

## ABSTRACT

This research brief examines changes in the age distribution of faculty in the University of Wisconsin (UW) system over time and trends in faculty retirement. Findings indicate that: (1) in 1997-98, 35 percent of faculty were age 55 and older, 51 percent were between 40 and 54 , and fewer than 15 percent were under 40 ; (2) on average, faculty at the UW comprehensive institutions were somewhat older than faculty at UW-Madison and UW-Milwaukee; faculty at the UW colleges were older than faculty in other system institutions; (3) faculty age distribution varied across academic disciplines, with engineering and physical sciences having both the highest percentage in the 55 and older age group and the highest percentage of faculty under 40; (4) between 1985-86 and 1997-98 the total number of UW system faculty declined by 9.8 percent; however, the number of faculty 55 and over increased by 18 percent and the number under age 40 declined by 41.4 percent, which changed the age distribution. Based on historical retirement rates, it is projected that 2,384 faculty members (close to 40 percent) systemwide will retire over the next decade. Text, figures, and graphs present the detailed analysis. Appendices include technical notes, additional tables, and notes on the projection methodology used. (DB)

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## The Graying of the Faculty in the UW System

## Executive Summary

It has been widely observed that in higher education the aging of the faculty "will result in retirement increases beginning in the late 1990s and continuing through the first decade of the $21^{\text {st }}$ century" (Bringing into Focus the Factors Affecting Faculty Supply and Demand, Western interstate Commission for Higher Education, 1991). This research brief looks at changes in the age distribution of faculty in the UW System over time in order to determine the impact of these changes on faculty retirements.

In 1997-98, 35 percent of faculty systemwide were age 55 and older, about half ( $51 \%$ ) were between the ages of 40 and 54, and less than 15 percent were under age 40. There were some variations among institutions in the UW System. Approximately 33 percent of the faculty at UWMadison were 55 and older while less than 15 percent of its faculty were under age 40. At UWMilwaukee, the age distribution of faculty was similar to that of UW-Madison with 30 percent of its faculty age 55 and older and again, less than 15 percent younger than age 40. On average, the faculty at the UW Comprehensive institutions were somewhat older than the faculty at UW-Madison and UW-Milwaukee with 36 percent of faculty age 55 and older and less than 15 percent under age 40. The UW Colleges' faculty were measurably older than faculty in the other institutions, with 47 percent of the faculty age 55 and older and less than 10 percent under age 40.

The faculty age distribution also varies across academic disciplines. In 1997-98, Engineering and Physical Sciences had the highest percentage $(39 \%)$ in the 55 and older age group, followed by Humanities ( $38 \%$ ), Agricultural and Life Sciences ( $33 \%$ ), Social and Behavioral Sciences ( $32 \%$ ), NonClinical Health Sciences ( $31 \%$ ), and Clinical Health Sciences ( $28 \%$ ). Engineering and Physical Sciences also had the highest percentage (19\%) of faculty under age 40 .

Between 1985-86 and 1997-98 the total number of UW System faculty declined from 6,883 to 6,208 $(9.8 \%)$. During the same time period the number of faculty 55 and over increased by 330 ( $18.0 \%$ ), while the number under the age of 40 declined by $621(41.4 \%)$ resulting in a change in the age distribution of the faculty. The percentage of UW System faculty age 55 and older increased from 27 percent in 1985-86 to 35 percent in 1997-98, while the percentage of faculty under age 40 declined from 22 percent in 1985-96 to 14 percent in 1997-98.

Based on historical retirement rates in the UW System, 2,384 faculty members systemwide are projected to retire over the next decade. This represents close to 40 percent of the total number of UW System faculty in 1997-98.

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## Introduction

## Section I:

1997-98 Faculty Age Distribution in the UW System

Approximately $35 \%$ of all UW System faculty were age 55 or older in 199798.

This report examines trends in the faculty age distribution in the UW System by institution, academic discipline area and gender, with an emphasis on the age distribution of faculty in 1997-98. Data on retirement patterns are used in conjunction with the age distribution data to develop estimated retirement projections. The population studied in this research brief includes all UW System tenured and tenure-track faculty members who were on the October AA/EEO databases of 1985, 1990, 1994, and 1997. Detailed technical notes are provided in Appendix A.

This research brief consists of four substantive sections and a conclusion. The first section provides a description of the 1997-98 faculty age distribution in the UW System; the second section discusses changes in the faculty age distribution over time; the third section focuses on the 1997-98 faculty age distribution by discipline area; and the fourth section provides projections of UW System faculty retirements in the next decade. The conclusion summarizes the major findings of this study and indicates their implications. In addition, there are three appendixes, which provide technical notes and tables showing detailed figures concerning various topics in this study.

Overall, in 1997-98, approximately 35 percent of the UW System faculty were 55 years of age or older. Approximately 14 percent of faculty were under age 40 , while 51 percent were in the age group between 40 and 54 (Figure 1 ).

Figure 1
1997-98 UW System Faculty Age Distribution


Table 1 shows the faculty age distribution for UW-Madison, UWMilwaukee, the UW Comprehensive institutions, and the UW Colleges. (Detailed information on each of the UW Comprehensive institutions is provided in Appendix B, Table 7.)

In 1997-98, approximately 33 percent of the faculty at UWMadison were 55 and older, while about 52 percent were between age 40 and 54 . Slightly less than 15 percent were under age 40.

The age distribution of UW-Milwaukee faculty was similar to that of UW-Madison, with approximately 30 percent of the faculty age 55 and older and 55 percent between age 40 and 54. Again, less than 15 percent were under age 40.

The faculty at the UW Comprehensive institutions were somewhat older than the faculty at UW-Madison and UW-Milwaukee.
Approximately 36 percent of the faculty in the UW Comprehensive institutions were age 55 and older while 50 percent were between age 40 and 54. Like UW-Madison and UW-Milwaukee, slightly less than 15 percent were under age 40.

The UW Colleges had the oldest faculty in the UW System with the highest proportion of faculty age 55 and older (47.3\%), and the lowest under age 40 ( $9.5 \%$ ). Only 43 percent of UW Colleges' faculty were between age 40 and 54.

Table 1
1997-98 Faculty Age Distribution by Institution/Cluster

|  | AGE $<40$ |  | AGE 40-54 |  | AGE 55 \& + |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| INSTITUTION | N | PCT | N | PCT | N | PCT |
| UW-Madison | 314 | 14.5 | 1.135 | 52.4 | 716 | 33.1 |
| UW-Milwaukee | 104 | 14.2 | 407 | 55.4 | 223 | 30.4 |
| UW Comprehensives | 431 | 14.4 | 1,487 | 49.7 | 1,076 | 35.9 |
| UW Colleges | 30 | 9.5 | 136 | 43.2 | 149 | 47.3 |
| UW System Total | 879 | 14.2 | 3,165 | 51.0 | 2.164 | 34.9 |

In 1997-98, 4,497 (72.4\%) of the total 6,208 UW System faculty were men and 1,711 ( $27.6 \%$ ) were women. While 40 percent of the male faculty were 55 years of age or older, only 22 percent of female faculty fell into this category. By contrast, almost 20 percent of the female faculty were under the age of 40 compared to 12 percent of the males (Figure 2). The difference in the distribution of men and women by age results in a situation in which 83 percent of the faculty 55 and over are male and only 17 percent of the faculty in that age group are female. (A detailed table is provided in Appendix B, Table 8.)

