

DOCUMENT RESUME

ED 338 177

HE 025 019

AUTHOR Howe, Richard D.; And Others
 TITLE Salary Trend Studies of Faculty for the Years 1986-87 and 1989-90 in the Following Disciplines/Major Fields: Engineering; Foreign Languages; Geology; Home Economics; Letters; Library and Archival Sciences; Life Sciences; Mathematics; Multi-Interdisciplinary Studies; Music; Nursing; and Philosophy and Religion.
 INSTITUTION Appalachian State Univ., Boone, N.C.; College and Univ. Personnel Association, Washington, D.C.
 PUB DATE Oct 91
 NOTE 197p.; For other volumes in this set, see HE 025 018-020.
 PUB TYPE Reports - Research/Technical (143)
 EDRS PRICE MF01/PC08 Plus Postage.
 DESCRIPTORS Academic Rank (Professional); Biological Sciences; *College Faculty; Comparative Analysis; Departments; Engineering; Full Time Faculty; Geography; Geology; Higher Education; Home Economics; *Intellectual Disciplines; Interdisciplinary Approach; Library Science; Literature; Mathematics; Music; Nursing; Private Colleges; Public Colleges; Second Languages; *Teacher Salaries, *Trend Analysis

ABSTRACT

This volume provides comparative data for faculty salaries in public and private colleges, based on an annual survey of over 700 colleges and universities. Data cover the following disciplines: Engineering; Foreign Languages; Geological Sciences; Home Economics; Letters; Library and Archival Sciences; Life Sciences; Mathematics; Multi-Interdisciplinary Studies; Music; Nursing. Presented for each discipline is a summary of the overall average salary increase between the baseline year of 1986-87 and the year 1989-90, for both state and private institutions. Data from institutions participating in both years are compared with each other and with the consumer price index. Also included are average salaries by rank and the faculty mix percentage as well as comparisons with other disciplines. The participating institutions are listed. (JB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to improve
reproduction quality.

Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

**SALARY-TREND STUDIES OF FACULTY
FOR THE YEARS 1986-87 AND 1989-90
IN THE FOLLOWING DISCIPLINES/MAJOR FIELDS:**

Engineering; Foreign Languages; Geology; Home Economics; Letters; Library and
Archival Sciences; Life Sciences; Mathematics; Multi-Interdisciplinary Studies;
Music; Nursing; and, Philosophy and Religion

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Richard D. Howe

by
Richard D. Howe and Associates
Appalachian State University
Boone, North Carolina 28608

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

Foreword

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, DC, in cooperation with Appalachian State University in Boone, NC, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, DC, and the other for the nation's private senior colleges and universities.

Salary data from each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines/major fields, 12 of which are included herein in alphabetical order. The disciplines/major fields were chosen from among those defined by the Higher Education General Information (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985.

Each of the 12 disciplines/major fields herein presents a summary of the overall average salary increases in that discipline/major field from the "base-line year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's state (AASCU) study of 1986-87, 210 also participated in the 1989-90 study. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA's private study of 1986-87, 265 also participated in the 1989-90 study. Data from those same 265 institutions were used in both the baseline year and the trend year.

In addition to listing the average salaries in the 12 individual disciplines/major fields for both the state and private participating institutions by rank, including "new assistant professor," and listing the faculty mix percentage (FAC MIX PCT) and the salary factor, comparisons are made in each of the 12 individual disciplines/major fields between the two state studies and the two private studies for each of the two study years (1986-87 and 1989-90) and with the CPI (Consumer Price Index) of changes in cost-of-living.

The list of all 36 selected academic disciplines/major fields studied is found in Appendix A of each discipline/major field included herein, and the list of all participating senior colleges and universities is found in Appendixes B (state) and C (private) of each discipline/major field included herein.

BEST COPY AVAILABLE

ED338177

HE 025 019

SALARY-TREND STUDY OF FACULTY IN ENGINEERING

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Ming Land

Since 1982-83, the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including engineering. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of engineering in the CIP is as follows:

A summary of groups of instructional programs that describe the mathematical and natural sciences gained by study, experience, and practice and applied with judgement to develop ways to economically utilize the materials and force of nature for the benefit of mankind.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 72.--14.)]

This article presents a summary of the overall average salary increases in the discipline/major field of engineering from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

In addition to listing the average salaries in engineering for both state and private participating institutions by rank, including "new assistant professor," and listing the faculty mix percentage (FAC MIX PCT) and the salary factor, comparisons are made using the two studies for each of the two study years (1986-87 and 1989-90) and with the CPI (Consumer Price Index) of changes in cost-of-living.

The CPI uses a base period of 1982-84 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary, it is important to consider any changes in the purchasing power of salaries due to inflation. Therefore, the CPI was used to yield a more precise representation of "real" salary increases over time.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .32 for associate professor of engineering in the 1986-87 state study means that 32 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of 1.18 for assistant professors in the discipline/major field of engineering in the 1986-87 state study means that their salaries are 18 percent higher than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of engineering with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the

PROF			ASSO PROF			ASST PROF			NEW ASST PROF			INSTRUCTOR			ALL RANKS													
SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN											
STATE, 1986-87:																												
DISCIPLINE: ENGINEERING																												
MAJOR FIELD: ENGINEERING																												
AVERAGE																												
SALARY:	44745	535	60	37378	496	63	32022	453	64	31839	62	28	24973	69	31	37802	1553	70										
FAC MIX																												
PCT:	0.34				0.32				0.29				0.04				0.04				1.00							
SALARY																												
FACTOR:	1.12				1.14				1.18				1.22				1.16				1.16							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	39819	17564				32676	15205				27122	14268				26202	1869				21466	4423				32611	51460	210
FAC MIX																												
PCT:	0.34				0.30				0.28				0.04				0.09				1.00							
STATE, 1989-90:																												
DISCIPLINE: ENGINEERING																												
MAJOR FIELD: ENGINEERING																												
AVERAGE																												
SALARY:	53916	524	49	44836	477	55	39293	472	55	39363	83	33	30973	56	26	45729	1529	61										
FAC MIX																												
PCT:	0.34				0.31				0.31				0.05				0.04				1.00							
SALARY																												
FACTOR:	1.15				1.17				1.23				1.51				1.26				1.20							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	47023	18930				38352	15550				31853	16354				26030	2865				24499	4733				38213	55567	210
FAC MIX																												
PCT:	0.34				0.28				0.29				0.05				0.09				1.00							
PRIVATE, 1986-87:																												
DISCIPLINE: ENGINEERING																												
MAJOR FIELD: ENGINEERING																												
AVERAGE																												
SALARY:	49925	619	44	38452	453	47	33732	350	43	34277	75	24	25540	31	14	41927	1453	50										
FAC MIX																												
PCT:	0.43				0.31				0.24				0.05				0.02				1.00							
SALARY																												
FACTOR:	1.25				1.24				1.32				1.38				1.24				1.33							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	40015	8507				31131	8438				25483	8319				24917	1279				20566	1985				31411	27249	265
FAC MIX																												
PCT:	0.31				0.31				0.31				0.05				0.07				1.00							
PRIVATE, 1989-90:																												
DISCIPLINE: ENGINEERING																												
MAJOR FIELD: ENGINEERING																												
AVERAGE																												
SALARY:	59192	621	41	45882	411	42	40772	394	43	41452	60	21	28297	23	13	49917	1449	49										
FAC MIX																												
PCT:	0.43				0.28				0.27				0.04				0.02				1.00							
SALARY																												
FACTOR:	1.25				1.24				1.33				1.39				1.17				1.33							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	47397	9026				36865	8771				30621	9004				29780	1476				24196	1808				37422	28609	265
FAC MIX																												
PCT:	0.32				0.31				0.31				0.05				0.06				1.00							

group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of engineering was reported in 70 of the 210 state (AASCU) institutions. The average salary of the 1,553 faculty was \$37,802. This average salary was approximately 16 percent (1.16%) higher than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of engineering was reported in 61 of the same 210 state (AASCU) institutions. The average salary of the 1,529 faculty was \$45,729. This average salary was approximately 20 percent (1.20%) higher than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in engineering after three years in the state institutions studied was 21.0 percent (\$45,729 minus \$37,802 equals \$7,927). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 7.2 percent or an average of 2.8 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.1 percent (\$38,213 minus

32,611 equals \$5,602). In comparison to the discipline/major field of engineering (21.0%), therefore, the percentage of salary increase of the faculty in ALL MAJOR FIELDS was 3.9 percentage points (21.0% minus 17.1% equals 3.9%) less than faculty in engineering. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent.

Since the discipline/major field of engineering is one of the "older" disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the state studies; 0.34 vs. 0.28 (1986-87), respectively; and 0.34 vs. 0.29 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies is as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS had the same percentage of professors and a lower percentage (28%) of assistant professors in the 1986-87 state study. Currently (1989-90), the percentages for full professor are the same, but lower for assistant professors in ALL MAJOR FIELDS in comparison to engineering.

Finally, the hiring rate of new assistant professors in engineering is high in the state studies: 4.0 percent (62/1,153) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Also, the hiring rate of new assistant professors in engineering in 1989-90 was 5.4 percent (83/1,529) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words the hiring rate in the discipline/major field of engineering is more than for ALL MAJOR FIELDS in both the state studies of 1986-87 and 1989-90.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of engineering was reported in 50 of the 265 private institutions. The average salary of the 1,453 faculty was \$41,927. This average salary was approximately 33 percent (1.33%) higher than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of engineering was reported in 49 of the same 265 private institutions. The average salary of the 1,449 faculty was \$49,917. This average salary was approximately 33 percent (1.33%) higher than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in engineering after three years in the private institutions studied was 19.1 percent (\$49,917 minus \$41,927 equals \$7,990). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 5.3 percent or 1.8 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of engineering (19.1%), therefore, the percentage of salary increase of the faculty in ALL MAJOR FIELDS was the same as the faculty in the engineering. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent over the three-year period.

Because engineering is one of the "older" disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the private studies: 0.43 vs. 0.24 (1986-87), and 0.43 vs. 0.27 (1989-90), respectively. This is different from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87), and 0.32 vs. 0.31 (1989-90), respectively. ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors than engineering in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in engineering in the private studies was less than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 5.2 percent (75/1,453) vs. 4.7 percent (1,279/27,049), respectively; and in 1988-89, 3.8 percent (56/1,490) vs. 4.3 percent (1,388/28,627), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of engineering and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 and the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 5,984 faculty in the discipline/major field of engineering participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of engineering is currently (1988-89) some 20 and 33 percent above the overall faculty salary factor of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for engineering in the private institutions was approximately 17 percent more in comparison to that in the state institutions in 1986-87. The overall average faculty salary in the private institutions is now (1989-90) 13 percent more compared to the salary factor for the state institutions but in real dollars is only 9 percent more.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in engineering, in both state and private institutions, received overall salary increases for three years above the cost-of-living. The "real" salaries of engineering faculty in both the state and private institutions grew faster than the "real" salaries of faculty in ALL MAJOR FIELDS. Engineering faculty in the public institutions have some catching up to do in salary in comparison with their colleagues in the private institutions.

Third, since the discipline/major field of engineering is one of the older disciplines, there is a marked difference between the number of faculty with the rank of full professor and assistant professor in the state and in the private institutions. The full professor rank is already "top heavy" in the private institutions. It seems a somewhat smaller percentage of new assistant professors is being hired in both the state and private institutions.

Now that a rather significant data base on individual faculty salaries

has been developed, it is anticipated that additional salary-trend studies will be effected in engineering, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Ming Land is dean of the College of Fine and Applied Arts and professor of technology at Appalachian State University, Boone, North Carolina.

APPENDICES:

- A) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B) LIST OF STATE Participating Institutions, page 11
- C) LIST OF PRIVATE Participating Institutions, page 13

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bowdoin State University (ME)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Hawaii University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Manfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Horgan State University (MD)
Horry State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Sales State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Aibion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (IN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
DePaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (IA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Herrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Morris College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (MI)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

TOTAL: 265

SALARY-TREND STUDY OF FACULTY IN FOREIGN LANGUAGES
FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Peggy Hartley

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including foreign languages. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of foreign languages in the CIP is as follows:

A summary of groups of instructional programs that describe the structure and use of language that is common or indigenous to people of the same community or nation; the same geographical area, or the same cultural traditions; including such features as sounds, literature, syntax, phonology, morphology, semantics, sentences, prose and verse, as well as the development of skills and attitudes used in communicating and evaluating thoughts and feelings through oral and written language.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 85.--16.)]

This article presents a summary of the overall average salary increases in the discipline/major field of foreign languages from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 440 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

This study lists the average salaries of foreign language faculty for both state and private participating institutions by rank, including "new assistant professor," the FAC MIX PCT (Faculty Mix Percentage) and the salary factor. In addition, comparisons are made using the CPI (Consumer Price Index) of changes in cost-of-living between the two studies for each of the two study years (1986-87 and 1989-90).

The CPI uses a base period of 1982-84 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of the "real salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed

computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .32 for associate professors of the foreign languages in the 1986-87 state study means that 32 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of .94 for assistant professors in the discipline/major field of foreign languages in the 1986-87 state study means that their salaries are 6 percent lower than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of foreign languages with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the

PROF			ASSO PROF			ASST PROF			NEW ASST PROF			INSTRUCTOR			ALL RANKS		
SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN
STATE, 1986-87:																	
DISCIPLINE: FOREIGN LANGUAGES MAJOR FIELD: FOREIGN LANGUAGES																	
AVERAGE																	
SALARY:	39050	455 143	31501	459 143	25417	413 138	23305	62 50	19846	88 51	31427	1415 176					
FAC MIX																	
PCT:	0.32		0.32		0.29		0.04		0.06		1.00						
SALARY																	
FACTOR:	0.98		0.96		0.94		0.89		0.92		0.96						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	39819	17564	32676	15205	27122	14268	26202	1869	21466	4423	32611	51460 210					
FAC MIX																	
PCT:	0.34		0.30		0.28		0.04		0.09		1.00						
STATE, 1989-90:																	
DISCIPLINE: FOREIGN LANGUAGES MAJOR FIELD: FOREIGN LANGUAGES																	
AVERAGE																	
SALARY:	46216	478 147	36808	461 148	29478	483 153	24037	80 59	22171	156 70	35967	1578 180					
FAC MIX																	
PCT:	0.30		0.29		0.31		0.05		0.10		1.00						
SALARY																	
FACTOR:	0.98		0.96		0.93		0.92		0.90		0.94						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	47023	18930	38352	15550	31853	16354	26030	2865	24499	4733	38213	55567 210					
FAC MIX																	
PCT:	0.34		0.28		0.29		0.05		0.09		1.00						
PRIVATE, 1986-87:																	
DISCIPLINE: FOREIGN LANGUAGES MAJOR FIELD: FOREIGN LANGUAGES																	
AVERAGE																	
SALARY:	37731	337 138	29565	434 156	24414	386 147	22871	66 45	19655	116 66	29261	1273 209					
FAC MIX																	
PCT:	0.26		0.34		0.30		0.05		0.09		1.00						
SALARY																	
FACTOR:	0.94		0.95		0.96		0.92		0.96		0.93						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	40015	8507	31131	8438	25483	8319	24917	1279	20566	1985	31411	27249 265					
FAC MIX																	
PCT:	0.31		0.31		0.31		0.05		0.07		1.00						
PRIVATE, 1989-90:																	
DISCIPLINE: FOREIGN LANGUAGES MAJOR FIELD: FOREIGN LANGUAGES																	
AVERAGE																	
SALARY:	44117	340 139	35298	413 149	29014	442 159	27152	86 61	24241	117 65	34480	1312 215					
FAC MIX																	
PCT:	0.26		0.31		0.34		0.07		0.09		1.00						
SALARY																	
FACTOR:	0.93		0.96		0.95		0.91		1.00		0.92						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	47397	9026	36865	8771	30621	9004	29780	1476	24196	1808	37422	28609 265					
FAC MIX																	
PCT:	0.32		0.31		0.31		0.05		0.06		1.00						

group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of foreign languages was reported in 176 of the 210 state (AASCU) institutions. The average salary of the 1,415 faculty was \$31,427. This average salary was approximately 4 percent (0.96%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of foreign languages was reported in 180 of the same 210 state (AASCU) institutions. The average salary of the 1,578 faculty was \$35,967. This average salary was approximately 6 percent (0.94%) lower than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in the foreign languages after three years in the state institutions studied was 14.4 percent (\$35,967 minus \$31,427 equals \$4,540). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 0.6 percent or an average of 0.2 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of foreign

languages (14.4%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.8 percentage points (17.2% minus 14.4% equals 2.8%) more than faculty in the discipline/major field of foreign languages. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent.

