased or residing in a foreign country at the time the survey was conducted.

\*Response rate "A" is the number of survey responses divided by the number in the survey sample. Response rate "B" is the number of survey responses divided by the number presumed to have been contacted.

†Merged fields and merged cohorts were created for certain small subgroups when sample was reduced.

‡Includes only those individuals whose racial/ethnic group was known at the time the sample was selected.

TABLE B-7: Response Rates for the 1977 Survey of Doctorate Recipients in the Humanities

1977	Sampling Frame (N)	Sample (n)	Survey Sample (n)	Con-tacted (n)	Survey Responses (n)	Response Rates*	
						A (%)	B (%)
Total	74032	15014	14267	13211	9455	66.3	71.6
Field of Doctorate/Employment							
History	19109	2705	2541	2380	1746	68.7	73.4
Art History	1722	643	616	575	430	69.8	74.8
Music	3910	929	890	835	621	69.8	74.4
Speech	4913	1038	991	926	653	65.9	70.5
Philosophy	6214	1186	1131	1030	681	60.2	66.1
English/American Literature	20891	2859	2730	2548	1830	67.0	71.8
Classical Language/Literature	2282	706	661	612	448	67.8	73.2
Modern Language/Literature	12499	3763	3578	3248	2245	62.7	69.1
Other Humanities	2492	1185	1129	1057	801	70.9	75.8
Year of Doctorate							
CY1930-CY1949	10332	2388	1839	1605	1157	62.9	72.1
CY1950-FY1961	14001	2604	2460	2309	1648	67.0	71.4
FY1962-FY1969	18664	3451	3407	3210	2347	68.9	73.1
FY1970-FY1974	22016	4282	4273	3923	2715	63.5	69.2
FY1975-FY1976	9019	2289	2288	2164	1588	69.4	73.4
Gender							
Male	56463	9878	9380	8788	6202	66.1	70.6
Female	17569	5136	4887	4423	3253	66.6	73.5
Race/Ethnic Group							
White/Unknown	72627	13610	12890	11943	8659	67.2	72.5
Minority Group†	1405	1404	1377	1268	796	57.8	62.8

NOTE: The sampling frame includes those deceased and those residing in foreign countries; hence, these numbers exceed the population estimates shown in the other tables of this report. The survey sample is the sample size minus persons known to be deceased or out-of-scope prior to the survey. The "out-of-scope" classification is assigned to an individual who indicated on a previous survey that he or she holds a Ph.D. from a foreign institution, is a foreign citizen, and resides in a foreign country. The number assumed contacted equals the survey sample minus those individuals for whom no valid address could be obtained or whose address information was discovered to be invalid.

Responses include individuals found to be deceased or residing in a foreign country at the time the survey was conducted.

\*Response rate "A" is the number of survey responses divided by the number in the survey sample. Response rate "B" is the number of survey responses divided by the number presumed to have been contacted.

†Includes only those individuals whose racial/ethnic group was known at the time the sample was selected.



## APPENDIX C: SAMPLING ERROR

Because the SDR estimates are based on a sample, they may vary from the values obtained had all units in the target population been surveyed using the same questionnaires and data collection methods. Two types of error are possible when population estimates are derived from measures of a sample: sampling error and nonsampling error.

Nonsampling error may be introduced during any part of the survey operation. Response variability is one such type of nonsampling error and may include variability both in interpretation of questionnaire items and in providing incorrect or incomplete information, whether deliberate or inadvertent. Inability to obtain data from all sample cases is another type of nonsampling error. Error may also be introduced in processing responses (as in coding and editing) or in generating the final estimates. Nonsampling error that is randomly introduced will increase the variance in the data and, hence, be reflected, in part, in the standard error estimates. Error that is biased, or constant in one direction, will contribute to bias in the estimate. This bias, however, is not reflected in the estimates of standard error.

Sampling error is the variation that occurs by chance because a sample, rather than the entire population, is surveyed. The particular sample used to estimate the 1989 U.S. population of humanities doctorates was one of a large number of possible samples that could have been selected using the same sample design and size. Estimates based on each of these samples would have differed from one another. In theory, the deviation of each of the sample estimates from the average of all possible samples would provide the basis for estimating the sampling error associated with a particular estimate derived from an individual sample. However, the sampling error may be estimated by determining the standard error of the survey estimate. "The term standard error is ordinarily used only in referring to the standard deviation of all possible sample estimates . . . [of some] summary measure estimated from [the] samples."<sup>1</sup> In other words, if all possible samples had been selected from the target population using the given sample design and size and if a particular population estimate had been derived from each of these samples, the standard deviation of the distribution of sample estimates would be the standard error. Although all samples have not been measured (and rarely are), the standard error may be estimated from a single sample. The sample estimate then, together with its estimated standard error, may be used to construct confidence intervals—bounds set around the sample estimate in which, with some prescribed probability, the average estimate from all possible samples will lie.