Figure 2
1997-98 Proportions of Men and Women Faculty by Age Group


Section II:
Trends in Faculty Age Distribution in the UW System

The percentage of UW System faculty age 55 and older rose from 27 percent in 1985-86 to 35 percent in 1997-98, while under age 40 declined from 22 percent in 1985-86 to 14 percent in 1997-98.

Between 1985-86 and 1997-98 the total number of UW System faculty declined from 6,883 to 6,208 ( $9.8 \%$ ). During the same time period the number of faculty 55 and over increased by 330 ( $18.0 \%$ ), while the number under the age of 40 declined by 621 ( $41.4 \%$ ) causing a change in the age distribution of the faculty. The percentage of UW System faculty age 55 and older increased from 27 percent in 1985-86 to 35 percent in 1997-98, while the percentage of faculty in the age group between 40 and 54 held almost constant at about 51 percent. The percentage of all faculty in the UW System under age 40 declined from 22 percent in 1985-86 to 14 percent in 1997-98 (Figure 3). Across the UW System, the mean faculty age increased from 48 in 1985-86 to 50 in 1997-98.

Figure 3
UW System Faculty Age Distributions 1985-86, 1990-91, 1994-95, and 1997-98


Table 2 displays number of faculty and the age distribution at UW-Madison, UW-Milwaukee, the UW Comprehensives, and the UW Colleges for 1985-86, 1990-91, 1994-95, and 1997-98.

During this period:

- While the total faculty at UW-Madison declined by 162 (9.8\%) between 1985-86 and 1997-98, the number of faculty age 55 years or older increased by 54 ( $8.2 \%$ ) and the faculty under the age of 40 declined by 283 ( $41.4 \%$ ). This changed the age distribution so that the percentage of faculty 55 or older increased from 28 percent to 33 percent while the percentage under the age of 40 declined from 26 percent to 15 percent. The average faculty age at UW-Madison increased from 48 in 1985-86 to 50 in 1997-98.
- UW-Milwaukee experienced a shift in the age distribution similar to UW-Madison, with the percentage of the faculty 55 or older increasing from 26 percent to 30 percent, while the percent under the age of 40 declined from 27 percent to 14 percent. UW-Milwaukee's average faculty age increased from 47 in 1985-86 to 50 in 1997-98.
- The UW Comprehensive institutions experienced a somewhat larger increase than either UW-Madison or UW-Milwaukee with the percentage age 55 and above rising from 27 percent to 36 percent. By contrast, the

Between 1985 and 1997, UW Colleges experienced a 32 percentage point increase in the number of faculty age 55 and older.

UW Comprehensives experienced a smaller decline than UW-Madison or UW-Milwaukee in the percentage under the age of 40 , which declined from 18 percent in 1985-86 to 14 percent in 1997-98. The average faculty age in the UW Comprehensives increased from 48 in 1985-86 to 50 in 1997-98.

- The UW Colleges experienced the largest shift in the age distribution, with the percent of faculty 55 or over rising from 15 percent in 1985-86 to 47 percent in 1997-98 and the percentage under the age of 40 falling from 19 percent to 10 percent. The average faculty age at UW Colleges increased from 46 in 198586 to 52 in 1997-98.

Table 2
Faculty Age Distribution by Institution/Cluster 1985-86, 1990-91, 1994-95, and 1997-98

|  | AGE < 40 |  | AGE 40-54 |  | AGE 55 \& + |  | TOTAL | MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| INST/YEAR | $N$ | PCT | $N$ | PCT | N | PCT | N | AGE |
| UW-Madison |  |  |  |  |  |  |  |  |
| 1985-86 | 597 | 25.7\% | 1,068 | 45.9\% | 662 | 28.4\% | 2,327 | 48 |
| 1990-91 | 590 | 24.3\% | 1,099 | 45.3\% | 737 | 30.4\% | 2,426 | 48 |
| 1994-95 | 446 | 18.9\% | 1,174 | 49.7\% | 740 | 31.4\% | 2,360 | 50 |
| 1997-98 | 314 | 14.5\% | 1,135 | 52.4\% | 716 | 33.1\% | 2.165 | 50 |
|  |  |  |  |  |  |  |  |  |
| 1985-86 | 217 | 26.5\% | 391 | 47.7\% | 211 | 25.8\% | 819 | 47 |
| 1990-91 | 216 | 25.7\% | 401 | 47.7\% | 223 | 26.6\% | 840 | 48 |
| 1994-95 | 153 | 19.0\% | 422 | 52.4\% | 231 | 28.6\% | 806 | 49 |
| 1997-98 | 104 | 14.2\% | 407 | 55.4\% | 223 | 30.4\% | 734 | 50 |
| UW Comprehensives |  |  |  |  |  |  |  |  |
| 1985-86 | 613 | 18.3\% | 1.841 | 54.8\% | 904 | 26.9\% | 3,358 | 48 |
| 1990-91 | 571 | 17.5\% | 1.773 | 54.4\% | 917 | 28.1\% | 3,261 | 49 |
| 1994-95 | 462 | 14.3\% | 1,714 | 53.2\% | 1,046 | 32.5\% | 3,222 | 50 |
| 1997-98 | 431 | 14.4\% | 1,487 | 49.7\% | 1,076 | 35.9\% | 2,994 | 50 |
|  |  |  |  |  |  |  |  |  |
| 1985-86 | 73 | 19.3\% | 249 | 65.7\% | 57 | 15.0\% | 379 | 46 |
| 1990-91 | 42 | 11.5\% | 243 | 66.4\% | 81 | 22.1\% | 366 | 49 |
| 1994-95 | 43 | 11.9\% | 188 | 51.9\% | 131 | 36.2\% | 362 | 50 |
| 1997-98 | 30 | 9.5\% | 136 | 43.2\% | 149 | 47.3\% | 315 | 52 |
| UW System Totals |  |  |  |  |  |  |  |  |
| 1985-86 | 1,500 | 21.8\% | 3,549 | 51.6\% | 1.834 | 26.6\% | 6,883 | 48 |
| 1990-91 | 1,419 | 20.6\% | 3,516 | 51.0\% | 1,958 | 28.4\% | 6,893 | 48 |
| 1994-95 | 1,104 | 16.4\% | 3,498 | 51.8\% | 2,148 | 31.8\% | 6,750 | 50 |
| 1997-98 | 879 | 14.2\% | 3,165 | 51.0\% | 2,164 | 34.9\% | 6,208 | 50 |
| \% Change in the UW System Faculty Population |  |  |  |  |  |  |  |  |
| Between 1985 \& 1990 | -5.4\% |  | -0.9\% |  | 6.8\% |  | 0.1\% |  |
| Between 1990 \& 1994 | -22.2\% |  | -0.5\% |  | 9.7\% |  | -2.1\% |  |
| Between 1994 \& 1997 | -20.4\% |  | -9.5\% |  | 0.7\% |  | -8.0\% |  |
| Between 1985 \& 1997 | -41.4\% |  | -10.8\% |  | 18.0\% |  | -9.8\% |  |