The reader may note that the faculty mix percentage in the discipline/major field of foreign languages is greater at the full professor rank than the assistant professor rank in the 1986 - 87 state study, 0.32 vs. 0.29 (1986-87) and lower in the 1989 - 90, 0.30 vs. 0.31 (1989-90). The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.28 (1988-89), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a similar percentage of assistant professors compared to foreign languages in both state studies.

Finally, the hiring rate of new assistant professors in foreign languages was higher than that for ALL MAJOR FIELDS in the 1986-87 state study: 4.4 percent (62/1,415) vs. 3.6 percent (1,869/51,460), respectively. In the 1989-90 study, the hiring rate of new assistant professors in foreign languages was slightly lower than that for ALL MAJOR FIELDS: 5.1 percent (80/1,578) vs. 5.2 percent (2,865/55,567), respectively.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of foreign languages was reported in 209 of the

265 private institutions. The average salary of the 1,273 faculty was \$29,261. This average salary was approximately 7 percent (0.93%) lower than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of foreign languages was reported in 215 of the same 265 private institutions. The average salary of the 1,312 faculty was \$34,480. This average salary was approximately 8 percent (0.92%) lower than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in the foreign languages after three years in the private institutions studied was 17.8 percent (\$34,480 minus \$29,261 equals \$5,219). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 4.0 percent or 1.3 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of foreign languages (17.8%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.3 percent (19.1% minus 17.8% equals 1.3%) more than faculty in the discipline/major field of foreign languages. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period.

The reader may note that the faculty mix percentage in the discipline/major field of foreign languages is slightly lower at the professor rank than at the

assistant professor rank in the private studies: 0.26 vs. 0.310 (1986-87) and 0.26 vs. 0.32 (1989-90), respectively. In ALL MAJOR FIELDS for the private studies, the faculty mix percentage at the professor rank is equal to the assistant professor rank: 0.31 vs. 0.31 (1986-87) and 0.32 vs. 0.31, respectively.

Finally, the reader may note that the hiring rate of new assistant professors in foreign languages is slightly higher than the hiring rate for ALL MAJOR FIELDS in the 1986-87 state study, 5.2 percent (66/1,273) vs. 4.7 percent (1,279/27,249), respectively. In 1989-90 the hiring rate of new assistant professors in foreign languages was slightly more than the hiring rate for ALL MAJOR FIELDS, 6.6 percent (86/1,312) vs. 5.2 percent (1,476/28,609), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of foreign languages and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 5,578 faculty in the discipline/major field of foreign languages participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary

factors in the discipline/major field of foreign languages are currently (1989-90) some 6 and 8 percent below the overall faculty salary factors of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for foreign languages in the private institutions was approximately 3 percent less in comparison to the salary factor in the state institutions in 1986-87 but is 7.4 percent lower in real dollars. The faculty salary factor in the private institutions is now (1989-90) approximately 2 percent less in comparison to that for the state institutions but is 4.3 percent lower in real dollars.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in foreign languages, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. The "real" salaries of foreign language faculty in both the state and private institutions lagged behind faculty in ALL MAJOR FIELDS during this same period. Foreign languages faculty in both the state and private institutions have some catching up to do in salary in comparison with ALL MAJOR FIELDS.

Third, in the discipline/major field of foreign languages there is not a marked difference between the number of faculty with the rank of full professor and assistant professor in either the state or the private institutions. The full professor rank appears to be decreasing slightly in the state institutions compared to the private institutions. It seems that an increasing percentage of new assistant professors are being hired in both the private and state institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend studies

will be effected in the foreign languages, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Peggy Hartley is professor of foreign languages at Appalachian State University, Boone, North Carolina.

APPENDICES:

- A) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B) LIST OF STATE Participating Institutions, page 11
- C) LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humboldt State University (CA)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (PA)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Platteville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Albion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Aim College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
DePaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferris College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GHI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Houston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (IA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scr'pps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

SALARY-TREND STUDY OF FACULTY IN GEOLOGICAL SCIENCES

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Ellen A. Cowan

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including geological sciences. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of geological sciences in the CIP is as follows:

A group of instructional programs that describe the history of the earth and other celestial bodies; especially as recorded in rocks.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 130.--40.06.)]

This article presents a summary of the overall average salary increases in the discipline/major field of geological sciences from the "baseline year" of

1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 440 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the "baseline year" and the "trend year".

In addition to listing the average salaries in the geological science for both state and private participating institutions by rank, including "new assistant professor," and listing the faculty mix percentage (FAC MIX PCT) and the salary factor, comparisons are made between the two studies for each of the two study years (1986-87 and 1989-90) and with the CPI (Consumer Price Index) of changes in cost-of-living.

The CPI is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the economy. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of the "real" salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a

given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .31 for associate professor of the geological sciences in the 1986-87 state study means that 31 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of 1.00 for assistant professors in the discipline/major field of geological sciences in the 1986-87 state study means that their salaries are equal to the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of geological sciences with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make

PROF			ASSO PROF			ASST PROF			NEW ASST PROF			INSTRUCTOR			ALL RANKS													
SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN											
DISCIPLINE: PHYSICAL SCIENCES																												
MAJOR FIELD: GEOLOGY																												
STATE, 1986-87:																												
AVERAGE																												
SALARY:	40491	275	93	32588	186	70	27038	135	68	28192	10	10	20782	12	11	34697	608	109										
FAC MIX																												
PCT:	0.45				0.31				0.22				0.02				0.02				1.00							
SALARY																												
FACTOR:	1.02				1.00				1.00				1.08				0.97				1.06							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	39819	17564				32676	15205				27122	14268				26202	1869				21466	4423				32611	51460	210
FAC MIX																												
PCT:	0.34				0.30				0.28				0.04				0.09				1.00							
DISCIPLINE: PHYSICAL SCIENCES																												
MAJOR FIELD: GEOLOGY																												
STATE, 1989-90:																												
AVERAGE																												
SALARY:	47331	285	87	37364	187	79	30771	120	66	29301	21	19	25087	12	10	40513	604	103										
FAC MIX																												
PCT:	0.47				0.31				0.20				0.03				0.02				1.00							
SALARY																												
FACTOR:	1.01				0.97				0.97				1.13				1.02				1.06							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	47023	18930				38352	15550				31853	16354				26030	2865				24499	4733				38213	55567	210
FAC MIX																												
PCT:	0.34				0.28				0.29				0.05				0.09				1.00							

DISCIPLINE: PHYSICAL SCIENCES																												
MAJOR FIELD: GEOLOGY																												
PRIVATE, 1986-87:																												
AVERAGE																												
SALARY:	43226	85	35	32316	43	27	25747	42	28	24850	6	5	22887	3	3	35873	173	48										
FAC MIX																												
PCT:	0.49				0.25				0.24				0.03				0.02				1.00							
SALARY																												
FACTOR:	1.08				1.03				1.01				1.00				1.11				1.14							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	40015	8507				31131	8438				25483	8319				24917	1279				20566	1985				31411	27249	265
FAC MIX																												
PCT:	0.31				0.31				0.31				0.05				0.07				1.00							
DISCIPLINE: PHYSICAL SCIENCES																												
MAJOR FIELD: GEOLOGY																												
PRIVATE, 1989-90:																												
AVERAGE																												
SALARY:	51705	107	41	37083	54	32	29363	33	24	26000	2	2	27000	1	1	43478	195	53										
FAC MIX																												
PCT:	0.55				0.28				0.17				0.01				0.01				1.00							
SALARY																												
FACTOR:	1.09				1.01				0.96				0.87				1.12				1.17							
ALL MAJOR FIELDS																												
AVERAGE																												
SALARY:	47397	9026				36865	8771				30621	9004				29780	1476				24196	1808				37422	28609	265
FAC MIX																												
PCT:	0.32				0.31				0.31				0.05				0.06				1.00							

based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of geological sciences was reported in 109 of the 210 state (AASCU) institutions. The average salary of the 608 faculty was \$34,697. This average salary was approximately 6 percent (1.06) higher than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of geological sciences was reported in 103 of the same 210 state (AASCU) institutions. The average salary of the 604 faculty was \$40,513. This average salary was approximately 6 percent (1.06) higher than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in the geological sciences after three years in the state institutions studied was 16.8 percent (\$40,513 minus \$34,697 equals \$5,816). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. A more realistic increase, therefore, in average faculty salaries over the three-year time period is 3 percent or an average of 1 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of geological sciences (16.8%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 0.4 percent (17.2% minus 16.8% equals 0.4%) more than faculty in the discipline/major field of geological sciences.

Since the discipline/major field of geological sciences is one of the

well-established disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the state studies; 0.45 vs. 0.22 (1986-87), respectively; and 0.47 vs. 0.20 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies is as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors compared to the geological sciences in both state studies.

Finally, the hiring rate of new assistant professors in the geological sciences is low in the state studies: 1.6 percent (10/608) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Also, the hiring rate of new assistant professors in the geological sciences in 1989-90 was 3.5 percent (21/604) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words the hiring rate in the discipline/major field of geological sciences is lower than for ALL MAJOR FIELDS in both of the state studies.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of geological sciences was reported in 48 of the 265 private institutions. The average salary of the 173 faculty was \$35,873. This average salary was approximately 14 percent (1.14) higher than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of geological sciences was reported in 53 of the same 265 private institutions. The average salary of the 195 faculty was \$43,478. This average salary was approximately 17 percent (1.17) higher than the average salary of

\$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1980-90 private study.

The increase in average salaries for all faculty in the geological sciences after three years in the private institutions studied was 21.2 percent (\$43,478 minus \$35,873 equals \$7,605). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. A more realistic increase, therefore, in average faculty salaries over the three-year time period is 7.4 percent or 2.5 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of geological sciences (19.1%), therefore, the faculty in ALL MAJOR FIELDS decreased their salaries by 2.1 percent (21.2% minus 19.1% equals 2.1%) more than faculty in the discipline/major field of geological sciences.

Because the discipline/major field of geological sciences is one of the well-established disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the private studies: 0.49 vs. 0.24 (1986-87), and 0.55 vs. 0.17 (1989-90), respectively. This differs from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87), respectively; and 0.32 vs. 0.31, (1989-90), respectively. In other words ALL MAJOR FIELDS has a much lower percentage of professors and a higher percentage of assistant professors than the geological sciences in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in the geological sciences in the private studies lagged behind the hiring rate in ALL MAJOR FIELDS both in 1986-87, 3.5 percent (6/173) vs. 4.7 percent (1,279/27,249), respectively; and in 1989-90, 1.0 percent (2/195) vs. 5.2 percent (1,476/28,609), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of geological sciences and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 and the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 1,580 faculty in the discipline/major field of geological sciences participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of geological sciences is currently (1989-90) 6 and 17 percent above the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for geological sciences in the private institutions was approximately 8 percent more in comparison to that in the state institutions in 1986-87. The overall salary factor in the private institutions still is (1989-90) almost 11 percent more in comparison to the salary factor for the state institutions and is 7.3 percent more in real dollars.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in the geological sciences, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. However, geological sciences faculty salaries in the state institutions lagged behind faculty in ALL MAJOR FIELDS during this same period by 0.4 percent. Geological sciences faculty in both the state and private institutions are

doing well in salary in comparison with faculty in ALL MAJOR FIELDS.

Third, since the discipline/major field of geological sciences is one of the well-established disciplines, there is a marked difference between the number of faculty with the rank of full professor and assistant professor in the state and in the private institutions. The full professor rank is already "top heavy" in the state and private institutions, and appears to be increasing slightly more rapidly in the private institutions. It seems that a smaller percentage of new assistant professors are being hired in the state and private institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend studies will be effected in the geological sciences, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Ellen A. Cowan is an assistant professor of geology at Appalachian State University, Boone, North Carolina.

APPENDICES:

- A) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B) LIST OF STATE Participating Institutions, page 11
- C) LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OR)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Aibion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Asherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MD)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

TOTAL: 265

SALARY-TREND STUDY OF FACULTY IN MATHEMATICS

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Doris V. Banner

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data from each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including mathematics. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of mathematics in the CIP is as follows:

A summary of groups of instructional programs that describe the sciences of logical symbolic language and their applications.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 120.--27.)]

This article presents a summary of the overall average salary increases in the discipline/major field of mathematics from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private insti-

tutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

This study lists the average salaries in mathematics for both state and private participating institutions by rank, including "new assistant professor," and lists the FAC MIX PCT (faculty mix percentage) and the salary factor. In addition, comparisons are made using the CPI (Consumer Price Index) of changes in cost-of-living between the two studies for each of the two study years (1986-87 and 1989-90).

The CPI uses a base period of 1982-84 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of the "real" salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .29 for associate professor of mathematics in the 1986-87 state study means that 29 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of 1.01 for assistant professors in the discipline/major field of mathematics in the 1986-87 state study means that their salaries were 1 percent above the average salary of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of mathematics with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

PROF			ASSO PROF			ASST PROF			NEW ASST PROF			INSTRUCTOR			ALL RANKS		
SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN
STATE, 1986-87:																	
DISCIPLINE: MATHEMATICS																	
MAJOR FIELD: MATHEMATICS																	
AVERAGE																	
SALARY:	40732	977 187	32954	888 182	27407	873 175	26752	126 73	19740	354 121	32332	3092 202					
FAC MIX																	
PCT:	0.32		0.29		0.28		0.04		0.11		1.00						
SALARY																	
FACTOR:	1.02		1.01		1.01		1.02		0.92		0.99						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	39819	17564	32676	15205	27122	14268	26202	1869	21466	4423	32611	51460 210					
FAC MIX																	
PCT:	0.34		0.30		0.28		0.04		0.09		1.00						
STATE, 1989-90:																	
DISCIPLINE: MATHEMATICS																	
MAJOR FIELD: MATHEMATICS																	
AVERAGE																	
SALARY:	47592	1046 193	38566	936 181	31663	958 189	30640	163 89	22726	405 124	37493	3345 205					
FAC MIX																	
PCT:	0.31		0.28		0.29		0.05		0.12		1.00						
SALARY																	
FACTOR:	1.01		1.01		0.99		1.18		0.93		0.98						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	47023	18930	38352	15550	31853	16354	26030	2865	24499	4733	38213	55567 210					
FAC MIX																	
PCT:	0.34		0.28		0.29		0.05		0.09		1.00						
<hr/>																	
PRIVATE, 1986-87:																	
DISCIPLINE: MATHEMATICS																	
MAJOR FIELD: MATHEMATICS																	
AVERAGE																	
SALARY:	40673	472 167	31089	465 172	25270	453 179	24458	67 56	20606	153 92	31273	1543 246					
FAC MIX																	
PCT:	0.31		0.30		0.29		0.04		0.10		1.00						
SALARY																	
FACTOR:	1.02		1.00		0.99		0.98		1.00		1.00						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	40015	8507	31131	8438	25483	8319	24917	1279	20566	1985	31411	27249 265					
FAC MIX																	
PCT:	0.31		0.31		0.31		0.05		0.07		1.00						
PRIVATE, 1989-90:																	
DISCIPLINE: MATHEMATICS																	
MAJOR FIELD: MATHEMATICS																	
AVERAGE																	
SALARY:	46956	470 178	36708	472 176	30081	428 181	29382	62 47	22561	147 93	36642	1517 247					
FAC MIX																	
PCT:	0.31		0.31		0.28		0.04		0.10		1.00						
SALARY																	
FACTOR:	0.99		1.00		0.98		0.99		0.93		0.98						
ALL MAJOR FIELDS																	
AVERAGE																	
SALARY:	47397	9026	36865	8771	30621	9004	29780	1476	24196	1808	37422	28609 265					
FAC MIX																	
PCT:	0.32		0.31		0.31		0.05		0.06		1.00						

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of mathematics was reported in 202 of the 210 state (AASCU) institutions. The average salary of the 3,092 faculty was \$32,332. This average salary was approximately 1 percent (0.9%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of mathematics was reported in 205 of the same 210 state (AASCU) institutions. The average salary of the 3,345 faculty was \$37,493. This average salary was 2 percent lower (0.9%) than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in mathematics after three years in the state institutions studied was 16.0 percent (\$37,493 minus \$32,332 equals \$5,161). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 2.2 percent or an average of 0.7 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of mathematics (16.0%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.2 percentage points (17.2% minus 16.0% equals 1.2%) more than faculty in the discipline/major field of mathematics. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent or an average of 1.1 percent per year.