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<sup>1</sup>M. H. Hansen, W. N. Hurwitz, and W. G. Madow, *Sample Survey Methods and Theory* (vol. 1), New York: John Wiley and Sons, 1953, page 115.

## Method for Estimating Standard Errors of Totals and Percentages<sup>2</sup>

The number of possible results for which standard error estimates may have been determined was extremely large (owing to the number of variables measured in the survey, the number of demographic and field-category groups for which the measures may be calculated, and the values—such as percents and medians—that may be derived using survey estimates). Both time and cost limitations prohibited the determination of standard error estimates for each of the possible results. However, a method for generalizing standard error values from a limited number of results was used, allowing application to a wide variety of survey estimates.

One of the first steps in generalizing the standard error estimates for the humanities population (and select subpopulations) was to determine the rel-variances associated with a set of 27 characteristics chosen to represent a range of values—small, medium, and large. Rel-variance, or "relative variance," is defined as the variance of an estimate divided by the square of that estimate,<sup>3</sup> or, in the mathematical notation,

$$v_{x'}^2 = \frac{\sigma_{x'}^2}{x'^2}$$

The variance of each estimate,  $x'$ , from the SDR was determined by

$$\sigma_{x'}^2 = \sum_h N_h^2 (1-f_h) \frac{N_h}{N_h - 1} \frac{(p_h q_h)}{(n_{rh})}$$

and the square of the estimate by

$$x'^2 = \left( \sum_h \frac{N_h}{n_h} \left( \frac{n_h}{n_{rh}} \right) x_h \right)^2,$$

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<sup>2</sup>The method described for estimating standard errors of totals and percentages was taken from J. Steinberg, "A Procedure for Estimating and Generalizing Standard Errors of Estimated Totals and Percentages for the Survey of Doctorate Recipients, 1986" (unpublished document). This method is also referenced in a number of sections in Hansen et al., *op. cit.*, Chapters 5 and 12.

<sup>3</sup>Hansen et al., *op. cit.*, p. 124.

where  $N_h$  = Universe count of the target population in stratum h;<sup>4</sup>  
 $n_h$  = Size of the sample selected from stratum h;<sup>4</sup>  
 $n_{rh}$  = Responding sample in stratum h;  
 $x_h$  = Count of characteristic x among  $n_{rh}$ ;  
 $f_h$  =  $n_h/N_h$ ;  
 $p_h$  =  $x_h/n_{rh}$ ;  
 $q_h$  =  $1 - p_h$ .

The rel-variances determined for the characteristics then were used to develop a generalized rel-variance function of the form  $v_{x'}^2 = a + b/x'$ , where  $x'$  represents a survey estimate, and the a and b parameters are regression coefficients. The method of fitting the function minimizes the squared relative residuals of  $v_x^2$ .<sup>5</sup> The values of a and b are determined through a series of successive iterations of the rel-variance function until values of a and b differ negligibly. The final set of a and b parameters were ultimately used to calculate approximate standard errors of totals as derived from the formula

$$\sigma_{x'} = \sqrt{ax^2 + bx}$$

### Standard Errors of Estimated Totals

Standard error values have been computed for the estimated totals in the humanities disciplines (see Table C-1). Standard error values were calculated using the generalized-variance derived parameters, a and b, along with the formula for standard error above and were rounded to the nearest multiple of 10. Standard error estimates for survey totals not shown in this table either may be determined through linear interpolation or may be calculated directly using the above formula with the appropriate values of a and b (as found in Table C-2).

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<sup>4</sup>Because adjustments for inactives and the presurvey deceased are made to the population and sample in each successive survey—yielding, in effect, a new target population and survey sample—the target population count for each stratum was used for the population count, and the survey sample count was used for the sample count (see Appendix D).

<sup>5</sup>Hansen et al., *op. cit.*, p. 577.

Table C-1. Approximate Standard Error of Estimated Number of Humanities Doctorates, by Field, 1989

Est'd Number	All Fields	American History	"Other History"	Art History	Music	Speech/Theatre	Philosophy	English/American Lang/Lit	Classical Lang/Lit	Modern Lang/Lit	"Other Hum"
50	30	40	40	10	20	20	20	40	10	20	30
100	50	50	60	20	30	30	30	50	20	30	50
200	60	80	80	30	50	40	50	80	30	40	70
500	100	120	130	40	80	60	70	120	40	70	110
700	120	140	150	50	90	70	90	140	50	80	130
1000	140	170	180	50	100	90	100	170	50	90	150
2500	230	260	280	60	150	120	140	260	N/A	140	230
5000	320	360	370	N/A	160	N/A	160	350	N/A	190	300
10000	440	N/A	440	N/A	N/A	N/A	N/A	430	N/A	220	N/A
25000	630	N/A	N/A	N/A	N/A	N/A	N/A	240	N/A	N/A	N/A
50000	750	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
75000	700	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
100000	410	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note: Standard error estimates are not available for numbers which exceed the population of a given field.