Table 3 illustrates that while the total number of facuity in the UW System declined by 675 ( $9.8 \%$ ) between 1985-86 and 1997-98, the number of women increased by $386(29.1 \%)$ and the number of men declined by $1,061(19.1 \%)$. This change increased the proportion of female faculty employed in the UW System from approximately 19 percent in 1985-86 to almost 28 percent in 1997-98. UW-Madison, UW-Milwaukee, the UW Comprehensives and the UW Colleges all showed an increase in the proportion of women faculty.

Systemwide, between 1985-86 and 1997-98, the number of female faculty under the age of 40 declined, but not as rapidly as the number of male faculty in that category, resulting in an increase in the proportion of female faculty under the age of 40. In the other two age categories, ( 40 to 54 and 55 and above), the number of women increased while the number of men declined. UW-Madison, the UW Comprehensives and the UW Colieges exhibited a similar pattern of increases in the proportion of women in all three age categories. At UW-Milwaukee there were decreases in the proportion of women in the under 40 and 55 and above categories, offset by a larger increase in the proportion of women in the 40 to 54 year category.

Table 3
Trends in Faculty Age Distribution by Gender and Institution/Cluster

|  | Age < 40 |  |  |  | Age 40-54 |  |  |  | Age 55 \& + |  |  |  | Total |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  | Female |  | Male |  | Female |  | Male |  | Female |  | Male |  | Female |  |
| Institution | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| UW-Madison |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985-86 | 465 | 77.9\% | 132 | 22.1\% | 924 | 86.5\% | 144 | 13.5\% | 591 | 89.3\% | 71 | 10.7\% | 1980 | 85.1\% | 347 | 14.9\% |
| 1990-91 | 428 | 72.5\% | 162 | 27.5\% | 898 | 81.7\% | 201 | 18.3\% | 665 | 90.2\% | 72 | 9.8\% | 1991 | 82.1\% | 435 | 17.9\% |
| 1994-95 | 321 | 72.0\% | 125 | 28.0\% | 905 | 77.1\% | 269 | 22.9\% | 664 | 89.7\% | 76 | 10.3\% | 1890 | 80.1\% | 470 | 19.9\% |
| 1997-98 | 211 | 67.2\% | 103 | 32.8\% | 856 | 75.4\% | 279 | 24.6\% | 624 | 87.2\% | 92 | 12.8\% | 1691 | 78.1\% | 474 | 21.9\% |
| UW-Milwaukee |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985-86 | 135 | 62.2\% | 82 | 37.8\% | 309 | 79.0\% | 82 | 21.0\% | 173 | 82.0\% | 38 | 18.0\% | 617 | 75.3\% | 202 | 24.7\% |
| 1990-91 | 133 | 61.6\% | 83 | 38.4\% | 283 | 70.6\% | 118 | 29.4\% | 193 | 86.5\% | 30 | 13.5\% | 609 | 72.5\% | 231 | 27.5\% |
| 1994.95 | 95 | 62.1\% | 58 | 37.9\% | 274 | 64.9\% | 148 | 35.1\% | 194 | 84.0\% | 37 | 16.0\% | 563 | 69.9\% | 243 | 30.1\% |
| 1997-98 | 68 | 65.4\% | 36 | 34.6\% | 245 | 60.2\% | 162 | 39.8\% | 193 | 86.5\% | 30 | 13.5\% | 506 | 68.9\% | 228 | 31.1\% |
| UW Comprehensives |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985-86 | 428 | 69.8\% | 185 | 30.2\% | 1493 | 81.1\% | 348 | 18.9\% | 736 | 81.4\% | 168 | 18.6\% | 2657 | 79.1\% | 701 | 20.9\% |
| 1990-91 | 371 | 65.0\% | 200 | 35.0\% | 1318 | 74.3\% | 455 | 25.7\% | 762 | 83.1\% | 155 | 16.9\% | 2451 | 75.2\% | 810 | 24.8\% |
| 1994 -95 | 276 | 59.7\% | 186 | 40.3\% | 1184 | 69.1\% | 530 | 30.9\% | 856 | 81.8\% | 190 | 18.2\% | 2316 | 71.9\% | 906 | 28.1\% |
| 1997-98 | 248 | 57.5\% | 183 | 42.5\% | 975 | 65.6\% | 512 | 34.4\% | 854 | 79.4\% | 222 | 20.6\% | 2077 | 69.4\% | 917 | 30.6\% |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985-86 | 53 | 72.6\% | 20 | 27.4\% | 206 | 82.7\% | 43 | 17.3\% | 45 | 78.9\% | 12 | 21.1\% | 304 | 80.2\% | 75 | 19.8\% |
| 1990-91 | 28 | 66.7\% | 14 | 33.3\% | 187 | 77.0\% | 56 | 23.0\% | 64 | 79.0\% | 17 | 21.0\% | 279 | 76.2\% | 87 | 23.8\% |
| 1994-95 | 23 | 53.5\% | 20 | 46.5\% | 133 | 70.7\% | 55 | 29.3\% | 104 | 79.4\% | 27 | 20.6\% | 260 | 71.8\% | 102 | 28.2\% |
| 1997-98 | 17 | 56.7\% | 13 | 43.3\% | 90 | 66.2\% | 46 | 33.8\% | 116 | 77.9\% | 33 | 22.1\% | 223 | 70.8\% | 92 | 29.2\% |
| UW System Totals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985-86 | 1081 | 72.1\% | 419 | 27.9\% | 2932 | 82.6\% | 617 | 17.4\% | 1545 | 84.2\% | 289 | 15.8\% | 5558 | 80.7\% | 1325 | 19.3\% |
| 1990-91 | 960 | 67.7\% | 459 | 32.3\% | 2686 | 76.4\% | 830 | 23.6\% | 1684 | 86.0\% | 274 | 14.0\% | 5330 | 77.3\% | 1563 | 22.7 ${ }^{\prime \prime}$ |
| 1994.95 | 715 | 64.8\% | 389 | 35.2\% | 2496 | 71.4\% | 1002 | 28.6\% | 1818 | 84.6\% | 330 | 15.4\% | 5029 | 74.5\% | 1721 | 25.6 |
| 1997-98 | 544 | 61.9\% | 335 | 38.1\% | 2166 | 68.4\% | 999 | 31.6\% | 1787 | 82.6\% | 377 | 17.4\% | 4497 | 72.4\% | 1711 | 27.6\% |

## Section III:

1997-98 Age Distributions by Discipline Area and Trends Between 1985-86 and 1997-98

1997-98 faculty in Engineering \& Physical Sciences had the highest percentages in age 55 or older and younger than age 40 categories.