The reader may note that the faculty mix percentages in mathematics are about the same at the professor rank as at the assistant professor rank for both of the state studies. The faculty mix percentages of professor and

assistant professor in mathematics are 0.32 and 0.28 (1986-87) respectively; and 0.31 and 0.29 (1989-90) respectively. The differences in the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are 0.34 and 0.28 (1986-87) and 0.34 and 0.29 (1989-90) respectively. In other words ALL MAJOR FIELDS has a higher percentage of full professors and a lower percentage of assistant professors when compared to mathematics faculty in both state studies.

Finally, the hiring rate of new assistant professors in mathematics is higher in the 1986-87 state study compared to ALL MAJOR FIELDS: 4.1 percent (126/3,092) vs. 3.6 percent (1,869/51,460), respectively. However, the hiring rate of new assistant professors in mathematics in 1989-90 was 5.3 percent (163/3,345) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS. In other words the hiring rate of new assistant professors in mathematics was greater than for ALL MAJOR FIELDS in the 1986-87 state study, and currently (1989-90) is slightly more (0.1%) than that for ALL MAJOR FIELDS.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of mathematics was reported in 246 of the 265 private institutions. The average salary of the 1,543 faculty was \$31,273. This average salary was approximately the same as (1.00) the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the major field of mathematics was reported in 247 of the same 265 private institutions. The average salary of the 1,517 faculty was \$36,642. This average salary was approximately the same (1.00) as the average of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in mathematics after three years in the private institutions studied was 17.2 percent (\$36,642 minus \$31,273 equals \$5,369). The increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 3.4 percent or 1.1 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of mathematics (17.2%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.9 percent (19.1% minus 17.2% equals 1.9%) more than faculty in the discipline/major field of mathematics. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period.

The faculty mix percentage rate at the professor rank is higher than the assistant professor rank in the private studies: 0.31 vs. 0.29 (1986-87), and 0.31 vs. 0.28 (1989-90), respectively. The faculty mix percentage rate at the professor rank is nearly the same as at the assistant professor rank for ALL MAJOR FIELDS: 0.31 vs. 0.31 (1986-87) and 0.32 vs. 0.31 (1989-90), respectively.

Finally, the reader may note that the hiring rate of new assistant professors in mathematics in the 1986-87 private study was slightly less than the hiring rate in ALL MAJOR FIELDS: 4.3 percent (67/1,543) vs. 4.7 percent (1,279/27,249), respectively; and in 1989-90, it was lower: 4.1 percent (62/1,517) vs. 5.2 percent (1,476/28,609), respectively. In other words, in the private institutions the hiring rate in the discipline/major field of mathematics was less than for ALL MAJOR FIELDS in 1986-87, and by 1989-90, respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of mathematics and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 9,497 faculty in the discipline/major field of mathematics participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of mathematics is currently (1989-90) some 2 percent below the overall average faculty salary of ALL MAJOR FIELDS in the state study and 2 percent below in the private study. The average faculty salary for mathematics in the private institutions was 3.4 percent lower in comparison to that in the state institutions in 1986-87. The average faculty salary in the private institutions is now (1989-90) 2.3 percent below that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in mathematics, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. The "real" salaries of mathematics faculty in the state and private institutions increased more slowly than the "real" faculty salaries in ALL MAJOR FIELDS during this same period. Mathematics faculty in both the state and

private institutions have some catching up to do in salary in comparison with faculty in ALL MAJOR FIELDS.

Third, in the discipline/major field of mathematics, there is a lesser percentage of faculty in the assistant professor rank compared to the full professor rank in all four studies. The full professor rank appears to be decreasing at a rather similar rate in both the state and the private institutions. It seems a slightly smaller percentage of new assistant professors are being hired in 1989-90 in the state institutions compared to the private institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend studies will be effected in mathematics, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Doris V. Banner is an educational specialist in mathematics for the North Carolina Department of Public Instruction in Charlotte, North Carolina.

APPENDICES:

- A - OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B - LIST OF STATE Participating Institutions, page 11
- C - LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLCGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Fau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Albion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
DePaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Merodith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

SALARY-TREND STUDY OF FACULTY IN HOME ECONOMICS

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Sammie Garner

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including home economics. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of home economics in the CIP is as follows:

A summary of groups of instructional programs that describe the relationship between the physical, social, emotional, and intellectual environment in and of the home and family, and the development of individuals. Includes instruction in natural and social sciences and humanities in the development of attitudes, knowledge, and ability pertaining to clothing and textiles, consumer education, food and nutrition, home management, housing, human development and family studies, and institutional management.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 103.--19.)]

This article presents a summary of the overall average salary increases in the discipline/major field of home economics from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

This study lists the average salaries of home economics faculty for both state and private participating institutions by rank, including "new assistant professor," the FAC MIX PCT (Faculty Mix Percentage), and the salary factor. In addition, comparisons are made with the CPI (Consumer Price Index) of changes in cost-of-living between the two study years (1986-87 and 1989-90).

The CPI uses a base period of 1982-1984 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of the "real" salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a

given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/ major field who hold a given academic rank. For example, a FAC MIX PCT factor of .27 for associate professor of home economics in the 1986-87 state study means that 27 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of 0.98 for associate professors in the discipline/major field of home economics in the 1986-87 state study means that their salaries are approximately 2% lower than the salaries of all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of home economics with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in

	PROF			ASSO PROF			ASST PROF			NEW ASST PROF			INSTRUCTOR			ALL RANKS		
	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN
STATE, 1986-87:																		
DISCIPLINE: HOME ECONOMICS																		
MAJOR FIELD: HOME ECONOMICS																		
AVERAGE																		
SALARY:	38996	103	46	32020	164	60	26156	255	71	24442	32	27	21351	94	44	29131	616	78
FAC MIX																		
PCT:	0.17			0.27			0.41			0.05			0.15			1.00		
SALARY																		
FACTOR:	0.98			0.98			0.96			0.93			0.99			0.89		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	39819	17564		32676	15205		27122	14268		26202	1869		21466	4423		32611	51460	210
FAC MIX																		
PCT:	0.34			0.30			0.28			0.04			0.09			1.00		
STATE, 1989-90:																		
DISCIPLINE: HOME ECONOMICS																		
MAJOR FIELD: HOME ECONOMICS																		
AVERAGE																		
SALARY:	45209	119	47	36750	177	62	30473	251	68	28979	30	24	23779	106	47	33773	653	77
FAC MIX																		
PCT:	0.18			0.27			0.38			0.05			0.16			1.00		
SALARY																		
FACTOR:	0.96			0.96			0.96			1.11			0.97			0.88		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	47023	18930		38352	15550		31853	16354		26030	2865		24499	4733		38213	55567	210
FAC MIX																		
PCT:	0.34			0.28			0.29			0.05			0.09			1.00		
PRIVATE, 1986-87:																		
DISCIPLINE: HOME ECONOMICS																		
MAJOR FIELD: HOME ECONOMICS																		
AVERAGE																		
SALARY:	34582	16	10	27570	36	23	23782	67	30	24093	12	8	19285	18	13	25448	137	40
FAC MIX																		
PCT:	0.12			0.26			0.49			0.09			0.13			1.00		
SALARY																		
FACTOR:	0.86			0.89			0.93			0.97			0.94			0.81		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	40015	8507		31131	8438		25483	8319		24917	1279		20566	1985		31411	27249	265
FAC MIX																		
PCT:	0.31			0.31			0.31			0.05			0.07			1.00		
PRIVATE, 1989-90:																		
DISCIPLINE: HOME ECONOMICS																		
MAJOR FIELD: HOME ECONOMICS																		
AVERAGE																		
SALARY:	40310	21	12	31320	34	24	28878	60	26	31000	5	3	23136	16	10	30642	131	35
FAC MIX																		
PCT:	0.16			0.26			0.46			0.04			0.12			1.00		
SALARY																		
FACTOR:	0.85			0.85			0.94			1.04			0.96			0.82		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	47397	9026		36865	8771		30621	9004		29780	1476		24196	1808		37422	28609	265
FAC MIX																		
PCT:	0.32			0.31			0.31			0.05			0.06			1.00		

the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of home economics was reported in 78 of the 210 state (AASCU) institutions. The average salary of the 616 faculty was \$29,131. This average salary was approximately 11 percent (0.89%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of home economics was reported in 77 of the same 210 state (AASCU) institutions. The average salary of the 653 faculty was \$33,773. This average salary was approximately 12 percent (0.88%) lower than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in home economics after three years in the state institutions studied was 15.9 percent (\$33,773 minus \$29,131 equals \$4,642). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 2.1 percent or an average of 0.7 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of home economics (15.9%), therefore, the faculty in ALL MAJOR FIELDS increased their

salaries by 1.3 percentage points (17.2% minus 15.9% equals 1.3%) more than faculty in the discipline/major field of home economics. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent or an average of 1.1 percent per year.

The reader may note that the faculty mix percentage in home economics is lower at the professor rank than at the assistant professor rank in both the state studies: 0.17 vs 0.41 (1986-87) and 0.18 vs 0.38 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a lower percentage of assistant professors compared to home economics in both of the state studies.

Finally, the hiring rate of new assistant professors in home economics was higher than for ALL MAJOR FIELDS in the 1986-87 state study, 5.2 percent (32/616) vs. 3.6 percent (1,869/51,460), respectively. However, the hiring rate of new assistant professors in home economics in 1989-90 was 4.6 percent (30/653) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words the hiring rate of new assistant professors in home economics was greater than for ALL MAJOR FIELDS in the 1986-87 state study, but currently (1989-90) is slightly less than that for ALL MAJOR FIELDS.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of home economics was reported in 40 of the 265 private institutions. The average salary of the 137 faculty was \$25,448. This average salary was approximately 19 percent (0.81%) lower than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of home economics was reported in 35 of the same 265 private institutions. The average salary of the 131 faculty was \$30,642. This average salary was approximately 18 percent (0.82%) lower than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in home economics after three years in the private institutions studied was 20.4 percent (\$30,642 minus \$25,448 equals \$5,194). The increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 6.6 percent or 2.2 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of home economics (19.1%), therefore, the faculty in ALL MAJOR FIELDS sustained the same increase (19.1% minus 19.1% equals 0.0%) as faculty in the discipline/major field of home economics. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period.

In the discipline/major field of home economics, the reader may note that the faculty mix percentage at the professor rank is less than at the assistant professor rank in the private studies: 0.12 vs. 0.49 (1986-87), and 0.16 vs. 0.46 (1989-90), respectively. This is quite different from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87), respectively; and 0.32 vs. 0.31 (1989-90), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a lower percentage of assistant professors compared to home economics in both private studies.

Finally, the reader may note that the hiring rate of new assistant pro-

fessors in home economics in the private studies was more than the hiring rate in ALL MAJOR FIELDS in 1986-87, 8.8 percent (12/137) vs. 4.7 percent (1,279/27,249), respectively; while presently somewhat the opposite is observed, 3.8 percent (5/131) vs. 5.2 percent (1,476/28,609), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of home economics and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 1,537 faculty in the discipline/major field of home economics participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of home economics is currently (1989-90) some 12 and 18 percent below the overall faculty salary factor of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for home economics in the private institutions was approximately 10 percent less in comparison to that in the state institutions in 1986-87. The average faculty salary in the private institutions is now (1989-90) 14.5 percent less in comparison to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in home economics, in both the state and private

institutions, received overall salary increases for three years above the cost-of-living. Average home economics faculty salaries in both the state and private institutions lagged behind faculty in ALL MAJOR FIELDS. Home economics faculty were ahead of the faculty in ALL MAJOR FIELDS. Home economics faculty in the state and private institutions have a lot of catching up to do.

Third, in the discipline/major field of home economics the assistant professor rank has a greater percentage compared to the full professor rank for both the state and private studies. The full professor rank appears to be increasing at a faster rate in the state institutions, compared to the private institutions. It seems a higher percentage of new assistant professors are being hired in the private institutions in comparison to the state institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend studies will be effected in home economics, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Sammie Garner is professor and chairperson of the department of home economics at Appalachian State University, Boone, North Carolina.

APPENDICES:

- A - OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B - LIST OF STATE Participating Institutions, page 11
- C - LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Aibion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmino College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
DePaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Houston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (IA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

SALARY-TREND STUDY OF FACULTY IN LETTERS

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
William Linneman

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including letters. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of letters in the CIP is as follows:

A summary of groups of instructional programs that describe sounds, literature, syntax, phonology, morphology, semantics, sentences, prose and verse, as well as the development of skills and attitudes used in communicating and evaluating thought and feelings through oral and written language.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 115.--23.)]

This article presents a summary of the overall average salary increases in

the discipline/major field of letters from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the "baseline year" and the "trend year".

In addition to listing the average salaries in letters for both state and private participating institutions by rank, including "new assistant professor," and listing the faculty mix percentage (FAC MIX PCT) and the salary factor, comparisons are made between the two studies for each of the two study years (1986-87 and 1989-90) using the CPI (Consumer Price Index) of changes in cost-of-living.

The CPI uses a base period of 1982-1984 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of "real" salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites is not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .29 for associate professor of letters in the 1986-87 state study means that 29 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of .97 for professors in the discipline/major field of letters in the 1986-87 state study means that their salaries are 3 percent lower than the average of all professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of letters with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90

PROF	ASSO PROF	ASST PROF	NEW ASST PROF	INSTRUCTOR	ALL RANKS
SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN
STATE, 1986-87:					
DISCIPLINE: LETTERS					
MAJOR FIELD: ENGLISH, GENERAL					
AVERAGE SALARY: 38529	1433 194	31123 1239 194	25162 1085 187	23079 117 17	18852 485 103
FAC MIX					30697 4242 199
PCT: 0.34		0.29	0.26	0.03	0.11
SALARY FACTOR: 0.97		0.95	0.93	0.88	0.88
					0.94
ALL MAJOR FIELDS					
AVERAGE SALARY: 39819	17564	32676 15205	27122 14268	26202 1869	21466 4423
FAC MIX					32611 51460 210
PCT: 0.34		0.30	0.28	0.04	0.09
					1.00
STATE, 1989-90:					
DISCIPLINE: LETTERS					
MAJOR FIELD: ENGLISH, GENERAL					
AVERAGE SALARY: 45107	1547 205	36438 1203 193	29007 1285 194	27045 244 127	21647 626 120
FAC MIX					35280 4661 206
PCT: 0.33		0.26	0.28	0.05	0.13
SALARY FACTOR: 0.96		0.95	0.91	1.04	0.88
					0.92
ALL MAJOR FIELDS					
AVERAGE SALARY: 47023	18930	38352 15550	31853 16354	26030 2865	24499 4733
FAC MIX					38213 55567 210
PCT: 0.34		0.28	0.29	0.05	0.09
					1.00
PRIVATE, 1986-87:					
DISCIPLINE: LETTERS					
MAJOR FIELD: ENGLISH, GENERAL					
AVERAGE SALARY: 37258	722 211	29046 639 198	23190 528 185	21851 76 56	18347 163 88
FAC MIX					29578 2052 242
PCT: 0.35		0.31	0.26	0.04	0.08
SALARY FACTOR: 0.93		0.93	0.91	0.88	0.89
					0.94
ALL MAJOR FIELDS					
AVERAGE SALARY: 40015	8507	31131 8438	25483 8319	24917 1279	20566 1985
FAC MIX					31411 27249 265
PCT: 0.31		0.31	0.31	0.05	0.07
					1.00
PRIVATE, 1989-90:					
DISCIPLINE: LETTERS					
MAJOR FIELD: ENGLISH, GENERAL					
AVERAGE SALARY: 44164	778 223	34537 633 215	27271 634 214	25958 117 84	21225 169 79
FAC MIX					34823 2214 256
PCT: 0.35		0.29	0.29	0.05	0.08
SALARY FACTOR: 0.93		0.94	0.89	0.87	0.88
					0.93
ALL MAJOR FIELDS					
AVERAGE SALARY: 47397	9026	36865 8771	30621 9004	29780 1476	24196 1808
FAC MIX					37422 28609 265
PCT: 0.32		0.31	0.31	0.05	0.06
					1.00

will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of letters was reported in 199 of the 210 state (AASCU) institutions. The average salary of the 4,242 faculty was \$30,697. This average salary was approximately 6 percent (0.94%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of letters was reported in 206 of the same 210 state (AASCU) institutions. The average salary of the 4,661 faculty was \$35,280. This average salary was approximately 8 percent (0.92%) lower than the average salary of \$38,213 for all 59,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in letters after three years in the state institutions studied was 14.9 percent (\$35,280 minus \$30,697 equals \$4,583). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 1.1 percent or an average of 0.4 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of letters (14.9%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.3 percentage points (17.2% minus 14.9% equals 2.3%) more than faculty in the discipline/major field of letters. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent or an average of 1.1 percent per year.