Table C-2: Listing of a and b Parameters (Select Demographic Groups in Humanities Fields), 1989

		Total	Female	Whites	Asians	Blacks	Native Americans	Minority Combined	Hispanic	1987-88 Cohort	Foreign
Total All Fields	A	-0.000192	-0.000267	-0.000205	0.001756	0.001784	0.175467	-0.000792	0.001231	-0.001531	-0.000689
	B	20.9096	9.7806	21.4695	4.6691	2.9596	-0.2513	7.9173	8.0441	11.5915	7.2204
American History	A	-0.000643	-0.001382	-0.000648	0.014102*	-0.003646	0.175467*	0.014102	0.001231*	0.089424	-0.000689*
	B	28.9486	10.726	29.7062	1.8597*	2.8456	-0.2513*	1.8597	8.0441*	0.2306	7.2204*
Other History	A	-0.001432	-0.00239	-0.001516	0.02292	0.023274	0.175467*	-0.005354	0.094592	-0.004122	-0.000689*
	B	33.8793	11.795	34.819	5.6003	5.3594	-0.2513*	12.1039	1.0632	14.6423	7.2204*
Art History	A	-0.000913	-0.001455	-0.001015	0.12182*	0.12182*	0.12182*	0.12182	0.001231*	-0.010704	0.050377
	B	3.8626	3.0328	3.6266	-0.2841*	-0.2841*	-0.2841*	-0.2841	8.0441*	3.2292	5.1583
Music	A	-0.001443	-0.001793	-0.001539	0.003684	-0.000118	0.175467*	0.000807	0.020258	-0.011509	-0.006427
	B	12.183	3.9584	12.5079	1.7091	5.1851	-0.2513*	4.1599	2.7428	11.1759	6.3947
Speech/Theater	A	-0.000839	-0.00102	-0.000871	-0.000792*	-0.000792*	-0.000792*	-0.000792*	0.001231*	-0.007643	-0.000689*
	B	8.1246	2.9418	8.3627	7.9173*	7.9173*	7.9173*	7.9173*	8.0441*	4.5051	7.2204*
Philosophy	A	-0.0014	-0.001991	-0.001475	0.031906	0.02166*	0.02166*	0.02166	0.058819	-0.01641	-0.004615
	B	11.8212	2.9987	11.9644	4.4912	4.5297*	4.5297*	4.5297	1.3063	8.0267	9.5955
English & Am Lang/Lit	A	-0.00108	-0.001773	-0.001133	0.02334	0.030393	0.175467*	0.010807	0.109993	-0.014748	-0.004388
	B	29.3401	18.5068	30.0145	3.5742	0.3291	-0.2513*	3.0431	3.2285	20.7742	7.6243
Classical Lang/Lit	A	-0.001444	-0.000991	-0.001422	-0.000792*	-0.000792*	-0.000792*	-0.000792*	0.001231	-0.023782	-0.000689
	B	3.9621	1.1354	3.9569	7.9173*	7.9173*	7.9173*	7.9173*	8.0441*	2.3121	7.2204*
Modern Language/Lit	A	-0.000436	-0.000723	-0.000456	0.010159	0.009417	0.008791*	0.008791	-0.000617	-0.004659	-0.000558
	B	9.2559	7.0001	9.4857	1.2609	0.8365	0.9093*	0.9093	8.2765	5.9684	5.464
Other Humanities	A	-0.001043	0.000296	-0.001151	0.045688	0.00147	0.010244*	0.010244	0.071071	-0.001997	0.029548
	B	23.2262	6.7131	23.7359	1.4097	1.8273	2.3584*	2.3584	1.7989	10.1542	8.5223

\*Direct estimates are not available, data shown are considered useful approximations.