The faculty age distribution varies across academic disciplines. For the purposes of this analysis, academic disciplines were grouped into six broad areas: Social and Behavioral Sciences, Humanities, Engineering and Physical Sciences, Agricultural and Life Sciences, Non-Clinical Health Sciences, and Clinical Health Sciences. Faculty members in non-teaching departments (e.g., university library) as well as Law and Medicine are excluded from this analysis. Among these six academic discipline areas, more than half ( $61.1 \%$ ) of the 1997-98 faculty population was in the Social and Behavioral Sciences and Humanities. Engineering and Physical Sciences had approximately 22 percent, while the other discipline areas shared the remaining 17 percent of the faculty population.

Systemwide, approximately 39 percent of faculty in Engineering and Physical Sciences were age 55 and older, followed by Humanities ( $37.7 \%$ ). The discipline area of Engineering and Physical Sciences also had the highest proportion of faculty under age $40(19.3 \%)$. Clinical Health Sciences had a concentration ( $65.6 \%$ ) of faculty between age 40 and 54 , leaving small fractions at both ends of the age distribution (Table 4). Detailed tables of 1997-98 faculty age distributions for all discipline areas and institutions in the UW System are provided in Appendix B, Tables 10.

Table 4
1997-98 Faculty Age Distributions by Discipline Area*

|  | AGE $<40$ |  | AGE 40-54 |  | AGE 55 \& + |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Discipline Areas | N | PCT | N | PCT | N | PCT | N |
| Soc \& Behv Sci | 303 | $14.2 \%$ | 1,150 | $53.8 \%$ | 686 | $32.0 \%$ | 2,139 |
| Humanities | 170 | $12.4 \%$ | 684 | $49.9 \%$ | 516 | $37.7 \%$ | 1,370 |
| Engr \& Phys Sci | 242 | $19.3 \%$ | 529 | $42.2 \%$ | 484 | $38.5 \%$ | 1,255 |
| Agri \& Life Sci | 86 | $13.4 \%$ | 340 | $53.1 \%$ | 214 | $33.4 \%$ | 640 |
| Non-Clin HIth Sci | 15 | $9.6 \%$ | 93 | $59.6 \%$ | 48 | $30.8 \%$ | 156 |
| Clinical Hith Sci | 12 | $6.6 \%$ | 120 | $65.6 \%$ | 51 | $27.9 \%$ | 183 |
| UW System Totals | 828 | $14.4 \%$ | 2,916 | $50.8 \%$ | 1,999 | $34.8 \%$ | 5,743 |

*Note: Due to the exclusion of faculties in non-teaching departments as well as Law and Medicine, the number of total faculty shown here is different from those of other sections.

Table 5 displays the age distribution of faculty by discipline in 198586, 1990-91, 1994-95, and 1997-98. Between 1985-86 and 199798, faculty age 55 and older in the Non-Clinical Health Sciences had the largest increase ( 17 percentage points), followed by Engineering \& Physical Sciences ( 13 percentage points), Humanities (11 percentage points), Agricultural and Life Sciences and Clinical Health Sciences (both 8 percentage points), and Social and Behavioral Sciences (5 percentage points).

During this period, all discipline areas experienced a decline in the proportion of faculty under age 40. However, due to small number of faculty, the Non-Clinical Health Sciences and Clinical Health Sciences experienced the most dramatic percentage point decreases (31 percentage points and 27 percentage points respectively).

Traditionally, faculty in the Engineering and Physical Sciences have been predominately male, however, between 1985-86 and 1997-98, the number of women faculty in these disciplines more than doubled, increasing from 74 to 152 with 32 more in the under age 40 category and 37 more in the age 40-54 category. (See Appendix B, Table 9.)

Proportionally, women faculty increased in the Social/Behavioral Science, Humanities, and Agricultural/Life Sciences disciplinary areas in all age categories during this period. Faculty in the Clinical Health Sciences have been predominately female. More than 90 percent of the faculty in the discipline were women faculty in 1985-86, 199091, and 1994-95, while the percentage decreased to 73 percent in 1997-98. (See Appendix B, Table 9.)

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Table 5
Faculty Age Distribution by Discipline Area 1985-86, 1990-91, 1994-95, and 1997-98

|  | AGE < 40 |  | AGE 40-54 |  | AGE 55 \& + |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DISC AREA/YEAR | N | PCT | N | PCT | N | PCT | N |
|  |  |  |  |  |  |  |  |
| Social \& Behavioral Sciences |  |  |  |  |  |  |  |
| 1985-86 | 544 | 22.6\% | 1,217 | 50.6\% | 643 | 26.7\% | 2,404 |
| 1990-91 | 531 | 22.2\% | 1,235 | 51.6\% | 629 | 26.1\% | 2,395 |
| 1994-95 | 389 | 16.5\% | 1,301 | 55.1\% | 671 | 28.4\% | 2,361 |
| 1997-98 | 303 | 14.2\% | 1,150 | 53.8\% | 686 | 32.1\% | 2,139 |
| Humanities |  |  |  |  |  |  |  |
| 1985-86 | 312 | 20.2\% | 817 | 52.9\% | 414 | 26.9\% | 1,543 |
| 1990-91 | 290 | 18.6\% | 786 | 50.3\% | 487 | 31.1\% | 1.563 |
| 1994-95 | 234 | 15.2\% | 772 | 50.0\% | 538 | 34.8\% | 1,544 |
| 1997-98 | 170 | 12.4\% | 684 | 49.9\% | 516 | 37.7\% | 1,370 |
| Engineering \& Physical Sciences |  |  |  |  |  |  |  |
| 1985-86 | 275 | 20.7\% | 708 | 53.4\% | 343 | 25.9\% | 1,326 |
| 1990-91 | 323 | 23.8\% | 654 | 48.1 \% | 383 | 28.1\% | 1,360 |
| 1994-95 | 264 | 20.4\% | 581 | 44.8\% | 451 | 34.8\% | 1,296 |
| 1997-98 | 242 | 19.3\% | 529 | 42.2\% | 484 | 38.5\% | 1,255 |
| Agricultural \& Life Sciences |  |  |  |  |  |  |  |
| 1985-86 | 143 | 23.3\% | 314 | 51.1\% | 157 | 25.6\% | 614 |
| 1990-91 | 133 | 21.2\% | 321 | 51.3\% | 172 | 27.5\% | 626 |
| 1994-95 | 105 | 16.7\% | 332 | 52.9\% | 191 | 30.4\% | 628 |
| 1997-98 | 86 | 13.4\% | 340 | 53.1\% | 214 | 33.4\% | 640 |
| Non-Clinical Health Sciences |  |  |  |  |  |  |  |
| 1985-86 | 65 | 40.1\% | 74 | 45.7\% | 23 | 14.2\% | 162 |
| 1990-91 | 33 | 21.7\% | 85 | 55.9\% | 34 | 22.4\% | 152 |
| 1994-95 | 19 | 11.4\% | 104 | 62.3\% | 44 | 26.3\% | 167 |
| 1997-98 | 15 | 9.6\% | 931 | 59.6\% | 48 | 30.8\% | 156 |
| Clinical Health Sciences |  |  |  |  |  |  |  |
| 1985-86 | 63 | 33.5\% | 87 | 46.3\% | 38 | 20.2\% | 188 |
| 1990-91 | 33 | 19.2\% | 104 | 60.5\% | 35 | 20.3\% | 172 |
| 1994-95 | 11 | 8.1\% | 96 | 70.6\% | 29 | 21.3\% | 136 |
| 1997-98 | 12 | 6.6\% | 120 | 65.6\% | 51 | 27.9\% | 183 |
| UW System Totals |  |  |  |  |  |  |  |
| 1985-86 | 1,402 | 22.5\% | 3,217 | 51.6\% | 1,618 | 25.9\% | 6,237 |
| 1990-91 | 1,343 | 21.4\% | 3,185 | 50.8\% | 1,740 | 27.8\% | 6,268 |
| 1994-95 | 1,022 | 16.7\% | 3,186 | 51.9\% | 1,924 | 31.4\% | 6,132 |
| 1997-98 | 828 | 14.4\% | 2,916 | 50.8\% | 1,999 | 34.8\% | 5,743 |
|  |  |  |  |  |  |  |  |