The reader may note that the faculty mix percentage in letters is higher at

the professor rank than at the assistant professor rank in the 1986-87 state study and in the 1989-90 state study. The faculty mix percentage of professor and assistant professor is 0.34 vs. 0.26 (1986-87) and 0.33 vs. 0.28 (1989-90) respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies is as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90) respectively. ALL MAJOR FIELDS had an equal percentage of professors and a slightly higher percentage of assistant professors compared to letters in the 1986-87 state study. Currently, letters has a lower percentage of full and assistant professors than ALL MAJOR FIELDS.

Finally, the hiring rate of new assistant professors in letters is low in the state studies: 2.8 percent (117/4,242) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Also, the hiring rate of new assistant professors in letters in 1989-90 is 5.2 percent (244/4,661) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words the hiring rate in the discipline/major field of letters is less than for ALL MAJOR FIELDS in the state study of 1985-86 and the same in 1989-90.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of letters was reported in 242 of the 265 private institutions. The average salary of the 2,052 faculty was \$29,578. This average salary was approximately 6 percent (0.94%) lower than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of letters was reported in 256 of the same 265 private institutions. The average salary of the 2,214 faculty was \$34,823. This average

salary was approximately 7 percent (0.93%) lower than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in letters after three years in the private institutions studied was 17.7 percent (\$34,823 minus \$29,578 equals \$5,244). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 3.9 percent or 1.3 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of letters (17.7%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.4 percent (17.7% minus 19.1% equals -1.4%) more than faculty in the discipline/major field of letters. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period.

In the discipline/major field of letters, the reader may note that the faculty mix percentage is somewhat similarly spread at the professor rank and the assistant professor rank for both private studies: 0.35 vs. 0.26 (1986-87) respectively; and 0.35 vs. 0.29 (1989-90) respectively. The faculty mix percentage for ALL MAJOR FIELDS is similar in both private studies: 0.31 vs. 0.31 (1986-87) respectively; and 0.32 vs. 0.31 (1989-90) respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors compared to letters in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in letters lagged behind the hiring rate in ALL MAJOR FIELDS for the 1986-87 private study, 3.7 percent (76/2,052) vs. 4.7 percent (1,279/27,249) respectively. However, it was slightly ahead in letters for the 1989-90 private

study, 5.3 percent (117/2,214) vs. 5.2 percent (1,476/28,609), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of letters and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 and the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 13,169 faculty in the discipline/major field of letters participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of letters is currently (1989-90) some 18 and 17 percent below the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for letters in the private institutions was approximately 4 percentage points less in comparison to that in the state institutions in 1986-87. The average faculty salary in the private institutions in 1989-90 is now approximately 1 percentage point less compared to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in letters, in both the state and private institutions, received overall salary increases for three years above the

cost-of-living. However, letters faculty salaries in the state institutions lagged behind faculty in ALL MAJOR FIELDS during this same period. Letters faculty in both the private and state institutions have some catching up to do in salary in comparison with their colleagues in ALL MAJOR FIELDS.

Third, even though the discipline/major field of letters is one of the older disciplines, there is not a marked difference in faculty mix percentage between faculty in the state and in the private institutions. The assistant professor rank at private institutions appears to be increasing slightly more rapidly in comparison to the state institutions, and with those faculty in ALL MAJOR FIELDS.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional interpretations of salaries will be effected in letters, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author William Linneman is professor of English at Illinois State University, Normal, Illinois.

APPENDICES:

- A) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B) LIST OF STATE Participating Institutions, page 11
- C) LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glenville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Ikanca University College (FR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Ablion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (IN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (IA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

{ }

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

SALARY-TREND STUDY OF FACULTY IN LIBRARY AND ARCHIVAL SCIENCES

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Loles D. Solis

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including library and archival sciences. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of library and archival sciences in the CIP is as follows:

A summary of groups of instructional programs that describe the knowledge and skills required to develop, organize, store, retrieve, administer, and facilitate the use of collections of information in such formats as books, documents, manuscripts, machine-readable data bases, filmed and recorded materials, specimens, and artifacts.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 117.--25.)]

This article presents a summary of the overall average salary increases in the discipline/major field of library and archival sciences from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

This study lists the average salaries of library and archival sciences faculty for both state and private participating institutions by rank, including "new assistant professor," the FAC MIX PCT (faculty mix percentage) and the salary factor. In addition, comparisons are made using CPI (Consumer Price Index) of changes in cost-of-living between two study years (1986-87 and 1989-90).

The CPI uses a base period of 1982-1984 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Therefore, the CPI, was used to yield a more precise representation of "real" salary increases.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included

to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .24 for associate professor of library and archival sciences in the 1986-87 state study means that 24 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of 0.92 for assistant professors in the discipline/major field of library and archival sciences in the 1985-86 state study means that their salaries are 8 percent lower than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of library and archival sciences with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample

	PROF			ASSO			ASST			NEW ASST			ALL RANKS					
	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN	SALARY	NUM	N/IN			
DISCIPLINE: LIBRARY AND ARCHIVAL SCIENCES																		
MAJOR FIELD: LIBRARY AND ARCHIVAL SCIENCES																		
STATE, 1986-87:																		
AVERAGE																		
SALARY:	39254	39	22	31033	77	32	24823	135	38	23595	11	9	20421	68	19	27148	319	47
FAC MIX																		
PCT:	0.12			0.24			0.42			0.03			0.21			1.00		
SALARY																		
FACTOR:	0.99			0.95			0.92			0.90			0.95			0.83		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	39819	17564		32676	15205		27122	14268		26202	1869		21466	4423		32611	51460	210
FAC MIX																		
PCT:	0.34			0.30			0.28			0.04			0.09			1.00		
DISCIPLINE: LIBRARY AND ARCHIVAL SCIENCES																		
MAJOR FIELD: LIBRARY AND ARCHIVAL SCIENCES																		
STATE, 1989-90:																		
AVERAGE																		
SALARY:	45180	76	26	35832	99	37	29348	148	35	26305	12	10	24669	45	15	33790	368	47
FAC MIX																		
PCT:	0.21			0.27			0.40			0.03			0.12			1.00		
SALARY																		
FACTOR:	0.96			0.93			0.92			1.01			1.01			0.88		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	47023	18930		38352	15550		31853	16354		26030	2865		24499	4733		38213	55567	210
FAC MIX																		
PCT:	0.34			0.28			0.29			0.05			0.09			1.00		
DISCIPLINE: LIBRARY AND ARCHIVAL SCIENCES																		
MAJOR FIELD: LIBRARY AND ARCHIVAL SCIENCES																		
PRIVATE, 1986-87:																		
AVERAGE																		
SALARY:	32624	13	10	26081	22	15	23331	40	22	29500	1	1	17587	15	9	24388	90	28
FAC MIX																		
PCT:	0.14			0.24			0.44			0.01			0.17			1.00		
SALARY																		
FACTOR:	0.82			0.84			0.92			1.18			0.86			0.78		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	40015	8507		31131	8438		25483	8319		24917	1279		20566	1985		31411	27249	265
FAC MIX																		
PCT:	0.31			0.31			0.31			0.05			0.07			1.00		
DISCIPLINE: LIBRARY AND ARCHIVAL SCIENCES																		
MAJOR FIELD: LIBRARY AND ARCHIVAL SCIENCES																		
PRIVATE, 1989-90:																		
AVERAGE																		
SALARY:	42325	13	10	32209	24	16	27864	45	18	24686	5	5	28154	21	11	30760	103	26
FAC MIX																		
PCT:	0.13			0.23			0.44			0.05			0.20			1.00		
SALARY																		
FACTOR:	0.89			0.87			0.91			0.83			1.16			0.82		
ALL MAJOR FIELDS																		
AVERAGE																		
SALARY:	47397	9026		36865	8771		30621	9004		29780	1476		24196	1808		37422	28629	265
FAC MIX																		
PCT:	0.32			0.31			0.31			0.05			0.06			1.00		

sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of library and archival sciences was reported in 47 of the 210 state (AASCU) institutions. The average salary of the 319 faculty was \$27,148. This average salary was approximately 17 percent (0.83%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of library and archival sciences was reported in 47 of the same 210 state (AASCU) institutions. The average salary of the 368 faculty was \$33,750. This average salary was approximately 12 percent (0.88%) lower than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in library and archival sciences after three years in the state institutions studied was 24.5 percent (\$33,790 minus \$27,148 equals \$6,642). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 10.7 percent or an average of 3.6 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of library and archival sciences (24.5%), therefore, the faculty in ALL MAJOR FIELDS

decreased their salaries by 7.3 percentage points (17.2% minus 24.5% equals -7.3%) less than faculty in the discipline/major field of library and archival sciences. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent or an average of 1.1 percent per year.

The reader may note that the faculty mix percentage in library and archival sciences is much lower at the professor rank than at the assistant professor rank in both the state studies: 0.12 vs. 0.42 (1986-87) and 0.21 vs. 0.40 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a lower percentage of assistant professors compared to library and archival sciences in both of the state studies.

Finally, the hiring rate of new assistant professors in library and archival sciences in the state studies was less than for ALL MAJOR FIELDS in 1986-87, 3.4 percent (11/319) vs. 3.6 percent (1,869/51,460), respectively, and the hiring rate of new assistant professors in library and archival sciences in the state studies was less than for ALL MAJOR FIELDS in 1989-90, 3.3 percent (12/368) vs. 5.2 percent (2,865/55,567), respectively.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of library and archival sciences was reported in 28 of the 265 private institutions. The average salary of the 90 faculty was \$24,388. This average salary was approximately 22 percent (0.78%) lower than the average salary of \$31,411 for all 27,245 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of library and archival sciences was reported in 26 of the same 265

private institutions. The average salary of the 103 faculty was \$30,760. This average salary was approximately 18 percent (0.82%) lower than the average salary of \$37,422 for all 28,629 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in library and archival sciences after three years in the private institutions studied was 26.1 percent (\$30,760 minus \$24,388 equals \$6,372). The increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 12.3 percent or 4.1 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of library and archival sciences (26.1%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 7.0 percent (26.1% minus 19.1% equals 7.0%) less than faculty in the discipline/major field of library and archival sciences. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period

In the discipline/major field of library and archival sciences, the reader may note that the faculty mix percentage at the professor rank is less than at the assistant professor rank in the private studies: 0.14 vs. 0.44 (1986-87), and 0.13 vs. 0.44 (1989-90), respectively. This is quite different from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1985-86), and 0.31 vs. 0.31 (1988-89), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a lower percentage of assistant professors compared to library and archival sciences in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in library and archival sciences in the 1986-87 private study was less

than the hiring rate in ALL MAJOR FIELDS, 1.1 percent (1/90) vs. 4.7 percent (1,279/27,249), respectively. In 1989-90 the hiring rate was less for new assistant professors in library and archival sciences compared to that for ALL MAJOR FIELDS, 4.9 percent (5/103) vs. 5.2 percent (1,476/28,629), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of library and archival sciences and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (ASSCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 880 faculty in the discipline/major field of library and archival sciences participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of library and archival sciences is currently (1989-90) some 12 and 18 percent below the overall faculty salary factor of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for library and archival sciences in the private institutions was 11 percent less in comparison to that in the state institutions in 1986-87. The average faculty salary in the private institutions is now (1989-90) 10 percent less in comparison to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in library and archival sciences, in both the state

and private institutions, received overall salary increases for three years above the cost-of-living. However, library and archival sciences faculty salary increases in both the state and private institutions lagged behind faculty in ALL MAJOR FIELDS. Library and archival sciences faculty in both the state and private institutions have some catching up to do in salary in comparison to ALL MAJOR FIELDS.

Third, in the discipline/major field of library and archival sciences the assistant professor rank has a much greater percentage compared to the full professor rank for both the state and private studies. The full professor rank appears to be increasing at a faster rate in the state institutions, compared to the private institutions. It seems a higher percentage of new assistant professors are being hired in the private institutions in comparison to the state institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional interpretations will be effected in library and archival sciences, and in other disciplines/ major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Loles D. Solis is Business Reference Librarian at Appalachian State University, Boone, North Carolina.

APPENDICES:

- A) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B) LIST OF STATE Participating Institutions, page 11
- C) LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Meyville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)

State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Aiblon College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmino College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (IN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (IA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)
Russell Sage College (NY)
Sacred Heart University (CT)
Saint John's University (MN)
Saint Joseph College (CT)
Saint Joseph's College (IN)
Saint Mary's College (MI)
Saint Mary's College (MN)
Saint Mary's College of California (CA)
Saint Meinrad College (IN)
Saint Michael's College (VT)
Salem College (NC)
School of the Ozarks, The (MO)
Schreiner College (TX)
Scripps College (CA)
Seattle Pacific University (WA)
Seattle University (WA)
Seton Hill College (PA)
Shorter College (GA)
Siena College (NY)
Siena Heights College (MI)
Simpson College (IA)
Skidmore College (NY)
Southern California College (CA)
Southwestern Assemblies of God College (TX)
Spalding University (KY)
Springfield College (MA)
St. Bonaventure University (NY)
St. Edward's University (TX)
St. Francis College (NY)
St. Mary's University (TX)
St. Norbert College (WI)
Stevens Institute of Technology (NJ)
Stillman College (AL)
Suffolk University (MA)
Susquehanna University (PA)
Talladega College (AL)
Taylor University (IN)
Texas Christian University (TX)
Transylvania University (KY)
Tri-State University (IN)
Trinity College (DC)
Trinity College of Vermont (VT)
Trinity University (TX)
United Theological Seminary of the Twin Cities (MN)
University of Charleston, The (SC)
University of Dayton (OH)
University of Detroit (MI)
University of Dubuque Theological Seminary (IA)
University of Findlay, The (OH)
University of Hartford (CT)
University of La Verne (CA)
University of Miami (FL)
University of Portland (OR)
University of Richmond (VA)
University of Rio Grande (OH)
University of San Diego (CA)
University of the South (TN)
University of Tulsa (OK)
Valparaiso University (IN)
Viterbo College (WI)
Walsh College (OH)
Washington and Jefferson College (PA)
Washington Bible College (MD)
Wesleyan College (GA)
West Virginia Wesleyan College (WV)
Western Maryland College (MD)
Westmar College (IA)
Westminster College of Salt Lake City (UT)
Westminster Theological Seminary (PA)

TOTAL: 265

SALARY-TREND STUDY OF FACULTY IN LIFE SCIENCES

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Roy Jones

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including life sciences. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of life sciences in the CIP is as follows:

A summary of groups of instructional programs that describe the systematic study of living organisms.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington DC.: National Center for Education Statistics, [1985], p. 118.-26.)]