### Standard Errors of Estimated Percents

The standard error of an estimated percent based upon the ratio of two estimated totals, where the numerator is a subset of the denominator, may be approximated by

$$\sigma_p = p \sqrt{v_x^2 + v_y^2 + \frac{\sigma_d^2 - \sigma_x^2 - \sigma_y^2}{xy}}$$

where

$$p = \frac{x}{y} (100)$$

$$v_x^2 = a + \frac{b}{x}$$

$$v_y^2 = a + \frac{b}{y}$$

$$\sigma_d^2 = ad^2 + bd$$

$$\sigma_x^2 = ax^2 + bx$$

$$\sigma_y^2 = ay^2 + by$$

Through algebraic derivation, the standard error of the estimated percent simplifies to:

$$\sigma_p \doteq p \sqrt{b \left( \frac{1}{x} - \frac{1}{y} \right)}$$

The standard errors of estimated percents that are provided in Table C-3 were derived using this simplified formula. Table C-3 is developed for the humanities population in total. The formula above may be used to calculate standard errors of percents not shown in this table.

## Confidence Intervals

Once the standard error of an estimate has been determined, one can develop confidence intervals, ranges that with specified probability would include the average estimate of all possible samples. Using the standard error value, one may determine ranges for any of a variety of confidence levels. Applying  $\pm 1.96$  units of standard deviation to the survey estimate will provide an approximately 95 percent confidence interval; applying  $\pm 1$  unit of standard error to the survey estimate will provide an approximately 68 percent confidence interval; and applying  $\pm 2.58$  units of standard error will provide an approximately 99 percent confidence interval.

### Limitations of the Standard Error Estimates

As stated, standard error estimates provided in this report were derived from generalized functions based upon a limited set of characteristics (or survey estimates). While this method provides good approximations of standard errors associated with most survey results, it may overstate the error associated with estimates drawn from strata with high sampling fractions. However, the only way to avoid this overstatement is to calculate the standard errors directly from the raw data, forgoing the more practical, more widely applicable generalized method.

Table C-3. Approximate Standard Errors of Estimated Percent of Humanities Doctorates, 1989

Base Number of Percent	Estimated Percent						
	1 or 99	2 or 98	5 or 95	10 or 90	15 or 85	25 or 75	50
50	6.4	9.1	14.1	19.4	23.1	28.0	32.3
100	4.5	6.4	10.0	13.7	16.3	19.8	22.9
200	3.2	4.5	7.0	9.7	11.5	14.0	16.2
500	2.0	2.9	4.5	6.1	7.3	8.9	10.2
700	1.7	2.4	3.8	5.2	6.2	7.5	8.6
1000	1.4	2.0	3.2	4.3	5.2	6.3	7.2
2500	0.9	1.3	2.0	2.7	3.3	4.0	4.6
5000	0.6	0.9	1.4	1.9	2.3	2.8	3.2
10000	0.5	0.6	1.0	1.4	1.6	2.0	2.3
25000	0.3	0.4	0.6	0.9	1.0	1.3	1.4
50000	0.2	0.3	0.4	0.6	0.7	0.9	1.0
75000	0.2	0.2	0.4	0.5	0.6	0.7	0.8
100000	0.1	0.2	0.3	0.4	0.5	0.6	0.7



## APPENDIX D: WEIGHTING PROCEDURE

Estimates in this report are based on weighted responses. The 649 individuals (in the total sample of 17,456) who were known to be deceased or out-of-scope prior to the 1989 survey were inflated by their sample weights. The sample weight is the inverse of the sampling rate applied to each of the strata in the sample design. The products resulting from that inflation process were then subtracted from the population number in the affected strata to yield estimates of the target population in those strata. These target population values were then used in the response weighting procedure. A response weight, which is the product of the sample weight and the inverse of the response rate for a given strata, was assigned to each of the 9,060 survey respondents. Estimates in this report were developed by summing response weights of the respondents selected for each analysis. Table D-1 illustrates the classification of the sample and the formulas used for calculating weights.

As weights that resulted from the computation process were not always integer weights, respondents in each stratum were assigned a weight that was equal to either the integral part of the stratum's response weight or the integral part plus one. Allocation of integer weights within a stratum was made at random so as to represent the stratum population.

For example, consider a stratum that contains 60 individuals, of whom 15 were selected for the sample. One of the 15 is known to be deceased prior to the survey. This individual receives a sample weight,  $60/15$ , or 4.0, and thus represents 4 individuals in the population. The number of survey sample cases in the stratum is 14. Of these 14 individuals, 10 responded. The average weight for the responses to this stratum would be  $(60/15) \cdot (14/10) = 5.6$ . To obtain integer weights, 4 of the respondents (chosen at random) would each receive a weight of 5, thus representing 20 individuals in the population. The 6 remaining respondents would each receive a weight of 6, thus representing 36 population cases. Combined, the 10 respondents would represent 56 individuals in the stratum who, together with the 4 individuals estimated to be deceased, represent the entire 60 individuals in the stratum.