*Note: Due to the exclusion of faculties in non-teaching departments as well as Law and Medicine, the number of total faculty shown here is different from those of other sections.

## Section IV: UW System Faculty Retirement Projections

The previous sections have illustrated the "graying" of the UW System faculty as a whole over the past 12 years. An important question is how the change in the age distribution will affect faculty retirement rates in the future. This section provides projections of retirements over the next decade. (see Appendix $C$ and Table 11 for description of methodology and projected retirement detailed by age and year.)

UW System faculty retirement projections for the next ten years were generated based on the age distribution of the1997-98 faculty population and the average actual faculty retirement rates by age of the last five years' (see Appendix C, Table 12). The model assumes that the recent historical patterns of retirement will continue in the future. However the availability of early retirement packages, career change opportunities, and retirement benefit adjustments might change the retirement patterns. Under such circumstances, the retirement projections in this study would have to be modified accordingly.

The average age at retirement for the past five years varied by institution. UW-Madison had an average retirement age of 63.9, while UW-Milwaukee's average retirement age was 64.3, the UW Comprehensives was age 61.5, and the UW Colleges was age 59.7.

Historically, retirement rates at UW-Madison were very low at ages younger than 62; however, partly because the implementation of the Post Retirement Plan ${ }^{2}$ in 1993-94, the retirement rates for faculty age 58 through age 61 have increased noticeably. For example, the retirement rate for faculty age 60 increased from 1.9 percent in 199394 to 14.5 percent in 1997-98.

UW-Milwaukee's faculty retirements in the past five years had been concentrated between age 62-67 and over 70, while UW Colleges' faculty retirements occurred mostly between age 57 and 66. A number of the UW Comprehensive institutions had a higher percentage of faculty retirements that occurred before age 59. For example, UWStout's five-year average retirement rate at age 57 is 18.8 percent, and UW-Oshkosh's five-year average retirement rate at age 55 is 6.4 percent.

[^1]Table 6 summarizes the projected retirements over the next decade for UW-Madison, UW-Milwaukee, the UW Comprehensives, and the UW Colleges. Overall, based on historical patterns, a total of 2,384 faculty are projected to retire systemwide by the year 2007-2008. This represents close to 40 percent of the total number of faculty in 199798. By institution, total projected retirements during this period as a percent of 1997-98 faculty range from 33 percent at UW-Milwaukee to 49 percent at UW Colleges, with UW-Madison at 35 percent and the UW Comprehensive institutions averaging 41 percent.

A greater proportion of the projected retirements will occur in the first five years of the 10 -year period. The number of projected retirements in the first five years is 1,276 ( $20.6 \%$ of the 1997-98 faculty base) compared to the $1,108(17.8 \%$ of the same faculty base) in the latter five years in the 10 -year period. These projections are consistent with the findings in a study by Lozier, and Dooris, Faculty Retirement Projections beyond 1994: Effects of Policy on Individual Choice. In that study, the authors made the observation that "... projections of retirement rates indicate that the largest number of retirements will occur between 1998-99 and 2002-03."

Table 6
Summary of Faculty Retirement Projections in the UW System 1998-99 to 2007-08

| Institution/Cluster | Total Actual Retirement | Retirement Projection 1998-99 to 2007-08 |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $1993-94$ to 1997-98 | Total | Yearly Average | Total as a percent of |
|  |  |  |  | $1997-98$ Faculty Base |
| UW-Madison | 398 | 763 | 76 | $35.2 \%$ |
| UW-Milwaukee | 127 | 239 | 24 | $32.6 \%$ |
| UW Comprehensives | 649 | 1,229 | 123 | $41.0 \%$ |
| UW Colleges | 62 | 153 | 15 | $48.6 \%$ |
|  |  |  |  | 38. |
| UW System | 1.236 | 2,384 | 238 | 38 |

## Conclusion:

The analysis in this report demonstrates that, like university faculty nationally, UW System faculty are aging, with a substantial portion likely to retire in the next ten years. This "graying" of the UW faculty has been accompanied by a decline in the number of younger faculty due to the budget cuts of the '90s. The data also indicate that the impacts of retirements will vary by discipline and by institution/cluster.

Because this is a national trend, UW institutions will be replacing significant numbers of retiring faculty in a competitive market for new faculty. The influx of new faculty accompanied by the retirements will significantly change the age distribution of the faculty in the next decade. The substantial turnover of faculty is likely to have some
positive implications such as increasing the proportion of women in faculty positions. However, serious challenges will face UW institutions as older, more experienced faculty retire and are replaced by younger, less experienced professors. Some academic departments may be decimated by a large number of retirements. Additionally, shortages may develop in specific disciplines where substantial numbers of faculty need to be replaced.