This article presents a summary of the overall average salary increases in the discipline/major field of life sciences from the "baseline year" of 1985-86 to and including the "trend year" of 1989-90 for both state and private insti-

tutions. Of the 265 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 475 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

In addition to listing the average salaries in the life sciences for both state and private participating institutions by rank, including "new assistant professor," and listing the faculty mix percentage (FAC MIX PCT) and the salary factor, comparisons are made between the two studies for each of the two study years (1986-87 and 1989-90) using the CPI (Consumer Price Index) of changes in cost-of-living.

The CPI uses a base period of 1982-1984 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Thus, by comparing changes in the CPI, a more precise representation of the "real" salary increases over the period of time studied.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .29 for associate professor of the life sciences in the 1986-87 state study means that 29 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of .97 for assistant professors in the discipline/major field of life sciences in the 1986-87 state study means that their salaries are 3 percent lower than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of life sciences with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

	PROF SALARY NUM N/IN	ASSO PROF SALARY NUM N/IN	ASST PROF SALARY NUM N/IN	NEW ASST PROF SALARY NUM N/IN	INSTRUCTOR SALARY NUM N/IN	ALL RANKS SALARY NUM N/IN
DISCIPLINE: LIFE SCIENCES MAJOR FIELD: LIFE SCIENCES						
STATE, 1986-87:						
AVERAGE						
SALARY:	38960 1183 181	31693 714 163	26178 477 148	24905 71 56	19924 95 51	33656 2469 189
FAC MIX						
PCT:	0.48	0.29	0.19	0.03	0.04	1.00
SALARY						
FACTOR:	0.98	0.97	0.97	0.95	0.93	1.03
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	39819 17564	32676 15205	27122 14268	26202 1869	21466 4423	32611 51460 210
FAC MIX						
PCT:	0.34	0.30	0.28	0.04	0.09	1.00
DISCIPLINE: LIFE SCIENCES MAJOR FIELD: LIFE SCIENCES						
STATE, 1989-90:						
AVERAGE						
SALARY:	45640 1288 196	36962 676 181	30388 552 160	29059 111 74	22808 83 52	39414 2599 200
FAC MIX						
PCT:	0.50	0.26	0.21	0.04	0.03	1.00
SALARY						
FACTOR:	0.97	0.96	0.95	1.12	0.93	1.03
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	47023 18930	38352 15550	31853 16354	26030 2865	24499 4733	38213 55567 210
FAC MIX						
PCT:	0.34	0.28	0.29	0.05	0.09	1.00
DISCIPLINE: LIFE SCIENCES MAJOR FIELD: LIFE SCIENCES						
PRIVATE, 1986-87:						
AVERAGE						
SALARY:	39743 526 174	30835 441 174	25251 300 151	24774 42 33	17852 38 26	32763 1305 229
FAC MIX						
PCT:	0.40	0.34	0.23	0.03	0.03	1.00
SALARY						
FACTOR:	0.99	0.99	0.99	0.99	0.87	1.04
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	40015 8507	31311 8438	25483 8319	24917 1279	20566 1985	31411 27249 265
FAC MIX						
PCT:	0.31	0.31	0.31	0.05	0.07	1.00
DISCIPLINE: LIFE SCIENCES MAJOR FIELD: LIFE SCIENCES						
PRIVATE, 1989-90:						
AVERAGE						
SALARY:	44688 527 193	34801 430 188	29185 292 155	26821 51 41	21895 39 29	37182 1288 243
FAC MIX						
PCT:	0.41	0.33	0.23	0.04	0.03	1.00
SALARY						
FACTOR:	0.94	0.94	0.95	0.90	0.90	0.99
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	47397 9026	36865 8771	30621 9004	29780 1476	24196 1808	37422 28609 265
FAC MIX						
PCT:	0.32	0.31	0.31	0.05	0.06	1.00

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of life sciences was reported in 189 of the 210 state (AASCU) institutions. The average salary of the 2,469 faculty was \$33,656. This average salary was approximately 3 percent (1.03%) higher than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of life sciences was reported in 200 of the same 210 state (AASCU) institutions. The average salary of the 2,599 faculty was \$39,414. This average salary was approximately 3 percent (1.03%) higher than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in the life sciences after three years in the state institutions studied was 17.1 percent (\$39,414 minus \$33,650 equals \$5,758). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 3.3 percent or an average of 1.1 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of life sciences (17.1%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 0.1 percent (17.1% minus 17.2% equals 0.1%) more than faculty in the discipline/major field of life sciences. In "real" or inflation-adjusted terms faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent or an average of 1.1 percent per year.

Since the discipline/major field of life sciences is one of the "older" disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the state studies;

0.48 vs. 0.19 (1986-87), and 0.50 vs. 0.21 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies is as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors compared to the life sciences in both state studies.

Finally, the hiring rate of new assistant professors in the life sciences is low in the state studies: 2.9 percent (71/2,469) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Also, the hiring rate of new assistant professors in the life sciences in 1989-90 was 4.3 percent (111/2,599) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words the hiring rate in the discipline/major field of life sciences is lower than for ALL MAJOR FIELDS in both the state studies.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of life sciences was reported in 229 of the 265 private institutions. The average salary of the 1,305 faculty was \$32,763. This average salary was 4 percent higher (1.04%) than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of life sciences was reported in 243 of the same 265 private institutions. The average salary of the 1,288 faculty was \$37,182. This average salary was approximately 1 percent lower (0.99%) than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in the life sciences after three years in the private institutions studied was 13.8 percent (\$37,182 minus \$32,673 equals \$4,509). The increased cost-of-living between October 1986 and October 1989 was 13.8 percent. Therefore, the average faculty salaries increase over the three-year time period was exactly the same as the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of life sciences (13.8%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 5.3 percent (19.1% minus 13.8% equals 5.3%) more than faculty in the discipline/major field of life sciences. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period.

Because the discipline/major field of life sciences is one of the "older" disciplines, the reader may note that the faculty mix percentage is higher at the professor rank than at the assistant professor rank in the private studies: 0.40 vs. 0.23 (1986-87), and 0.41 vs. 0.23 (1989-90), respectively. This difference is less for ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87), and 0.32 vs. 0.31, (1989-90), respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors than the life sciences in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in the life sciences in the private studies lagged behind the hiring rate in ALL MAJOR FIELDS both in 1986-87, 3.2 percent (42/1,305) vs. 4.7 percent (1,279/27,249), respectively; and in 1989-90, 4.0 percent (51/1,288) vs. 5.2 percent (1,476/28,605), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/ major field of life sciences and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 and the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 7,661 faculty in the discipline/major field of life sciences participated and were included in the overall total of 162,885 faculty in all 36 disciplines/ major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of life sciences is currently (1989-90) some 3 percentage points above the overall faculty salary factor of ALL MAJOR FIELDS in the state study but is 1 percentage point below in the private study. The average faculty salary for life sciences in the state institutions was approximately 3 percentage points more in comparison to that in the private institutions in 1986-87. The average faculty salary in the private institutions is now (1989-90) nearly 6 percentage points less in comparison to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in the life sciences, in both the state and private institutions, received overall salary increases for three years at or above the cost-of-living. Life sciences faculty salaries in the private institutions were ahead in 1986-87 but lagged behind faculty in ALL MAJOR FIELDS in 1989-90 whereas life sciences faculty salaries in the state institutions exceeded the

faculty in ALL MAJOR FIELDS during both study years, 1986-87 and 1989-90. Life sciences faculty in the private institutions have some catching up to do in salary in comparison with their colleagues in the state institutions as of 1989-90.

Third, since the discipline/major field of life sciences is one of the older disciplines, there is a marked difference between the number of faculty with the rank of full professor and assistant professor in the state and in the private institutions. The full professor rank is already "top heavy" in the state and private institutions. It appears that the full professor rank is increasing at about the same rate in both the state and private institutions. It seems that new assistant professors are being hired at about the same rate both in the state and private institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional analysis of salary-trends will be effected in the life sciences, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Roy Jones is an assistant professor in the Extension Division of Virginia Polytechnic Institute and State University, Blacksburg, Virginia.

APPENDICES:

- A - OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B - LIST OF STATE Participating Institutions, page 11
- C - LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)

State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL) . . .
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Aibion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MI)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Memmonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

SALARY-TREND STUDY OF FACULTY IN MULTI-INTERDISCIPLINARY STUDIES

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Marvin Williamsen

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including multi-interdisciplinary studies. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of multi-interdisciplinary studies in the CIP is as follows:

A summary of groups of instructional programs, the components of which derive from two or more separate conventional academic instructional programs.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, D.C.: National Center for Education Statistics, [1985], p. 122.--30.)]

This article presents a summary of the overall average salary increases in the discipline/major field of multi-interdisciplinary studies from the "base-

line year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

This study lists the average salaries of multi-interdisciplinary studies faculty for both state and private participating institutions by rank, including "new assistant professor," the FAC MIX PCT (faculty mix percentage) and the salary factor. In addition, comparisons are made with the CPI (Consumer Price Index) of changes in cost-of-living between the two studies for each of the two study years (1986-87 and 1989-90).

The CPI is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the economy. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of the "real" salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a

given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .29 for associate professor of multi-interdisciplinary studies in the 1986-87 state study means that 29 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-89. For example, a SALARY FACTOR of 0.94 for assistant professors in the discipline/major field of multi-interdisciplinary studies in the 1985-86 state study means that their salaries are 6 percent less than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of multi-interdisciplinary studies with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make

	PROF	ASSO PROF	ASST PROF	NEW ASST PROF	INSTRUCTOR	ALL RANKS
	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN
DISCIPLINE: MULTI-INTERDISCIPLINARY STUDIES						
MAJOR FIELD: MULTI-INTERDISCIPLINARY STUDIES						
STATE, 1986-87:						
AVERAGE						
SALARY:	37876 66 18	31743 75 13	25392 104 16	23322 11 4	22089 16 4	30171 261 24
FAC MIX						
PCT:	0.25	0.29	0.40	0.04	0.06	1.00
SALARY						
FACTOR:	0.95	0.97	0.94	0.89	1.03	0.93
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	39819 17564	32676 15205	27122 14268	26202 1869	21466 4423	32611 51460 210
FAC MIX						
PCT:	0.34	0.30	0.28	0.04	0.09	1.00
DISCIPLINE: MULTI-INTERDISCIPLINARY STUDIES						
MAJOR FIELD: MULTI-INTERDISCIPLINARY STUDIES						
STATE, 1989-90:						
AVERAGE						
SALARY:	48666 51 28	37527 73 15	29502 107 20	28300 14 7	26197 33 7	35010 264 33
FAC MIX						
PCT:	0.19	0.28	0.41	0.05	0.13	1.00
SALARY						
FACTOR:	1.03	0.98	0.93	1.09	1.07	0.92
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	47023 18930	38352 15550	31853 16354	26030 2865	24499 4733	38213 55567 210
FAC MIX						
PCT:	0.34	0.28	0.29	0.05	0.09	1.00
DISCIPLINE: MULTI-INTERDISCIPLINARY STUDIES						
MAJOR FIELD: MULTI-INTERDISCIPLINARY STUDIES						
PRIVATE, 1986-87:						
AVERAGE						
SALARY:	37509 51 13	27793 58 14	24373 42 16	21300 4 3	20120 16 7	29164 167 25
FAC MIX						
PCT:	0.31	0.35	0.25	0.02	0.10	1.00
SALARY						
FACTOR:	0.94	0.89	0.96	0.85	0.98	0.93
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	40015 8507	31131 8438	25483 8319	24917 1279	20566 1985	31411 27249 265
FAC MIX						
PCT:	0.31	0.31	0.31	0.05	0.07	1.00
DISCIPLINE: MULTI-INTERDISCIPLINARY STUDIES						
MAJOR FIELD: MULTI-INTERDISCIPLINARY STUDIES						
PRIVATE, 1989-90:						
AVERAGE						
SALARY:	49236 72 18	34494 40 14	31132 42 21	28000 1 1	24244 6 6	39860 160 28
FAC MIX						
PCT:	0.45	0.25	0.26	0.01	0.04	1.00
SALARY						
FACTOR:	1.04	0.94	1.02	0.94	1.00	1.07
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	47397 9026	36865 8771	30621 9004	29780 1476	24196 1808	37422 28609 265
FAC MIX						
PCT:	0.32	0.31	0.31	0.05	0.06	1.00

based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of multi-interdisciplinary studies was reported in 24 of the 210 state (AASCU) institutions. The average salary of the 261 faculty was \$30,171. This average salary was 7 percent less (0.93%) than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of multi-interdisciplinary studies was reported in 33 of the same 210 state (AASCU) institutions. The average salary of the 264 faculty was \$35,010. This average salary was approximately 8 percent (0.92%) lower than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in multi-interdisciplinary studies after three years in the state institutions studied was 16.0 percent (\$35,010 minus \$30,171 equals \$4,839). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. A more realistic increase, therefore, in average faculty salaries over the three-year time period is 2.2 percent or an average of .73 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.0 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of multi-interdisciplinary studies (16.0%), therefore, the faculty in ALL MAJOR FIELDS decreased their salaries by 1 percent (16.0% minus 17.0% equals -1%) less than faculty in the discipline/major field of multi-interdisciplinary studies

The reader may note that the faculty mix percentage in the discipline/major

field of multi-interdisciplinary studies is lower at the professor rank than at the assistant professor rank in the 1986-87 state studies: 0.25 vs 0.40 and in the 1989-90 study: 0.19 vs 0.41. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS had a higher percentage in the professor rank and a lower percentage in the assistant professor rank compared to multi-interdisciplinary studies in both the 1986-87 state study and the 1989-90 study.

Finally, the hiring rate of new assistant professors in the discipline/major field of multi-interdisciplinary studies in the state studies was more than for ALL MAJOR FIELDS both in 1986-87, 4.2 percent (11/261) vs. 3.6 percent (1,869/51,460), respectively; and in 1989-90, it was 5.3 percent (14/264) vs. 5.2 percent (2,865/55,567), respectively.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of multi-interdisciplinary studies was reported in 25 of the 265 private institutions. The average salary of the 167 faculty was \$29,164. This average salary was approximately 7 percent below the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of multi-interdisciplinary studies was reported in 28 of the same 265 private institutions. The average salary of the 160 faculty was \$39,860. This average salary was approximately 7 percent (1.07%) higher than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in multi-interdisciplinary studies after three years in the private institutions studied was 36.7 percent (\$39,860 minus \$20,164 equals \$10,696). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. A more realistic increase, therefore, in average faculty salaries over the three-year time period is 22.9 percent or 7.6 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of multi-interdisciplinary studies (36.7%), the faculty in ALL MAJOR FIELDS increased their salaries by 17.6 percent (19.1% minus 36.7% equals -17.6%) less than faculty in the discipline/major field of multi-interdisciplinary studies.

In the discipline/major field of multi-interdisciplinary studies, the reader may note that the faculty mix percentage at the professor rank was higher than at the assistant professor rank in (1986-87) the private study: 0.31 vs. 0.25, respectively; and higher in the 1989-90 study: 0.45 vs. 0.26 . This is different from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87),; and 0.32 vs. 0.31 (1989-90), respectively. In other words, ALL MAJOR FIELDS has a lower percentage of professors, and a higher percentage of assistant professors as compared with the discipline/major field of multi-interdisciplinary studies in 1986-87, and a higher percentage assistant professors compared to the discipline/major field of multi-interdisciplinary studies in the 1989-90 private study.