Table D-1: Classification and Weighting of the 1989 SDR Sample

Group	Number in Sample	Type of Estimation Weight Applied
TOTAL SAMPLE	17,456	
EXCLUDED FROM SURVEY		
Known Deceased Prior to Survey†	-602	Sample
Out of Scope‡	<u>-47</u>	Sample
SURVEY SAMPLE	16,807	
Not Contacted	<u>-1,712</u>	
CONTACTED SAMPLE	15,095	
RESPONSES		
Completed Questionnaires	8,978	Response
Deceased (learned through 1989 Survey)	<u>+ 82</u>	Response
TOTAL	9,060	

NOTE: The sample weight ( $W_s$ ) and response weight ( $W_r$ ) for each stratum was computed as follows:  $W_{s_h} = N_h/n_h$  where  $N_h$  and  $n_h$  are the respective population and sample sizes of stratum  $h$  and  $W_{r_h} = [(N_h/n_h)(n_h/r_h)]$ , and where  $n_h$  is the sample size of stratum  $h$  and  $r_h$  is the number of survey responses in stratum  $h$ .

†Based on information obtained from the 1977-1987 surveys or through address searches.

‡Based on responses indicating that the individual held a foreign doctoral degree, held foreign citizenship, and was residing in a foreign country.

## APPENDIX E: TIME-SERIES TABLES

TABLE E-1: Population of Humanities Ph.D.s, by Field of Doctorate, 1977-1989

Field of Doctorate	1977	1979	1981	1983	1985	1987	1989
All Fields	66,400	72,100	78,600	85,100	90,600	95,000	100,700
American History	5,400	7,200	8,500	8,400	8,800	9,500	10,000
"Other History"	11,400	10,700	11,000	12,000	12,500	12,500	12,700
Art History	1,500	1,800	2,100	2,400	2,700	2,800	3,100
Music	3,700	4,400	5,200	5,900	6,700	7,400	8,300
Speech/Theater	3,200	3,000	3,200	3,700	3,800	4,100	4,200
Philosophy	5,400	5,700	6,200	6,500	7,000	7,200	7,500
English/Amer Lang & Lit	18,500	20,100	21,700	22,800	23,800	24,600	26,000
Classical Lang & Lit	1,700	1,800	1,800	1,900	1,900	1,900	2,000
Modern Lang & Lit	11,800	13,200	14,300	15,100	16,000	16,600	17,400
"Other Humanities"	3,800	4,100	4,600	6,500	7,500	8,400	9,600

NOTE: Numbers are rounded to the nearest hundred; therefore, subcategories may not add to totals.

TABLE E-2: Demographic Characteristics of Humanities Ph.D.s, 1977-1989 (in percent)

Field of Doctorate and Gender	1977	1979	1981	1983	1985	1987	1989
Total Population (No.)	66,400	72,100	78,600	85,100	90,600	95,000	100,700
All Fields							
Men	76.1	74.1	72.8	71.5	70.3	69.1	68.3
Women	23.9	25.9	27.2	28.5	29.7	30.9	31.7
American History							
Men	84.2	86.4	86.2	85.0	85.1	85.1	84.5
Women	15.8	13.6	13.8	15.0	14.9	14.9	15.5
"Other History"							
Men	86.3	83.0	82.5	82.3	80.9	79.3	78.7
Women	13.7	17.0	17.5	17.7	19.1	20.7	21.3
Art History							
Men	59.2	57.2	53.5	51.2	49.2	46.6	45.5
Women	40.8	42.8	46.5	48.8	50.8	53.4	54.5
Music							
Men	84.2	81.8	80.3	79.1	77.5	76.7	75.5
Women	15.8	18.2	19.7	20.9	22.5	23.3	24.5
Speech/Theater							
Men	81.6	78.9	77.8	77.5	75.2	75.2	73.2
Women	18.4	21.1	22.2	22.5	24.8	24.8	26.8
Philosophy							
Men	86.9	86.5	85.8	85.4	84.6	84.4	83.8
Women	13.1	13.5	14.2	14.6	15.4	15.6	16.2
English/Amer Lang & Lit							
Men	71.0	68.7	67.6	66.2	64.9	63.1	62.6
Women	29.0	31.3	32.4	33.8	35.1	36.9	37.4
Classical Lang & Lit							
Men	72.6	71.0	70.2	70.7	71.1	69.7	70.0
Women	27.4	29.0	29.8	29.3	28.9	30.3	30.0
Modern Lang & Lit							
Men	64.7	62.7	60.3	58.4	56.4	55.6	54.3
Women	35.3	37.3	39.7	41.6	43.6	44.4	45.7
"Other Humanities"							
Men	74.9	72.3	68.3	67.3	67.5	64.6	65.3
Women	25.1	27.7	31.7	32.7	32.5	35.4	34.7
Race/Ethnic Group							
White	90.1	92.6	93.3	92.3	92.4	93.0	92.7
Minority Group	4.7	5.6	5.9	6.3	6.6	6.5	6.8
Hispanic	2.1	2.5	2.8	2.9	2.9	3.0	3.2
Black	1.3	1.5	1.6	1.6	1.9	1.8	1.8
Asian	1.2	1.4	1.4	1.7	1.7	1.4	1.6
Native American	0.1	0.2	0.1	0.2	0.2	0.2	0.2
Other	0.2	0.1	0.0	0.0	0.1	0.1	0.1
No Report	5.0	1.8	0.8	1.4	0.9	0.4	0.3
Age in Survey Year							
Under 40	36.5	34.7	30.0	25.3	21.1	17.5	14.9
40-49	29.0	30.5	34.0	37.6	39.1	39.8	38.8
50-59	19.2	19.7	20.5	21.1	22.4	23.9	25.4
60 and Over	14.4	14.6	15.5	15.9	17.2	18.4	20.3
No Report	0.8	0.4	0.1	0.1	0.1	0.5	0.7