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## APPENDIX A: TECHNICAL NOTES

The population studied in this research brief includes all full- and part-time tenured and tenure-track faculty members in the UW System (ranks of professor, associate professor, assistant professor, and instructor) who were on the October 1985, 1990, 1994, and 1997 AA/EEO databases with a valid date of birth. AA/EEO database is a Systemwide University Personnel Tape System which maintains information on each appointment an individual can hold with the UW System institutions.

Age was calculated as of June 30 for each of the academic years of 1985-86, 1990-91, 1994-95 and 1997-98, and grouped into three categories--age under 40, between age 40 and 54, and age 55 and older for analyses within the UW System institutions.

UW System faculty members who had split tenured or tenure-track appointments in different departments within one UW System institution were counted only once in the department with the lower UDDS code (Unit-Division-Department-Subdepartment). Faculty members who had split appointments among different UW System institutions were counted once in each of the different UW System institutions.

The discipline areas for each faculty member were determined by matching their appointment UDDS codes with the Discipline Area Codes. Faculty members who are in non-teaching departments (e.g. university library) or in UW-Madison's Medical School or Law School are excluded in the analysis by academic discipline areas. In 1997-98, there were 86 (1.4\%) faculty members in non-teaching departments, 338 ( $5.4 \%$ ) in the Medical School, and 41 ( $0.7 \%$ ) in the Law School.

APPENDIX B

Table 7
University of Wisconsin System Faculty Age Distributions by Institutions 1997-98

|  | AGE GROUP |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $<40$ |  | 40-54 |  | 55-64 |  | 65\% + |  |
|  | $N$ | PCT | $N$ | PCT | $N$ | PCT | $N$ | PCT |
| INSTITUTION |  |  |  |  |  |  |  |  |
| MADISON | 314 | 14.5 | 1135 | 52.4 | 584 | 27.0 | 132 | 6.1 |
| MILWAUKEE | 104 | 14.2 | 407 | 55.4 | 179 | 24.4 | 44 | 6.0 |
| EAU CLAIRE | 65 | 15.1 | 230 | 53.5 | 119 | 27.7 | 16 | 3.7 |
| GREEN BAY | 26 | 16.8 | 72 | 46.5 | 53 | 34.2 | 4 | 2.6 |
| LA CROSSE | 46 | 13.6 | 181 | 53.7 | 104 | 30.9 | 6 | 1.8 |
| OSHKOSH | 74 | 20.1 | 154 | 41.8 | 123 | 33.4 | 17 | 4.6 |
| PARKSIDE | 17 | 12.8 | 59 | 44.4 | 51 | 38.3 | 6 | 4.5 |
| PLATTEVILLE | 38 | 17.0 | 95 | 42.4 | 84 | 37.5 | 7 | 3.1 |
| RIVER FALLS | 24 | 10.5 | 139 | 61.0 | 61 | 26.8 | 4 | 1.8 |
| STEVENS POINT | 43 | 12.0 | 172 | 47.9 | 139 | 38.7 | 5 | 1.4 |
| STOUT | 32 | 10.7 | 151 | 50.5 | 112 | 37.5 | 4 | 1.3 |
| SUPERIOR | 15 | 14.0 | 50 | 46.7 | 36 | 33.6 | 6 | 5.6 |
| WHITEWATER | 51 | 14.4 | 184 | 52.0 | 106 | 29.9 | 13 | 3.7 |
| UW COLLEGES | 30 | 9.5 | 136 | 43.2 | 141 | 44.8 | 8 | 2.5 |
| UW SYSTEM TOTALS | 879 | 14.2 | 3165 | 51.0 | 1892 | 30.5 | 272 | 4.4 |

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| INSTITUTION | AGE < 40 |  |  |  |  | AGE 40-54 |  |  |  |  | AGE 55 \& + |  |  |  |  | TOTAL |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MALE |  | FEMALE |  | TOTAL | MALE |  | FEMALE |  | TOTAL | MALE |  | FEMALE |  | TOTAL | MALE |  | FEMALE |  | TOTAL |
|  | N | PCT | N | PCT | N | N | PCT | N | PCT | N | N | PCT | N | PCT | N | N | PCT | N | PCT | N |
| UW-Madison | 211 | 67.2\% | 103 | 32.8\% | 314 | 856 | 75.4\% | 279 | 24.6\% | 1,135 | 624 | 87.2\% | 92 | 12.8\% | 716 | 1,691 | 78.1\% | 474 | 21.9\% | 2,165 |
| UW-Milwaukee | 68 | 65.4\% | 36 | 34.6\% | 104 | 245 | 60.2\% | 162 | 39.8\% | 407 | 193 | 86.5\% | 30 | 13.5\% | 223 | 506 | 68.9\% | 228 | 31.1\% | 734 |
| UW Comprehensives | 248 | 57.5\% | 183 | 42.5\% | 431 | 975 | 65.6\% | 512 | 34.4\% | 1,487 | 854 | 79.4\% | 222 | 20.6\% | 1,076 | 2,077 | 69.4\% | 917 | 30.6\% | 2,994 |
| UW Colleges | 17 | 56.7\% | 13 | 43.3\% | 30 | 90 | 66.2\% | 46 | 33.8\% | 136 | 116 | 77.9\% | 33 | 22.1\% | 149 | 223 | 70.8\% | 92 | 29.2\% | 315 |
| UW' System Totals | 544 | 61.9\% | 335 | 38.1\% | 879 | 2,166 | 68.4\% | 999 | 31.6\% | 3,165 | 1,787 | 82.6\% | 377 | 17.4\% | 2,164 | 4,497 | 72.4\% | 1,711 | 27.6\% | 6,208 |