Finally, the reader may note that the hiring rate of new assistant professors in multi-interdisciplinary studies was lower than the hiring rate in ALL MAJOR FIELDS in 1986-87, and was lower than the hiring rate in ALL MAJOR FIELDS in 1989-90, 2.4 percent (4/167) vs. 4.7 percent (1,279/27,249), respectively;

and in 1989-90, 0.6 percent (1/160) vs. 4.8 percent (1,476/28,609), respectively. in other words the hiring rate in the discipline/major field of multi-interdisciplinary studies is less both in the 1986-87 and 1989-90 studies in comparison to ALL MAJOR FIELDS in the 1989-90 study.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of multi-interdisciplinary studies and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 852 faculty in the discipline/major field of multi-interdisciplinary studies participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of multi-interdisciplinary studies is currently some 8 percent below (1989-90), and 7 percent above the overall faculty salary factor of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for multi-interdisciplinary studies in the state institutions was approximately 4 percent more in comparison to that in the private institutions in 1986-87. The average faculty salary in the private institutions is now (1989-90) 14 percent more in comparison to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986,

indicates that the faculty in multi-interdisciplinary studies, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. Multi-interdisciplinary faculty salaries are lower in the state institutions and higher in the private institutions in comparison to faculty in ALL MAJOR FIELDS during this same period. Multi-interdisciplinary studies faculty in the state institutions have some catching up to do in salary in comparison with their colleagues in the private institutions and ALL MAJOR FIELDS.

Third, in the discipline/major field of multi-interdisciplinary studies the full professor rank now (1989-90) has a smaller percentage compared to the assistant professor rank in the state study. In the private studies, the full professor rank has a greater percentage in the current (1989-90) study than the assistant professor rank. The full professor lagged behind the assistant professor rank in the 1986-87 state study. It seems that a much higher percentage of new assistant professors are now (1989-90) being hired in the state institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend analyses will be effected in multi-interdisciplinary studies, and in other disciplines/ major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University Boone, North Carolina. Co-author Marvin Williamsen is associate professor and chairperson of the department of interdisciplinary studies at Appalachian State University, Boone, North Carolina.

APPENDICES:

- A - OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B - LIST OF STATE Participating Institutions, page 11
- C - LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OR)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OR)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)

State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Albion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MF)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

SALARY-TREND STUDY OF FACULTY IN MUSIC

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Clinton Parker

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including music. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of music in the CIP is as follows:

A group of instructional programs that describe the art and science of combining sounds of various timbre in harmonic, rhythmic, or melodic forms which are artistically expressive.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, D.C.: National Center for Education Statistics, [1985]), p. 160.--50.09]

This article presents a summary of the overall average salary increases in the discipline/major field of music from the "baseline year" of 1985-86 to and including the "trend year" of 1989-90 for both state and private institutions.

Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the baseline year and the trend year.

This study lists the average salaries of music faculty for both state and private participating institutions by rank, including "new assistant professor," the FAC MIX PCT (faculty mix percentage) and the salary factor. In addition, comparisons are made with the CPI (Consumer Price Index) of changes in cost-of-living between the two studies for each of the two study years (1986-87 and 1989-90).

The CPI uses a base period of 1982-1984 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of "real" salary increases is yielded.

The salary is based on a regular academic year of two semesters or three quarters of full-time faculty only. Full-time faculty are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a

given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .31 for associate professor of music in the 1986-87 state study means that 31 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of .93 for assistant professors in the discipline/major field of music in the 1986-87 state study means that their salaries are 7 percent lower than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of music with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

PROF SALARY NUM N/IN	ASSO PROF SALARY NUM N/IN	ASST PROF SALARY NUM N/IN	NEW ASST PROF SALARY NUM N/IN	INSTRUCTOR SALARY NUM N/IN	ALL RANKS SALARY NUM N/IN
-------------------------	---------------------------------	---------------------------------	--	-------------------------------	------------------------------

DISCIPLINE: VISUAL & PERFORMING ARTS
MAJOR FIELD: MUSIC, GENERAL

STATE, 1986-87:

AVERAGE SALARY: 38461 728 151	30750 695 156	25178 641 146	23190 58 39	21170 192 87	30839 2256 168
FAC MIX					
PCT: 0.32	0.31	0.28	0.03	0.09	1.00
SALARY					
FACTOR: 0.97	0.94	0.93	0.89	0.99	0.95

ALL MAJOR FIELDS

AVERAGE SALARY: 39819 17564	32676 15205	27122 14268	26202 1869	21466 4423	32611 51460 210
FAC MIX					
PCT: 0.34	0.30	0.28	0.04	0.09	1.00

DISCIPLINE: VISUAL & PERFORMING ARTS
MAJOR FIELD: MUSIC, GENERAL

STATE, 1989-90:

AVERAGE SALARY: 44700 805 157	35739 719 154	29271 723 159	27129 115 77	24027 197 78	35833 2444 175
FAC MIX					
PCT: 0.33	0.29	0.30	0.05	0.08	1.00
SALARY					
FACTOR: 0.95	0.93	0.92	1.04	0.98	0.94

ALL MAJOR FIELDS

AVERAGE SALARY: 47023 18930	38352 15550	31853 16354	26030 2865	24499 4733	38213 55567 210
FAC MIX					
PCT: 0.34	0.28	0.29	0.05	0.09	1.00

DISCIPLINE: VISUAL & PERFORMING ARTS
MAJOR FIELD: MUSIC, GENERAL

PRIVATE, 1986-87:

AVERAGE SALARY: 34456 346 139	27748 379 145	23144 357 145	23096 60 45	20311 104 61	27667 1186 202
FAC MIX					
PCT: 0.29	0.32	0.30	0.05	0.09	1.00
SALARY					
FACTOR: 0.86	0.89	0.91	0.93	0.99	0.88

ALL MAJOR FIELDS

AVERAGE SALARY: 40015 8507	31131 8438	25483 8319	24917 1279	20566 1985	31411 27249 265
FAC MIX					
PCT: 0.31	0.31	0.31	0.05	0.07	1.00

DISCIPLINE: VISUAL & PERFORMING ARTS
MAJOR FIELD: MUSIC, GENERAL

PRIVATE, 1989-90:

AVERAGE SALARY: 40739 351 136	33009 380 146	27246 349 143	27077 50 32	24390 80 49	33020 1160 208
FAC MIX					
PCT: 0.30	0.33	0.30	0.04	0.07	1.00
SALARY					
FACTOR: 0.86	0.90	0.89	0.91	1.01	0.88

ALL MAJOR FIELDS

AVERAGE SALARY: 47397 9026	36865 8771	30621 9004	29780 1476	24196 1808	37422 28609 265
FAC MIX					
PCT: 0.32	0.31	0.31	0.05	0.06	1.00

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of music was reported in 168 of the 210 state (AASCU) institutions. The average salary of the 2,256 faculty was \$30,839. This average salary was approximately 5 percent (0.95%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of music was reported in 175 of the same 210 state (AASCU) institutions. The average salary of the 2,444 faculty was \$35,833. This average salary was approximately 6 percent (0.94%) lower than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in music after three years in the state institutions studied was 16.2 percent (\$35,833 minus \$30,839 equals \$4,994). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 2.4 percent or an average of 0.8 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of music (16.2%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.0 percentage points (16.2% minus 17.2% equals -1.0%) more than faculty in the discipline/major field of music. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent or an average of 1.1 percent per year.

The reader may note that the faculty mix percentage in the discipline/major field of music is slightly greater at the professor rank compared to the assistant professor rank in both of the state studies: 0.32 vs. 0.28

(1986-87), and 0.33 vs. 0.30 (1989-90), respectively. The differences in the faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words both the discipline/major field of music and ALL MAJOR FIELDS have a higher percentage of professors and a lower percentage of assistant professors.

Finally, the hiring rate of new assistant professors in music is low in the state studies: 2.6 percent (58/2,256) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Also, the hiring rate of new assistant professors in music in 1989-90 was 4.7 percent (115/2,444) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words the hiring rate in the discipline/major field of music is less than for ALL MAJOR FIELDS in both the state studies of 1986-87 and 1989-90.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of music was reported in 202 of the 265 private institutions. The average salary of the 1,186 faculty was \$27,667. This average salary was 12 percent (0.88%) lower than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of music was reported in 208 of the same 265 private institutions. The average salary of the 1,160 faculty was \$33,020. This average salary was approximately 12 percent (0.88%) lower than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in music after three years in the private institutions studied was 19.3 percent (\$33,020 minus \$27,667 equals \$5,353). The increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 5.5 percent or 1.8 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 16.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of music (19.3%), therefore, the faculty in ALL MAJOR FIELDS decreased their salaries by 3.2 percent (16.1% minus 19.3% equals -3.2%) less than faculty in the discipline/major field of music. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period.

The reader may note that the faculty mix percentage in the discipline/major field of music is approximately the same at the professor rank as at the assistant professor rank in both the private studies: 0.29 vs. 0.30 (1986-87), respectively, 0.30 vs. 0.30, respectively (1989-90). The faculty mix percentage is nearly equal at the professor rank and at the assistant professor rank for ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87), respectively; and 0.32 vs. 0.31 (1989-90), respectively.

Finally, the reader may note that the hiring rate of new assistant professors in music in the private studies is slightly ahead of the hiring rate in ALL MAJOR FIELDS in 1986-87, 5.1 percent (60/1,186) vs. 4.7 percent (1,279/27,249) respectively; but lags behind in 1989-90, 4.3 percent (50/1,160) vs. 5.2 percent (1,388/28,627), respectively. In other words the hiring rate in the discipline/ major field of music is more than for ALL MAJOR FIELDS in the private study of 1986-87 but is less than that for ALL MAJOR FIELDS in 1989-90.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of music and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 7,046 faculty in the discipline/major field of music participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factors in the discipline/major field of music in both the state and private studies are currently (1989-90) at 12 percent below and 6 percent below respectively, the faculty salary factor of ALL MAJOR FIELDS. The average faculty salary for music in the private institutions was 22 percent less in comparison to that in the state institutions in 1986-87. The average faculty salary in the private institutions is now (1989-90) 9 percent less compared to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in music, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. Music faculty salary increases in the state institutions were ahead of these faculty in ALL MAJOR FIELDS during this same period. Conversely, in private institutions music faculty salaries were slightly behind those of faculty in ALL MAJOR FIELDS. Music faculty in the private institutions have some

catching up to do in salary in comparison with their colleagues in state institutions but faculty in both types of institutions remain behind faculty in ALL MAJOR FIELDS.

Third, in the discipline/major field of music, there is not a marked difference between the number of faculty with the rank of full professor and assistant professor in the state or private institutions. The full professor rank appears to be increasing at approximately the same rate in both the state and private institutions. It seems a smaller percentage of new assistant professors are being hired in the private institutions in comparison to the state institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend studies will be effected in music, and in other disciplines/major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author R. Clinton Parker is professor of music and associate vice chancellor for academic affairs at Appalachian State University, Boone, North Carolina.

APPENDICES:

- A - OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B - LIST OF STATE Participating Institutions, page 11
- C - LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glennville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Albion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Ballarwine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

FACULTY IN NURSING
FOR THE YEARS
1986-87 AND 1989-90

By
Richard D. Howe
and
Fredel T. Reighard

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1988-89. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full-time teaching faculty in 36 selected academic disciplines including nursing. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of nursing in the CIP is as follows:

An instructional program that generally describes the techniques and procedures for providing care for sick, disabled, infirm, or other individuals, including the administration of medication and treatments, assisting a physician during treatments and examinations, and planning education for health maintenance.*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 101.--18.11)]

This article presents a summary of the overall average salary increases in the discipline/major field of nursing from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA's STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the baseline year and the trend year. Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the "baseline year" and the "trend year".

This study lists the average salaries of nursing faculty for both state and private participating institutions by rank, including "new assistant professor," the FAC MIX PCT (faculty mix percentage) and the salary factor. In addition, comparisons are made using the CPI (Consumer Price Index) of changes in cost-of-living between the two study years (1986-87 and 1989-90).

The CPI uses a base period of 1982-84 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of the salaries due to inflation. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of the "real" salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty member are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .21 for associate professor of nursing in the 1986-87 state study means that 21 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of 0.98 for assistant professors in the discipline/major field of nursing in the 1986-87 state study means that their salaries are 2 percent lower than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of nursing with the entire data base for each study.

PROF	ASSO PROF	ASST PROF	NEW ASST PROF	INSTRUCTOR	ALL RANKS
SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN
DISCIPLINE: HEALTH SCIENCES					
MAJOR FIELD: NURSING, GENERAL					
STATE, 1986-87:					
AVERAGE					
SALARY: 40630 129 58	32183 450 114	26477 1071 133	27621 85 56	21970 452 95	27598 2102 136
FAC MIX					
PCT: 0.06	0.21	0.51	0.04	0.22	1.00
SALARY					
FACTOR: 1.02	0.98	0.98	1.05	1.02	0.85
ALL MAJOR FIELDS					
AVERAGE					
SALARY: 39819 17564	32676 15205	27122 14268	26202 1869	21466 4423	32611 51460 210
FAC MIX					
PCT: 0.34	0.30	0.28	0.04	0.09	1.00
DISCIPLINE: HEALTH SCIENCES					
MAJOR FIELD: NURSING, GENERAL					
STATE, 1989-90:					
AVERAGE					
SALARY: 47156 156 73	37137 513 122	30666 1052 132	29197 98 61	25601 379 93	32557 2100 140
FAC MIX					
PCT: 0.07	0.24	0.50	0.05	0.18	1.00
SALARY					
FACTOR: 1.00	0.97	0.96	1.12	1.04	0.85
ALL MAJOR FIELDS					
AVERAGE					
SALARY: 47023 18930	38352 15550	31853 16354	26030 2865	24499 4733	38213 55567 210
FAC MIX					
PCT: 0.34	0.28	0.29	0.05	0.09	1.00
DISCIPLINE: HEALTH SCIENCES					
MAJOR FIELD: NURSING, GENERAL					
PRIVATE, 1986-87:					
AVERAGE					
SALARY: 38566 68 40	29354 263 68	24340 521 85	24447 61 31	21333 197 55	25954 1049 92
FAC MIX					
PCT: 0.06	0.25	0.50	0.06	0.19	1.00
SALARY					
FACTOR: 0.96	0.94	0.96	0.98	1.04	0.83
ALL MAJOR FIELDS					
AVERAGE					
SALARY: 40015 8507	31131 8438	25483 8319	24917 1279	20566 1985	31411 27249 265
FAC MIX					
PCT: 0.31	0.31	0.31	0.05	0.07	1.00
DISCIPLINE: HEALTH SCIENCES					
MAJOR FIELD: NURSING, GENERAL					
PRIVATE, 1989-90:					
AVERAGE					
SALARY: 41262 99 48	33072 215 67	28318 426 81	27570 37 29	24321 143 48	30279 883 89
FAC MIX					
PCT: 0.11	0.24	0.48	0.04	0.16	1.00
SALARY					
FACTOR: 0.87	0.90	0.92	0.93	1.01	0.81
ALL MAJOR FIELDS					
AVERAGE					
SALARY: 47397 9026	36865 8771	30621 9004	29780 1476	24196 1808	37422 28609 265
FAC MIX					
PCT: 0.32	0.31	0.31	0.05	0.06	1.00

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90 will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of nursing was reported in 136 of the 210 state (AASCU) institutions. The average salary of the 2,102 faculty was \$27,598. This average salary was approximately 15 percent (0.85%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1987-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of nursing was reported in 140 of the same 210 state (AASCU) institutions. The average salary of the 2,100 faculty was \$32,557. This average salary was approximately 15 percent (0.85%) lower than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in nursing after three years in the state institutions studied was 18.0 percent (\$32,557 minus \$27,598 equals \$4,959). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 4.2 percent or an average of 1.4 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of nursing (18.0%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 0.8 percentage points (18.0% minus 17.2% equals 0.8%) less than faculty in the discipline/major field of nursing. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries by 3.4 percent or an average of 1.1 percent per year.

The reader may note that the faculty mix percentage in nursing is lower at the professor rank than at the assistant professor rank in both the state studies: 0.06 vs 0.51 (1986-87) and 0.07 vs 0.50 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a lower percentage of assistant professors compared to nursing in both of the state studies.