**TABLE E-3: Employment Status of Humanities Ph.D.s, 1977-1989 (in percent)**

Employment Status	1977	1979	1981	1983	1985	1987	1989
Total Population (No.)	66,400	72,100	78,600	85,100	90,600	95,000	100,700
Employed Full-Time	83.0	81.6	83.6	82.0	83.0	80.9	80.1
Employed Part-Time	4.9	6.7	6.0	6.7	7.1	7.8	7.8
Postdoctoral Appointment	0.9	0.7	0.7	1.2	0.3	0.8	0.6
Not Employed	10.9	10.6	9.1	9.0	9.6	10.4	11.6
Seeking Employment	3.1	2.0	1.4	1.5	1.5	1.1	1.0
Not Seeking Employment	1.6	2.2	1.7	1.7	1.6	1.5	1.5
Retired	5.8	6.0	5.8	5.3	6.2	7.6	8.8
Other	0.4	0.3	0.2	0.6	0.3	0.2	0.2
No Report	0.3	0.4	0.6	1.1	0.0	0.1	0.0

TABLE E-4: Type of Employer of Humanities Ph.D.s, 1977-1989 (in percent)

Type of Employer	1977	1979	1981	1983	1985	1987	1989
Employed Population* (No.)	58,400	63,700	70,400	75,500	81,600	84,200	88,400
Educational Institution	89.9	86.3	85.3	82.9	82.3	81.0	81.0
4-Year Coll/Univ	82.4	79.3	77.6	74.8	74.3	73.0	73.4
2-Year College	5.1	4.3	4.9	5.1	5.1	4.9	4.6
Elem/Secondary Schools	2.4	2.6	2.8	3.0	2.9	3.2	3.1
Business/Industry†	3.2	5.4	6.5	8.8	8.7	9.8	9.8
U.S. Government	1.7	1.8	2.2	2.1	2.4	2.1	2.7
State/Local Government	0.8	1.0	1.6	1.7	1.7	1.1	1.1
Nonprofit Organization	3.5	4.5	3.7	4.2	4.6	5.5	5.1
No Report	0.7	0.9	0.6	0.3	0.2	0.2	0.2

NOTE: Percentages for those reporting other types of employers are not included in this table; therefore, totals may not add to 100 percent.

\*Includes those employed full-time or part-time.

†Includes those who were self-employed.

TABLE E-5: Primary Work Activity of Humanities Ph.D.s, 1977-1989 (in percent)

Primary Work Activity	1977	1979	1981	1983	1985	1987	1989
Employed Population* (No.)	58,400	63,700	70,400	75,500	81,600	84,200	88,400
Teaching	69.5	65.6	69.8	66.3	63.5	63.9	63.1
Management/Administration	10.9	12.9	11.1	11.4	12.9	14.2	14.9
Research & Development	5.0	5.2	3.9	4.4	4.9	4.9	5.2
Writing/Editing	4.8	5.4	4.2	5.1	5.5	4.9	4.5
Performing Arts	0.0	1.1	0.9	0.8	1.0	1.0	1.0
Consult/Professional Svcs	2.1	2.3	2.8	3.6	3.8	3.3	3.8
Other Activities	3.7	4.0	5.1	5.2	5.0	5.5	6.3
No Report	4.0	3.6	2.2	3.2	3.4	2.3	1.2

\* Includes those employed full-time or part-time.