UW System Faculty Age Distribution Trends by Gender and Discipline Area*

|  | 1985-86 |  |  |  |  | 1990-91 |  |  |  |  | 1994-95 |  |  |  |  | 1997-98 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  | Female |  | Total | Male |  | Female |  | Total | Male |  | Female |  | $\begin{gathered} \hline \text { Total } \\ \hline \mathrm{N} \\ \hline \end{gathered}$ | Male |  | Female |  | Total |
|  | N | \% | N | \% | N | N | \% | N | \% | N | N | \% | N | \% |  | N | \% | N | \% |  |
| Soc \& Behav Sci | 388 | 71.3\% | 156 | 28.7\% | 544 | 349 | 65.7\% | 182 | 34.3\% | 531 | 246 | 63.2\% | 143 |  | 389 |  |  |  |  |  |
| Humanities | 201 | 64.4\% | 111 | 35.6\% | 312 | 168 | 57.9\% | 122 | 42.1\% | 290 | 117 | 53.2\% | 117 | 36.8\% | 389 | 173 83 | 57.1\% | 130 | 42.9\% | 303 |
| Engr \& Phys Sci | 246 | 89.5\% | 29 | 10.5\% | 275 | 268 | 83.0\% | 55 | 17.0\% | 323 | 206 | 78.0\% | 58 | 22.0\% | 264 | 181 | 74.8\% | 61 | 25.2\% | 170 |
| Agri \& Life Sci | 117 | 81.8\% | 26 | 18.2\% | 143 | 103 | 77.4\% | 30 | 22.6\% | 133 | 77 | 73.3\% | 28 | 26.7\% | 105 | 55 | 64.0\% | 31 | 36.0\% | 248 |
| Non-Clinical Hith Sci | 47 | 72.3\% | 18 | 27.7\% | 65 | 18 | 54.5\% | 15 | 45.5\% | 33 | 9 | 47.4\% | 10 | 52.6\% | 19 | 7 | 46.7\% | 8 | 53.3\% | 15 |
| Clinical Health Sci | 12 | 19.0\% | 51 | 81.0\% | 63 | 3 | 9.1\% | 30 | 90.9\% | 33 | 0 | 0.0\% | 11 | 100.0\% | 11 | 5 | 41.7\% | 7 | 58.3\% | 12 |
| Total | 1011 | 72.1\% | 391 | 27.9\% | 1402 | 909 | 67.7\% | 434 | 32.3\% | 1343 | 655 | 64.1\% | 367 | 35.9\% | 1022 | 504 | 60.9\% | 324 | 39.1\% | 828 |
| AGE 40-54 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soc \& Behav Sci | 989 | 81.3\% | 228 | 18.7\% | 1217 | 908 | 73.5\% | 327 | 26.5\% | 1235 | 875 | 67.3\% | 426 | 32.7\% | 1301 | 749 | 65.1\% | 401 | 34.9\% | 1150 |
| Humanities | 648 | 79.3\% | 169 | 20.7\% | 817 | 559 | 71.1\% | 227 | 28.9\% | 786 | 498 | 64.5\% | 274 | 35.5\% | 772 | 408 | 59.6\% | 276 | 40.4\% | 684 |
| Engr \& Phys Sci | 677 | 95.6\% | 31 | 4.4\% | 708 | 605 | 92.5\% | 49 | 7.5\% | 654 | 526 | 90.5\% | 55 | 9.5\% | 581 | 461 | 87.1\% | 68 | 12.9\% | 529 |
| Agri \& Life Sci | 274 | 87.3\% | 40 | 12.7\% | 314 | 274 | 85.4\% | 47 | 14.6\% | 321 | 285 | 85.8\% | 47 | 14.2\% | 332 | 279 | 82.1\% | 61 | 17.9\% | 340 |
| Non-Clinical Hith Sci | 62 | 83.8\% | 12 | 16.2\% | 74 | 64 | 75.3\% | 21 | 24.7\% | 85 | 71 | 68.3\% | 33 | 31.7\% | 104 | 62 | 66.7\% | 31 | 33.3\% | 93 |
| Clinical Health Sci | 5 | 5.7\% | 82 | 94.3\% | 87 | 13 | 12.5\% | 91 | 87.5\% | 104 | 12 | 12.5\% | 84 | 87.5\% | 96 | 31 | 25.8\% | 89 | 74.2\% | 120 |
| Total | 2655 | 82.5\% | 562 | 17.5\% | 3217 | 2423 | 76.1\% | 762 | 23.9\% | 3185 | 2267 | 71.2\% | 919 | 28.8\% | 3186 | 1990 | 68.2\% | 926 | 31.8\% | 2916 |
| AGE 55 \& OLDER <br> Soc \& Behav Sci |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Humanities | 334 | 80.7\% | 80 | 19.3\% | 414 | 402 | 82.5\% | 85 | 17.5\% | 487 | 433 | 82.6 | 117 | 17.4\% | 671 | 554 | 80.8\% | 132 | 19.2\% | 686 |
| Engr \& Phys Sci | 329 | 95.9\% | 14 | 4.1\% | 343 | 374 | 97.7\% | 9 | 2.3\% | 383 | 433 | 96.0\% | 18 | 4.0\% | 531 | 387 | 75.0\% | 129 | 25.0\% | 516 |
| Agri \& Life Sci | 147 | 93.6\% | 10 | 6.4\% | 157 | 162 | 94.2\% | 10 | 5.8\% | 172 | 168 | 88.0\% | 23 | 12.0\% | 191 | 192 | 89.7\% | 22 | 10.3\% | 184 |
| Non-Clinical Hith Sci | 18 | 78.3\% | 5 | 21.7\% | 23 | 30 | 88.2\% | 4 | 11.8\% | 34 | 31 | 70.5\% | 13 | 29.5\% | 44 | 39 | 81.3\% | 9 | 18.8\% | 48 |
| Clinical Health Sci | 0 | 0.0\% | 38 | 100.0\% | 38 | 1 | 2.9\% | 34 | 97.1\% | 35 | 1 | 3.4\% | 28 | 96.6\% | 29 | 14 | 27.5\% | 37 | 72.5\% | 51 |
| Total | 1367 | 84.5\% | 251 | 15.5\% | 1618 | 1500 | 86.2\% | 240 | 13.8\% | 1740 | 1620 | 84.2\% | 304 | 15.8\% | 1924 | 1647 | 82.4\% | 352 | 17.6\% | 1999 |
| SYSTEM TOTAL |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Soc \& Behav Sci | 1916 | 79.7\% | 488 | 20.3\% | 2404 | 1788 | 74.7\% | 607 | 25.3\% | 2395 | 1675 | 70.9\% | 686 | 29.1\% | 2361 | 1476 | 69.0\% | 663 | 31.0\% | 2139 |
| Humanities | 1183 | 76.7\% | 360 | 23.3\% | 1543 | 1129 | 72.2\% | 434 | 27.8\% | 1563 | 1048 | 67.9\% | 496 | 32.1\% | 1544 | 878 | 64.1\% | 492 | 35.9\% | 1370 |
| Engr \& Phys Sci | 1252 | 94.4\% | 74 | 5.6\% | 1326 | 1247 | 91.7\% | 113 | 8.3\% | 1360 | 1165 | 89.9\% | 131 | 10.1\% | 1296 | 1103 | 87.9\% | 152 | 12.1\% | 1255 |
| Agri \& Life Sci | 538 | 87.6\% | 76 | 12.4\% | 614 | 539 | 86.1\% | 87 | 13.9\% | 626 | 530 | 84.4\% | 98 | 15.6\% | 628 | 526 | 82.2\% | 114 | 17.8\% | 640 |
| Non-Clinical Hith Sci | 127 | 78.4\% | 35 | 21.6\% | 162 | 112 | 73.7\% | 40 | 26.3\% | 152 | 111 | 66.5\% | 56 | 33.5\% | 167 | 108 | 69.2\% | 48 | 30.8\% | 156 |
| Clinical Health Sci | 17 | 9.0\% | 171 | 91.0\% | 188 | 17 | 9.9\%. | 155 | 90.1\% | 172 | 13 | 9.6\% | 123 | 90.4\% | 136 | 50 | 27.3\% | 133 | 72.7\% | 183 |
| Total | 5033 | 80.7\% | 1204 | 19.3\% | 6237 | 4832 | 77.1\% | 1436 | 22.9\% | 6268 | 4542 | 74.1\% | 1590 | 25.9\% | 6132 | 4141 | 72.1\% | 1602 | 27.9\% | 5743 |

*Excludes faculty who are in non-teaching departments (e.g. university library) as well as UW-Madison's Law School and Medical School.