Finally, the hiring rate of new assistant professors in nursing is high in the state studies: 4.0 percent (85/2,102) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Also, the hiring rate of new assistant professors in nursing in 1989-90 was 4.7 percent (98/2,100) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words the hiring rate in the discipline/major field of nursing is more than for ALL MAJOR FIELDS in 1985-86 and less in 1988-89.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of nursing was reported in 92 of the 265 private institutions. The average salary of the 1,049 faculty was \$25,954. This average salary was approximately 13 percent (0.87%) lower than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of nursing was reported in 89 of the same 265 private institutions. The average salary of the 883 faculty was \$30,422. This average salary was approximately 19 percent (0.81%) lower than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in nursing after three years in the private institutions studied was 16.7 percent (\$30,279 minus \$25,954 equals \$4,325). The CPI of increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 2.9 percent or .97 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of nursing (16.7%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.4 percent (19.1% minus 16.7% equals 2.4%) more than faculty in the discipline/major field of nursing. The inflation-adjusted increase for faculty in

ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three year period.

In the discipline/major field of nursing, the reader may note that the faculty mix percentage at the professor rank is much less than at the assistant professor rank in the private studies: 0.06 vs. 0.50 (1986-87), respectively; and 0.11 vs. 0.48 (1989-90), respectively. This is quite different from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87), respectively; and 0.32 vs. 0.31 (1989-90), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a lower percentage of assistant professors compared to nursing in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in nursing was greater than the hiring rate in ALL MAJOR FIELDS in the 1986-87 private study, 5.8 percent (61/1,049) vs. 4.7 percent (1,279/ 27,249), respectively. The opposite is true in 1989-90, 4.2 percent (37/883) vs. 5.2 percent (1,476/28,609), respectively. In conclusion the hiring rate in the discipline/major field of nursing exceeds ALL MAJOR FIELDS in the 1986-87 private study. Conversely, in the 1989-90 private study the hiring rate in ALL MAJOR FIELDS is greater.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of nursing and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 6,134 (3.8%) faculty in the

discipline/major field of nursing participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of nursing is currently (1989-90) some 15 and 19 percent below the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for nursing in the private institutions was approximately 6 percent less in comparison to that in the state institutions in 1986-87 and in 1989-90. The average faculty salary in the private institutions is now (1989-90) approximately 8 percentage points less in comparison to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in nursing, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. Nursing faculty salary increases in the private institutions lagged behind faculty in ALL MAJOR FIELDS during this same period and just the opposite occurred in the state institutions. Nursing faculty salaries were behind that of faculty in ALL MAJOR FIELDS.

Third, in the "new" discipline/major field of nursing there is a greater percentage of faculty in the assistant professor rank compared to full and associate professor ranks for both the state and private studies. The full professor rank appears to be increasing slightly more rapidly in the private

institutions, in comparison to the state institutions. It seems a smaller percentage of new assistant professors are being hired in the private institutions in comparison to the state institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend analyses will be effected in nursing, and in other disciplines/major fields, on an annual basis.

Richard P. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author Fredel T. Reighard is coordinator of the Nursing Education Options Program at Caldwell Community College and Technical Institute, Lenoir, North Carolina.

APPENDICES:

- A) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B) LIST OF STATE Participating Institutions, page 11
- C) LIST OF PRIVATE Participating Institutions, page 13

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDILOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bowdoin State University (ME)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glenville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humboldt University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Hansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (PA)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Sales State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Albion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Annas Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferris College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycow College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Meredith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South (TN)
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	<u>TOTAL: 265</u>
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

SALARY-TREND STUDY OF FACULTY IN PHILOSOPHY AND RELIGION

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
George F. Howe

Since 1982-83 the College and University Personnel Association (CUPA) in Washington, D.C., in cooperation with Appalachian State University in Boone, North Carolina, has conducted annual national faculty salary studies by discipline and rank each year through 1989-90. Each year two separate studies are conducted, one for state senior colleges and universities which are members of the American Association of State Colleges and Universities (AASCU) in Washington, D.C., and the other for private senior colleges and universities. The list of private institutions is provided by the American Council on Education in Washington, D.C.

Salary data for each study were collected and tabulated for full time teaching faculty in 36 selected academic disciplines including philosophy and religion. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIP), 1985. The definition of the discipline/major field of philosophy and religion in the CIP is as follows:

A summary of groups of instructional programs that describe the critical examination of the categories for describing reality, the nature and contexts of human experience, the methodology of rational inquiry and criteria of practice (philosophy); and the investigation of organized forms, beliefs, and practices related to eternal principles or transcendent spiritual entities (religion).*

[*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 127-8.--38.)]

This article presents a summary of the overall average salary increases in

the discipline/major field of philosophy and religion from the "baseline year" of 1986-87 to and including the "trend year" of 1989-90 for both state and private institutions. Of the 262 institutions which participated in CUPA'S STATE (AASCU) study of 1986-87, 210 also participated in 1989-90. Data from those same 210 institutions were used in both the "baseline year" and the "trend year". Of the 478 institutions which participated in CUPA'S PRIVATE study of 1986-87, 265 also participated in 1989-90. Data from those same 265 institutions were used in both the "baseline year" and the "trend year".

This study lists the average salaries of philosophy and religion faculty for both state and private participating institutions by rank, including "new assistant professor," the FAC MIX PCT, (faculty mix percentage) and the salary factor. In addition, comparisons are made using the CPI (Consumer Price Index) of changes in cost-of-living between the two study years (1986-87 and 1989-90).

The CPI uses a base period of 1982-84 and is based on prices of food, clothing, shelter and fuels, transportation, medical care, entertainment, and other goods and services that people buy for day-to-day living. In examining trends in faculty salary it is important to consider any changes in the purchasing power of salaries due to inflation. Thus, by comparing changes in faculty salaries with the CPI, a more precise representation of the "real" salary increases is yielded.

The salary is based on a nine- or ten-month academic year salary of full-time faculty only. Full-time faculty members are those who teach no less than 51 percent of the time. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary displayed is computed from all faculty salaries reported for a given rank and discipline.

The "NUM" means the number of faculty members whose salaries were included to compute the average salary.

The "N/IN" means the number of institutions that reported salary data for a given academic rank and discipline/major field.

The FAC MIX PCT is the percentage of faculty in a given discipline/major field who hold a given academic rank. For example, a FAC MIX PCT factor of .36 for associate professor of philosophy and religion in the 1986-87 state study means that 36 percent of the faculty in that discipline/major field hold the rank of associate professor.

The SALARY FACTOR for a given rank of a given discipline/major field is the ratio of the average salary to the total average salary of all institutions in each of the four studies: STATE 1986-87, STATE 1989-90, PRIVATE 1986-87 and PRIVATE 1989-90. For example, a SALARY FACTOR of 0.93 for assistant professors in the discipline/major field of philosophy and religion in the 1985-86 state study means that their salaries are 7 percent lower than the average of all assistant professors in all institutions in that study.

NEW ASST PROF is the grouping of assistant professors who were hired for the first time in the fall of the study year (1986-87 or 1989-90). All information for this group was included in the ASST PROF group for reporting purposes. This group is used mainly for new hiring information.

ALL MAJOR FIELDS is the entire data base for all 36 disciplines/major fields in each of the four studies. It is used to compare, among other things, the discipline/major field of philosophy and religion with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on which each percentage or dollar value is based. The smaller the number in the group, the greater the effect of extreme scores on a descriptive statistic such as the average. It should be noted also that any large disparity in the sample sizes between the "baseline year" of 1986-87 and the "trend year" of 1989-90

	PROF	ASSO PROF	ASST PROF	NEW ASST PROF	INSTRUCTOR	ALL RANKS
	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN	SALARY NUM N/IN
DISCIPLINE: PHILOSOPHY AND RELIGION MAJOR FIELD: PHILOSOPHY AND RELIGION						
STATE, 1986-87:						
AVERAGE						
SALARY:	39187 313 108	31529 266 109	25109 157 77	22767 30 21	20246 10 9	33239 746 141
FAC MIX						
PCT:	0.42	0.36	0.21	0.04	0.01	1.00
SALARY						
FACTOR:	0.98	0.96	0.93	0.87	0.94	1.02
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	39819 17564	32676 15205	27122 14268	26202 1869	21466 4423	32611 51460 210
FAC MIX						
PCT:	0.34	0.30	0.28	0.04	0.09	1.00
DISCIPLINE: PHILOSOPHY AND RELIGION MAJOR FIELD: PHILOSOPHY AND RELIGION						
PUBLIC, 1989-90:						
AVERAGE						
SALARY:	47195 348 120	37150 226 97	30084 176 88	28783 34 27	24512 35 28	39455 785 149
FAC MIX						
PCT:	0.44	0.29	0.22	0.04	0.04	1.00
SALARY						
FACTOR:	1.00	0.97	0.94	1.11	1.00	1.03
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	47023 18930	38352 15550	31853 16354	26030 2865	24499 4733	38213 55567 210
FAC MIX						
PCT:	0.34	0.28	0.29	0.05	0.09	1.00
DISCIPLINE: PHILOSOPHY AND RELIGION MAJOR FIELD: PHILOSOPHY AND RELIGION						
PRIVATE, 1986-87:						
AVERAGE						
SALARY:	36470 500 185	29647 361 154	23745 297 130	21845 47 37	19313 50 41	30592 1208 226
FAC MIX						
PCT:	0.41	0.30	0.25	0.04	0.04	1.00
SALARY						
FACTOR:	0.91	0.95	0.93	0.88	0.94	0.97
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	40015 8507	31131 8438	25483 8319	24917 1279	20566 1985	31411 27249 265
FAC MIX						
PCT:	0.31	0.31	0.31	0.05	0.07	1.00
DISCIPLINE: PHILOSOPHY AND RELIGION MAJOR FIELD: PHILOSOPHY AND RELIGION						
PRIVATE, 1989-90:						
AVERAGE						
SALARY:	43108 512 188	34532 370 165	28086 363 153	26406 65 54	23126 37 27	35803 1282 237
FAC MIX						
PCT:	0.40	0.29	0.28	0.05	0.03	1.00
SALARY						
FACTOR:	0.91	0.94	0.92	0.89	0.96	0.96
ALL MAJOR FIELDS						
AVERAGE						
SALARY:	47397 9026	36865 8771	30621 9004	29780 1476	24196 1808	37422 28609 265
FAC MIX						
PCT:	0.32	0.31	0.31	0.05	0.06	1.00

will lessen the reliability and validity of any conclusions that one might make based on a simple comparison of averages.

RESULTS OF THE TWO STATE (AASCU) STUDIES, 1986-87 AND 1989-90

In the STATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of philosophy and religion was reported in 141 of the 210 state (AASCU) institutions. The average salary of the 746 faculty was \$33,239. This average salary was approximately 2 percent (1.02%) higher than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1986-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of philosophy and religion was reported in 149 of the same 210 state (AASCU) institutions. The average salary of the 785 faculty was \$39,455. This average salary was approximately 3 percent (1.03%) higher than the average salary of \$38,213 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in philosophy and religion after three years in the state institutions studied was 18.7 percent (\$39,455 minus \$33,239 equals \$6,216). The CPI reported an increase in the cost-of-living between October 1986 and October 1989 of 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 4.9 percent or an average of 1.6 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of philosophy and religion (18.7%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.5 percentage points (18.7% minus 17.2% equals 1.5%) less than faculty in the discipline/major field of philosophy and

religion. In "real" or inflation-adjusted terms, faculty in ALL MAJOR FIELDS increased their salaries over the period by 3.4 percent or an average of 1.1 percent per year.

The reader may note that the faculty mix percentage in philosophy and religion is higher at the professor rank than at the assistant professor rank in both the state studies: 0.42 vs 0.21 (1986-87) and 0.44 vs 0.22 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assistant professor in ALL MAJOR FIELDS for both state studies are as follows: 0.34 vs. 0.28 (1986-87) and 0.34 vs. 0.29 (1989-90), respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors compared to philosophy and religion in both of the state studies.

Finally, the hiring rate of new assistant professors in philosophy and religion was higher in the 1986-87 state study in comparison to that of ALL MAJOR FIELDS: 4.8 percent (30/746) vs. 3.6 percent (1,869/51,460), respectively. However, the hiring rate of new assistant professors in philosophy and religion in 1989-90 was lower than ALL MAJOR FIELDS: 4.3 percent (34/785) vs. 5.2 percent (2,865/55,567), respectively.

RESULTS OF THE TWO PRIVATE STUDIES, 1986-87 AND 1989-90

In the PRIVATE 1986-87 salary study in the above table, the reader may note that the discipline/major field of philosophy and religion was reported in 226 of the 265 private institutions. The average salary of the 1,208 faculty was \$30,592. This average salary was approximately 3 percent (0.97%) lower than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS in the 1986-87 private study.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of philosophy and religion was reported in 237 of the same 265

private institutions. The average salary of the 1,282 faculty was \$35,803. This average salary was approximately 4 percent (0.96%) lower than the average salary of \$37,422 for all 28,609 faculty in ALL MAJOR FIELDS in the 1989-90 private study.

The increase in average salaries for all faculty in philosophy and religion after three years in the private institutions studied was 17 percent (\$35,803 minus \$30,592 equals \$5,211). The increased cost-of-living between October 1986 and October 1989 was 13.8 percent. The "real" increase, therefore, in average faculty salaries over the three-year time period is 3.2 percent or 1.1 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FIELDS after three years in the private institutions studied was 19.1 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of philosophy and religion (17%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.1 percent (19.1% minus 17% equals 2.1%) more than faculty in the discipline/major field of philosophy and religion. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8 percent per year over the three-year period.

In the discipline/major field of philosophy and religion, the reader may note that the faculty mix percentage at the professor rank is more than at the assistant professor rank in the private studies: 0.41 vs. 0.25 (1986-87), respectively; and 0.40 vs. 0.28 (1989-90), respectively. This is different from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87), respectively; and 0.32 vs. 0.31 (1989-90), respectively. In other words ALL MAJOR FIELDS has a lower percentage of professors and a higher percentage of assistant professors compared to philosophy and religion in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in philosophy and religion in the 1986-87 private study was lower than

the hiring rate in ALL MAJOR FIELDS, 3.7 percent (47/1,279) vs. 4.4 percent (1,208/27,249), respectively. Also, in the 1989-90 private study the hiring rate was higher in ALL MAJOR FIELDS, 4.4 percent (65/1,476) vs. 4.5 percent (1,282/28,609), respectively.

CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of philosophy and religion and compared that information with ALL MAJOR FIELDS over a period of three years: the "baseline year" of 1986-87 through the "trend year" of 1989-90. Two studies, one for state (AASCU) institutions, and the other for private institutions were conducted for the baseline year and for the trend year--a total of four studies. A total of 4,021 faculty in the discipline/major field of philosophy and religion participated and were included in the overall total of 162,885 faculty in all 36 disciplines/major fields in all four studies. The same 210 state (AASCU) institutions and the same 265 private institutions in the United States participated in the baseline year and the trend year.

Although many interpolations and extrapolations of the data may be made, a few of the more important ones are as follows. First, the faculty salary factor in the discipline/major field of philosophy and religion is currently (1989-90) some 3 percent above in the state institutions and 4 percent below in the private institutions of the overall faculty salary factor of ALL MAJOR FIELDS. The average faculty salary for philosophy and religion in the private institutions was approximately 9 percent less in comparison to that in the state institutions in 1986-87. The average faculty salary in the private institutions is now (1989-90) 11 percent less in comparison to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in philosophy and religion, in both the state and private institutions, received overall salary increases for three years above

the cost-of-living. The salary increase of the philosophy and religion faculty salaries in the state institutions exceeded faculty in ALL MAJOR FIELDS during this same period, whereas philosophy and religion faculty salaries in the private institutions lagged behind ALL MAJOR FIELDS. Philosophy and religion faculty in the private institutions have some catching up to do in salary in comparison to faculty in ALL MAJOR FIELDS.

Third, in the discipline/major field of philosophy and religion the full professor rank has a greater percentage compared to the assistant professor rank for both the state and private studies. The full professor rank appears to be increasing at a greater rate in the state institutions compared to the private institutions. It seems a smaller percentage of new assistant professors are being hired in the state institutions in comparison to the private institutions.

Now that a rather significant data base on individual faculty member salaries has been developed, it is anticipated that additional salary-trend analyses will be effected in philosophy and religion, and in other disciplines/-major fields, on an annual basis.