TABLE E-6: Median Annual Salaries of Full-Time Employed Humanities Ph.D.s, by Field of Doctorate, 1977-1989 (in thousands of dollars)

Field of Doctorate	1977	1979	1981	1983	1985	1987	1989
All Fields	\$20.6	\$22.7	\$26.2	\$30.7	\$34.6	\$38.9	\$42.0
American History	19.8	23.9	28.7	34.9	37.3	43.8	47.2
"Other History"	22.3	23.9	26.7	32.2	36.4	40.8	45.6
Art History	19.8	21.3	25.3	30.3	33.3	36.8	42.3
Music	20.7	22.6	25.9	28.9	32.4	35.6	37.4
Speech/Theater	23.1	24.8	28.5	34.0	35.6	39.7	43.3
Philosophy	20.1	22.5	26.2	30.9	36.1	40.4	43.5
English/Amer Lang & Lit	20.4	22.3	26.1	30.0	34.1	37.4	40.9
Classical Lang & Lit	19.5	20.9	25.0	30.0	32.6	36.8	40.6
Modern Lang & Lit	19.6	22.1	25.4	29.7	33.6	37.0	40.8
"Other Humanities"	20.1	22.3	25.5	29.2	31.5	36.1	40.1

NOTE: Median salaries were computed only for Ph.D.s employed full-time, excluding those in the U.S. military. Academic salaries were multiplied by 11/9 to adjust for a full-time scale.

TABLE E-7. Faculty Rank of Humanities Doctorates in a Time-Series, 1977-1989

Survey Year	1977	1979	1981	1983	1985	1987	1989
<u>Total, Male and Female</u>							
Total Academically Employed*	51,100	53,300	58,100	60,300	64,800	65,600	68,900
Professor	35.7	36.7	37.2	41.2	39.5	41.5	41.0
Associate Professor	29.7	29.9	30.4	30.9	29.2	27.7	26.5
Assistant Professor	25.0	22.8	20.8	16.5	16.3	16.7	18.5
Instructor	2.7	2.9	2.6	2.3	3.8	2.4	2.2
Adjunct†	N/A	N/A	N/A	N/A	N/A	3.1	2.9
Lecturer†	2.3	N/A	N/A	N/A	N/A	2.3	2.2
<u>Male</u>							
Total Academically Employed*	40,300	40,600	43,300	44,800	47,000	46,400	48,100
Professor	40.1	42.2	42.8	47.3	45.4	48.6	47.9
Associate Professor	30.3	30.6	31.7	31.4	29.8	27.9	26.1
Assistant Professor	22.1	19.1	16.4	13.0	12.9	13.0	15.0
Instructor	1.9	1.9	1.9	1.6	2.8	1.6	1.7
Adjunct†	N/A	N/A	N/A	N/A	N/A	2.1	2.4
Lecturer†	1.3	N/A	N/A	N/A	N/A	1.1	1.4
<u>Female</u>							
Total Academically Employed*	10,800	12,700	14,800	15,500	17,800	19,200	20,800
Professor	19.2	19.0	21.1	23.6	23.9	24.3	25.1
Associate Professor	27.6	27.5	26.4	29.4	27.8	27.1	27.5
Assistant Professor	35.6	35.0	33.6	26.6	25.2	25.8	26.8
Instructor	5.5	6.1	4.7	4.0	6.4	4.2	3.2
Adjunct†	N/A	N/A	N/A	N/A	N/A	5.5	4.2
Lecturer†	6.1	N/A	N/A	N/A	N/A	5.2	4.0

\*Includes those employed full- or part-time.

†Not applicable for these years.

TABLE E-8. Age Distribution of Humanities Doctorates Employed As Faculty, 1977-1989