Table 10
University of Wisconsin System
1997-98 Faculty Age Distributions by Unit and Discipline Area



## APPENDIX C

Technical Notes on the Faculty Retirement Projection Methodology at UW System

1. The 1985-86, 1990-91, 1994-95 and 1997-98 faculty population includes all tenured and probationary faculty members with titles in the professorial ranks who were on the October AA/EEO database and with a valid date of birth. Age is calculated as of June 30 for each of the fiscal years. Age at retirement is calculated as follows:

AGE $=\operatorname{INT}(((E N D Y Y-B I R T H Y Y) * 12+(E N D M M-B I R T H M M)) / 12)$

INT = Integer function
ENDYY = Retirement year (e.g., 1995)
ENDMM = Retirement month (è.g., 06 for June)
BIRTHYY = Birth year (e.g., 1929)
BIRTHMM = Birth month (e.g., 12 for December)

2a. From the IADS (Integrated Appointment Data System) database, actual number of faculty retirements for UW-Madison, UW-Milwaukee, UW-Green Bay, UW-Parkside, and UW Colleges by institution and age were generated for fiscal years 1993-94 through 1997-98. UW-Eau Claire, UW-La Crosse, UW-Oshkosh, UW-Platteville, UW-River Falls, UW-Stevens Point, UW-Stout, UW-Superior, and UW-Whitewater joined the UWPC payroll system either in 1996 or 1997, the number of faculty retirements for this five-year period were collected from the institutions.

2b. Frequency tables of age distributions for the total faculty population (by age and institution) for Fall terms of the same five years were generated from the October AA/EEO database.
3. For each institution and for each fiscal year, the retirement ratios for age 55 and older were calculated by using the actual number of retirements at age 55 and older (from 2 a . above) divided by the total number of faculty at the same age (from 2 b . above). Then, for each institution, five-year average retirement ratios at age 55 and older were calculated by using the sum of the five years' retirement ratios at each age divided by 5 .
4. The faculty base for the retirement projection is the Fall 1997-98 faculty population of each institution. The same population, then, aged through year 2007-08. For example, faculty members age 57 in fall 1997-98 become faculty members age 58 in 1998-99, and age 59 in 1999-2000.
5. The number of projected retirements for the first year (1998-99) is the integer product of the faculty population at age 55 and older (from 4. above) times the five-year average retirement ratios for the same age (from 3. above).
6. Beginning from the 2nd year and on to 2007-08, the faculty base at age 56 and older has to be adjusted by subtracting the projected retirements from the previous year, then calculate the projected retirements as above.

For example, 30 faculty members age 57 in 1997-98 becomes 30 faculty age 58 in 199899, and these 30 faculty will be age 59 in 1999-2000. However, if the projected retirements at age 58 in 1998-99 were 5, then the faculty base for age 59 in 1999-2000 is 25 instead of 30 .

2001-2002
UW-MSN
UW-MIL
UW-EAU
UW-GBY
UW-LAC
UW-OSH
UW-PKS
UW-PLT
UW-RVF
UW-STP
UW-STO
UW-SUP
UW-WTW
UWC
TOTAL
2002-2003
UW-MSN
UW-ML
UW-EAU
UW-GBY
UW-LAC
UW-OSH
UW-PKS
UW-PLT
UW-RVF
UW-STP
UW-STO
UW-SUP
UW-WTW
UWC


| 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 3 | 2 | 3 | 3 | 5 | 5 | 6 | 5 | 5 | 10 | 4 | 5 | 4 |
| 2 | 1 |  | 1 | 1 | 2 | 1 | 3 | 2 | 4 | 3 | 1 | 2 |  |
|  |  | 1 |  | 2 | 1 | 3 | 3 | 3 | 1 | 1 | 1 |  | 1 |
|  |  | , |  |  | 1 |  | 1 |  |  |  | 1 |  |  |
|  | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 |  | 1 |  |  |
| 1 |  | 1 | 1 | 2 |  | 2 | 1 | 1 | 1 | 1 | 1 |  |  |
|  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
|  |  |  |  |  |  |  | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| 1 |  | 1 |  | 1 | 1 | 3 |  | 1 | 1 |  |  |  |  |
|  |  | 1 |  |  | 1 | 2 | 1 | 1 |  | 3 | 2 | 1 |  |
|  |  | 1 |  |  | 2 | 2 | 2 | 2 | 1 |  | 1 | 1 |  |
|  |  | 1 |  |  |  | 1 |  |  |  | 1 |  |  |  |
|  |  | 1 | 2 | 1 | 1 | 1 | 2 | 3 | 1 | 1 |  |  |  |
|  |  | 1 | 1 |  |  | 1 | 2 | 1 | 1 | 1 | 1 |  |  |
| 7 | 5 | 12 | 9 | 11 | 16 | 22 | 24 | 21 | 19 | 22 | 14 | 9 | 6 |

Table 12
FACULTY FIVE-YEAR AVERAGE RETIREMENT RATES IN THE UW SYSTEM*



UW-MILWAUKEE
 UW-EAU CLAIRE
1993-94
$1994-95$
$1995-96$
$1996-97$
$1997-98$
5-year avg. rate

UW-LA CROSSE UW-LA CROSSE
$1993-94$
$1994-95$
$1995-96$
$1996-97$
$1997-98$
5 -year avg. rate

$1993-94$
$1994-95$
$1995-96$
$1996-97$
$1997-98$
5-year avg. rate

*Retirement rate as a percentage is calculated by dividing the actual number of retirements at a specific age by the total number of faculty at the same age.

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${ }^{41}$

## OCCASIONAL RESEARCH BRIEFS

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## Access Update: The Class Of Fall 1996

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Characteristics Of New Freshmen.
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[^1]:    ${ }^{1}$ In 1997, a study was conducted at UW-Madison using a logistic regression analysis of retirement patterns in addition to the model of using only historical retirement rates by age category, which is used in this research brief. The regression analysis included variables in addition to age, such as years as a faculty member, divisional committee affiliation, race, gender, rank, department size, etc. The study concluded that, "as expected, age was the most important factor in explaining the likelihood of retirement in a given year" and "the results of all the methods were similar in the aggregate [numbers of projected retirements]". (Harrigan, 1997)
    ${ }^{2}$ The program provides a smooth transition for faculty from full-time teaching to a full retirement. Faculty who elect to utilize the plan are hired back to teach part-time for a few years with full retirement benefits.