Richard D. Howe is the originator and director of the annual CUPA faculty salary studies. He is a professor of leadership and higher education, and history at Appalachian State University, Boone, North Carolina. Co-author George F. Howe is an administrator at Troy State University in Montgomery, Montgomery, Alabama.

APPENDICES:

- A) OVERALL LIST OF SELECTED DISCIPLINES, page 10
- B) LIST OF STATE Participating Institutions, page 11
- C) LIST OF PRIVATE Participating Institutions, page 14

APPENDIX A

OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING	PHILOSOPHY AND RELIGION
BUSINESS ADMINISTRATION AND MANAGEMENT	PHYSICAL EDUCATION
BUSINESS AND MANAGEMENT	PHYSICAL SCIENCES
BUSINESS ECONOMICS	PHYSICS
CHEMISTRY	POLITICAL SCIENCE AND GOVERNMENT
COMMUNICATION TECHNOLOGIES	PSYCHOLOGY
COMMUNICATIONS	READING EDUCATION
COMPUTER & INFORMATION SCIENCES	SECRETARIAL AND RELATED PROGRAMS
CURRICULUM AND INSTRUCTION	SOCIOLOGY
DRAMATIC ARTS	SPECIAL EDUCATION
DRAWING	SPEECH PATHOLOGY/AUDIOLOGY
EDUCATION	STUDENT COUNSELING AND PERSONNEL SERVICES
ENGINEERING	VISUAL AND PERFORMING ARTS
FOREIGN LANGUAGES	
GEOLOGY	
HOME ECONOMICS	
LETTERS	
LIBRARY AND ARCHIVAL SCIENCES	
LIFE SCIENCES	
MATHEMATICS	
MULTI-INTERDISCIPLINARY STUDIES	<u>TOTAL: 36</u>
MUSIC	
NURSING	

APPENDIX B

CUPA State (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Adams State College (CO)
Alabama State University (AL)
Albany State College (GA)
Angelo State University (TX)
Appalachian State University (NC)
Arkansas Tech University (AR)
Auburn University at Montgomery (AL)
Augusta College (GA)
Austin Peay State University (TN)
Ball State University (IN)
Bemidji State University (MN)
Black Hills State University (SD)
Bluefield State College (WV)
Bridgewater State College (MA)
California State University, Bakersfield (CA)
California State University, Hayward (CA)
California University of Pennsylvania (PA)
Castleton State College (VT)
Central Connecticut State University (CT)
Central Missouri State University (MO)
Central State University (OK)
Central Washington University (WA)
Chadron State College (NE)
Christopher Newport College (VA)
Citadel, (The) Military College of
South Carolina (SC)
Clarion University of Pennsylvania (PA)
Cleveland State University (OH)
College of Staten Island, The (NY)
Columbus College (GA)
Delta State University (MS)
Dickinson State University (ND)
East Central University (OK)
East Tennessee State University (TN)
East Texas State University (TX)
East Texas State University
at Texarkana (TX)
Eastern Connecticut State University (CT)
Eastern Illinois University (IL)
Eastern Washington University (WA)
Edinboro University of Pennsylvania (PA)
Fitchburg State College (MA)
Florida Atlantic University (FL)
Fort Hays State University (KS)
Francis Marion College (SC)
Frostburg State University (MD)
George Mason University (VA)
Georgia College (GA)
Georgia Southern College (GA)
Glenville State College (WV)
Grambling State University (LA)
Grand Valley State University (MI)
Harris-Stowe State College (MO)
Henderson State University (AR)
Humacao University College (PR)
Idaho State University (ID)
Illinois State University (IL)
Indiana State University (IN)
Indiana University of Pennsylvania (PA)
Jackson State University (MS)
Jacksonville State University (AL)
James Madison University (WV)
Kearney State College (NE)
Keene State College (NH)
Kennesaw State University (GA)
Kent State University (OH)
Lake Superior State University (MI)
Lamar University--Beaumont (TX)
Lander College (SC)
Lewis-Clark State College (ID)
Lincoln University (MO)
Livingston University (AL)
Longwood College (VA)
Louisiana State University in Shreveport (LA)
Louisiana Tech University (LA)
Maine Maritime Academy (ME)
Mansfield University of Pennsylvania (PA)
Marshall University (WV)
Mary Washington College (VA)
Mayville State University (ND)
Memphis State University (TN)
Mesa State College (CO)
Metropolitan State College (CO)
Metropolitan State University (MN)
Middle Tennessee State University (TN)
Millersville University of Pennsylvania (KY)
Mississippi University for Women (MS)
Missouri Southern State College (MO)
Missouri Western State College (MO)
Montana College of Mineral Science
& Technology (MT)
Montclair State College (NJ)
Moorhead State University (MN)
Morehead State University (KY)

Participating Institutions (continued):

Morgan State University (MD)
Murray State University (KY)
New Mexico Highlands University (NM)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Missouri State University (MO)
Northeastern Illinois University (IL)
Northeastern State University (OK)
Northern Arizona University (AZ)
Northern Illinois University (IL)
Northern Kentucky University (KY)
Northern Michigan University (MI)
Northern State University (SD)
Oakland University (MI)
Old Dominion University (VA)
Peru State College (NE)
Pittsburg State University (KS)
Plymouth State College (NH)
Portland State University (OR)
Radford University (VA)
Rhode Island College (RI)
Saginaw Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
San Diego State University (CA)
Sangamon State University (IL)
Shepherd College (WV)
Shippensburg University of Pennsylvania (PA)
Slippery Rock University of Pennsylvania (PA)
Sonoma State University (CA)
South Dakota School of Mines & Technology (SD)
Southeast Missouri State University (MO)
Southeastern Louisiana University (LA)
Southeastern Massachusetts University (MA)
Southern College of Technology (GA)
Southern Illinois University at Carbondale (IL)
Southern Illinois University at Edwardsville (IL)
Southern Oregon State College (OR)
Southwest Missouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MN)
State University of New York College
at Brockport (NY)
State University of New York College
at Buffalo (NY)
State University of New York College
at Fredonia (NY)
State University of New York College
at Old Westbury (NY)
State University of New York College
at Potsdam (NY)
Stephen F. Austin University (TX)
Sul Ross State University (TX)
Tennessee Technological University (TN)
Texas A&I University (TX)
Texas A&M University at Galveston (TX)
Texas Woman's University (TX)
Towson State University (MD)
Troy State University (AL)
University of Akron, The (OH)
University of Arkansas at Little Rock (AR)
University of Arkansas at Monticello (AR)
University of Central Arkansas (AR)
University of Colorado at Colorado Springs (CO)
University of Colorado at Denver (CO)
University of Houston--Clear Lake (TX)
University of Maine at Fort Kent (ME)
University of Maryland Baltimore County (MD)
University of Montevallo (AL)
University of Nebraska at Omaha (NE)
University of Nevada, Las Vegas (NV)
University of North Carolina at Asheville (NC)
University of North Carolina at Charlotte (NC)
University of North Carolina at Greensboro (NC)
University of North Carolina at Wilmington (NC)
University of Northern Colorado (CO)
University of Northern Iowa (IA)
University of North Texas (TX)
University of Pittsburgh at Bradford (PA)
University of Pittsburgh at Johnstown (PA)
University of Science and Arts of Oklahoma (OK)
University of South Alabama, The (AL)
University of South Carolina at Aiken (SC)
University of South Carolina at Spartanburg (SC)
University of Southern Colorado (CO)
University of Southern Indiana (IN)
University of Southern Maine (ME)
University of Southern Mississippi (MS)
University of Southwestern Louisiana (LA)
University of Tennessee at Chattanooga (TN)
University of Tennessee at Martin (TN)
University of Texas at Dallas (TX)
University of Texas at San Antonio (TX)
University of Texas at Tyler, The (TX)
University of the Virgin Islands--
St. Croix
University of the Virgin Islands--
St. Thomas
University of Wisconsin--Eau Claire (WI)
University of Wisconsin--Green Bay (WI)

Participating Institutions (continued):

University of Wisconsin--La Crosse (WI)
University of Wisconsin--Oshkosh (WI)
University of Wisconsin--Plattville (WI)
Valdosta State College (GA)
Valley City State University (ND)
Washburn University of Topeka (KS)
Wayne State College (NE)
Weber State College (UT)
West Chester State College (PA)
West Georgia College (GA)
West Texas State University (TX)
West Virginia Institute of Technology (WV)
West Virginia State College (WV)
Western Carolina University (NC)
Western Connecticut State University (CT)
Western Illinois University (IL)
Western Kentucky University (KY)
Western Michigan University (MI)
Western Oregon State College (OR)
Western State College of Colorado (CO)
Wichita State University, (KS)
William Paterson College (NJ)
Winston-Salem State University (NC)

TOTAL: 210

APPENDIX C

CUPA Private (AASCU) Faculty Salary Studies: 1986-87 and 1989-90

Participating Institutions

Abilene Christian University (TX)
Albertus Magnus College (CT)
Albion College (MI)
Alfred University (NY)
Allegheny College (PA)
Allentown College of St. Francis de Sales (PA)
Alma College (MI)
American University, The (DC)
Amherst College (MA)
Anna Maria College (MA)
Aquinas College (MI)
Arkansas College (AR)
Asbury College (KY)
Ashland University (OH)
Augustana College (IL)
Aurora University (IL)
Avila College (MO)
Azusa Pacific University (CA)
Babson College (MA)
Baldwin-Wallace College (OH)
Bard College (NY)
Barry University (FL)
Beaver College (PA)
Bellarmine College (KY)
Bellevue College (NE)
Benedictine College (KS)
Bethune-Cookman College (FL)
Birmingham-Southern College (AL)
Boston University (MA)
Bradley University (IL)
Briar Cliff College (AL)
Bridgewater College (VA)
Brigham Young University (UT)
Bryant College (RI)
Bryn Mawr College (PA)
Bucknell University (PA)
Butler University (IN)
Cabrini College (PA)
Canisius College (NY)
Capital University (OH)
Carroll College (MT)
Carroll College (WI)
Catawba College (NC)
Catholic Theological Union (IL)
Catholic University of America, The (DC)
Cedar Crest (PA)
Cedarville College (OH)
Central College (IA)
Central Methodist College (MO)
Central Wesleyan College (SC)
Chapman College (PA)
Christian Brothers College (TN)
Clark University (MA)
Cogswell Polytechnical University (CA)
Coker College (SC)
College of Mount Saint Vincent (NY)
College of Mount St. Joseph (OH)
College of Saint Mary (NE)
College of St. Scholastica (MN)
College of St. Thomas (MN)
College of the Holy Cross (MA)
College of Wooster, The (OH)
Concordia College (MN)
Concordia College (NY)
Concordia Teachers College (NE)
Cornell College (IA)
Covenant College (GA)
D'Youville College (NY)
Daniel Webster College (NH)
David Lipscomb College (TN)
Defiance College, The (OH)
Depaul University (IL)
Dickinson College (PA)
Doane College (NE)
Dominican College of Blauvelt (NY)
Dordt College, Inc. (IA)
Drake University (IA)
Drew University (NJ)
Drury College (MO)
Eastern Mennonite College and
Seminary (VA)
Eckerd College (FL)
Elmhurst College (IL)
Elmira College (NY)
Embry-Riddle Aeronautical University (FL)
Emerson College (MA)
Emory & Henry College (VA)
Eureka College (IL)
Fairfield University (CT)
Ferrum College (VA)
Fontbonne College (MO)
Franklin and Marshall College (PA)
Furman University (SC)
George Fox College (OR)

Participating Institutions (continued):

George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Hood College (MD)
Huston-Tillotson College (TX)
Iona College (NY)
Ithaca College (NY)
John Carroll University (OH)
Johns Hopkins University, The (MD)
Juniata College (PA)
Kalamazoo College (MI)
Kenyon College (OH)
King's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (OR)
Lincoln Memorial University (TN)
Linfield College (OR)
Loras College (IA)
Louisiana College (LA)
Loyola College in Maryland (MD)
Luther College (IA)
Lutheran Theological Seminary at Gettysburg (PA)
Lycoming College (PA)
Lynchburg College (VA)
Madonna College (MI)
Malone College (OH)
Manhattan Christian College (KS)
Manhattanville College (NY)
Marietta College (OH)
Marist College (NY)
Mars Hill College (NC)
Mary Baldwin College (VA)
Marymount College (NY)
Marywood College (PA)
Memphis Theological Seminary (TN)
Mercer University (GA)
Mercy College (NY)
Mercy College of Detroit (MI)
Merridith College (NC)
Merrimack College (MA)
Milliken University (IL)
Missouri Baptist College (MO)
Monmouth College (NJ)
Moravian College (PA)
Morris Brown College (GA)
Mount Mercy College (IA)
Mount Saint Mary's College (MD)
Mount St. Clare College (IA)
Mount Union College (OH)
Mount Vernon College (DC)
Muskingum College (OH)
Nazarene Theological Seminary (MO)
Neumann College (PA)
North Central College (IL)
Northeastern University (MA)
Northland College (WI)
Northwestern College (IA)
Northwestern College (MN)
Norwich University (VT)
Notre Dame College (NH)
Notre Dame College (OH)
Notre Dame Seminary (LA)
Ohio Northern University (OH)
Ottawa University (KS)
Otterbein College (OH)
Our Lady of the Holy Cross College (LA)
Our Lady of the Lake University (TX)
Paine College (GA)
Palm Beach Atlantic College (FL)
Park College (MO)
Parks College of St. Louis University (IL)
Pepperdine University (CA)
Piedmont College (GA)
Pikeville College (KY)
Polytechnic University (NY)
Presbyterian College (SC)
Principia College (IL)
Quincy College (IL)
Randolph-Macon Woman's College (VA)
Reed College (OR)
Reformed Bible College (MI)
Regis College (MA)
Rensselaer Polytechnic Institute (NY)
Rhode Island School of Design (RI)
Rider College (NJ)
Roanoke College (VA)
Rockford College (IL)
Rockhurst College (MO)
Rocky Mountain College (MT)

Participating Institutions (continued):

Rose-Hulman Institute of Technology (IN)	University of La Verne (CA)
Russell Sage College (NY)	University of Miami (FL)
Sacred Heart University (CT)	University of Portland (OR)
Saint John's University (MN)	University of Richmond (VA)
Saint Joseph College (CT)	University of Rio Grande (OH)
Saint Joseph's College (IN)	University of San Diego (CA)
Saint Mary's College (MI)	University of the South
Saint Mary's College (MN)	University of Tulsa (OK)
Saint Mary's College of California (CA)	Valparaiso University (IN)
Saint Meinrad College (IN)	Viterbo College (WI)
Saint Michael's College (VT)	Walsh College (OH)
Salem College (NC)	Washington and Jefferson College (PA)
School of the Ozarks, The (MO)	Washington Bible College (MD)
Schreiner College (TX)	Wesleyan College (GA)
Scripps College (CA)	West Virginia Wesleyan College (WV)
Seattle Pacific University (WA)	Western Maryland College (MD)
Seattle University (WA)	Westmar College (IA)
Seton Hill College (PA)	Westminster College of Salt Lake City (UT)
Shorter College (GA)	Westminster Theological Seminary (PA)
Siena College (NY)	
Siena Heights College (MI)	
Simpson College (IA)	
Skidmore College (NY)	
Southern California College (CA)	
Southwestern Assemblies of God College (TX)	
Spalding University (KY)	
Springfield College (MA)	
St. Bonaventure University (NY)	
St. Edward's University (TX)	
St. Francis College (NY)	
St. Mary's University (TX)	
St. Norbert College (WI)	
Stevens Institute of Technology (NJ)	
Stillman College (AL)	
Suffolk University (MA)	
Susquehanna University (PA)	
Talladega College (AL)	
Taylor University (IN)	
Texas Christian University (TX)	
Transylvania University (KY)	
Tri-State University (IN)	
Trinity College (DC)	
Trinity College of Vermont (VT)	
Trinity University (TX)	
United Theological Seminary of the Twin Cities (MN)	
University of Charleston, The (SC)	
University of Dayton (OH)	
University of Detroit (MI)	
University of Dubuque Theological Seminary (IA)	
University of Findlay, The (OH)	
University of Hartford (CT)	

TOTAL: 265