Age in Survey Year	1977	1979	1981	1983	1985	1987	1989
<b>All Fields</b>							
Total Faculty*	49,300	51,000	54,400	56,600	59,900	63,300	66,500
35 and Under	20.0	15.9	11.9	8.8	8.1	6.3	6.3
36 - 45	37.0	39.8	40.6	39.7	36.9	33.9	30.6
46 - 55	25.8	26.1	27.8	30.8	32.2	36.0	38.5
56 - 65	14.5	16.1	16.7	17.5	18.8	19.2	19.9
66 and Older	2.2	2.2	3.0	3.1	3.8	4.3	4.4
No Response	0.5	0.0	0.0	0.1	0.1	0.3	0.4
<b>English/American Language and Literature</b>							
Total Faculty*	14,100	14,700	15,300	15,400	15,900	16,700	17,500
35 and Under	21.1	17.9	11.3	8.5	8.0	6.5	5.5
36 - 45	37.2	40.4	42.9	41.2	38.0	32.8	28.7
46 - 55	24.4	21.7	24.5	29.5	31.9	36.8	40.8
56 - 65	14.5	16.9	17.1	17.0	18.4	19.8	19.6
66 and Older	2.2	3.1	4.2	3.7	3.7	3.8	4.8
No Response	0.6	0.0	0.0	0.1	0.0	0.3	0.5
<b>History</b>							
Total Faculty*	12,100	12,000	12,700	13,200	13,600	14,300	14,400
35 and Under	18.6	10.2	8.1	5.6	4.8	3.7	4.4
36 - 45	37.3	43.6	41.2	38.0	32.4	27.4	24.4
46 - 55	25.8	29.5	32.1	35.4	36.3	41.8	43.8
56 - 65	15.7	15.6	15.9	17.8	21.6	21.7	23.3
66 and Older	1.9	1.1	2.8	3.0	4.8	5.3	4.1
No Response	0.7	0.0	0.0	0.1	0.1	0.1	0.1
<b>Other Languages and Literature</b>							
Total Faculty*	9,700	10,500	11,400	11,300	12,200	12,600	13,300
35 and Under	21.0	18.5	14.1	10.4	8.3	6.7	6.3
36 - 45	37.0	37.7	41.3	40.1	38.9	36.2	31.4
46 - 55	24.3	25.5	26.5	30.4	31.7	34.3	37.1
56 - 65	14.6	15.9	15.3	16.1	17.7	18.2	20.5
66 and Older	2.7	2.5	2.7	3.0	3.1	4.4	4.3
No Response	0.4	0.0	0.1	0.1	0.2	0.2	0.4
<b>Other Humanities Fields</b>							
Total Faculty*	13,500	13,800	15,100	16,700	18,200	19,700	21,300
35 and Under	19.3	16.6	13.9	10.5	10.6	8.0	8.1
36 - 45	36.6	37.4	37.1	39.4	38.0	38.1	35.7
46 - 55	28.5	28.1	28.7	28.7	29.9	32.2	33.8
56 - 65	13.5	15.7	18.1	18.5	17.7	17.4	17.3
66 and Older	2.0	2.2	2.1	2.8	3.6	4.0	4.5
No Response	0.2	0.0	0.0	0.1	0.1	0.4	0.5

\*Includes only those employed full- or part-time in academe who responded to the question on faculty status.

## APPENDIX F

TABLE F-1: Estimated Number of Employed Humanities Ph.D.s, by Fine Field of Employment, 1989

Total Employed*	88,978		
Mathematics, Total	331	Arts/Humanities/Language/ Literature, Total	65,397
Logic	207	American History	6,239
Mathematics, Other	124	European History	3,437
Computer & Information Sci, Total	2,005	History & Phil of Sci	1,202
Hardware Systems	45	History, Other	3,244
Information Sci & Systems	467	American	4,540
Intelligent Systems	144	English Language	4,143
Software Systems	805	English Literature	7,136
Systems Analysis	282	Classics	1,371
Computer Sciences, Other	262	German	1,909
Physics/Astronomy, Total	27	Russian	751
Chemistry, Total	5	French	2,892
Earth, Envir, & Marine Sci, Total	151	Spanish & Portuguese	3,691
Earth Sciences	26	Italian	341
Environmental Sciences	24	Other Languages	1,091
Marine Sciences	101	Comparative Literature	933
Engineering, Total	33	Linguistics	1,449
Agricultural Sciences, Total	28	History & Criticism of Art	2,563
Medical Sciences, Total	300	Archeology	269
Speech Pathology & Audiology	17	American Studies	389
Medicine & Surgery	85	Music	6,441
Medical Sciences, Other	198	Theater & Theater Criticism	1,724
Biological Sciences, Total	19	Speech Dramatic Art/Debate	606
Psychology, Total	420	Religious Studies	1,755
Clinical Psychology	85	Philosophy	4,414
Counseling & Guidance	272	Letters, Other	1,021
Psychology, Other	63	Humanities, General	1,150
Social Sciences, Total	2,590	Humanities, Other	696
Anthropology	128	Educational, Professional, & Other Fields, Total	16,710
Communications	725	Education	4,933
Sociology	125	Applied Art	105
Economics	62	Theology	1,244
Social Statistics	11	Business & Management	1,894
Demography	6	Home Economics	74
Area Studies	130	Journalism	828
Political Science	174	Law, Jurisprudence	1,226
Public Administration	350	Social Work	146
Public Policy Studies	41	Architec & Environ Design	84
International Relations	332	Library & Archival Sciences	1,058
Criminology & Crim. Justice	44	Prof Fields, General	166
Urban & Regional Planning	31	Prof Fields, Other	1,458
Social Sciences, General	59	Other Fields	3,494
Social Sciences, Other	372	No Report	896

\*Includes postdoctoral appointees as well as Ph.D.s employed full-time and part-time.

