### DOCUMENT RESUME

ED 338 176 HE 025 018

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TITLE

Salary Trend Studies of Faculty for the Years 1986-87

and 1989-90 in the Following Disciplines/Major Fields: Accounting; Business Administration and Management; Business and Management; Chemistry;

Communication Technologies; Communications; Computer and Information Science; Curriculum and Instruction;

Dramatic Arts; Drawing; and Education.

INSTITUTION Appalachian State Univ., Boone, N.C.; College and

Univ. Personnel Association, Washington, D.C.

PUB DATE

Oct 91

NOTE

196p.; For other volumes in this set, see HE 025

019-020.

PUB TYPE

Reports - Research/Technical (143)

EDRS PRICE

MF01/PC08 Plus Postage.

DESCRIPTORS

Academic Rank (Professional); Accounting; Business Administration; Chemistry; \*College Faculty; Communications; Comparative Analysis; Computer Science; Departments; Dramatics; Educational Administration; Fine Arts; Full Time Faculty; Higher

Education; Information Science; \*Intellectual Disciplines; Private Colleges; Public Colleges;

\*Teacher Salaries; \*Trend Analysis

### ABSTRACT

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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: Accounting; Business Administration and Management; Business and Management; Chemistry; Communication Technologies; Communications; Computer and Information Science; Curriculum and Instruction; Dramatic Arts; Fine Arts/Drawing; Education. 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)

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

Accounting; Business Administration and Management; Business and Management; Business Economics; Chemistry; Communication Technologies; Communications; Computer & Information Sciences; Curriculum and Instruction; Dramatic Arts; Drawing; and, Education

by Richarl D. Howe and Associates Appalachian State University Boone. North Carolina 28608 PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Richard D. Howe --

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### 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 "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 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 ssistant 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 eac's 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.

## SALARY-TREND STUDY OF FACULTY IN ACCOUNTING

### FOR THE YEARS

## 1986-87 AND 1989-90

By
Richard D. Howe
and
Rebecca Kaenzig

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 accounting. 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 accounting in the CIP is as follows:

An instructional program that describes the principles, procedures, and theories of organizing, maintaining, and auditing business and financial transactions.\*

[\*Gerald S. Malitz, A Classification of Instructional Programs (Washington, D.C.: National Center for Education Statistics, [1985], p. 45.--06.02)]

This article presents a summary of the overall average salary increases



in the discipline/major field of accounting 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 accounting 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 and the CPI yields 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. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of 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 accounting 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 1.18 for associate professors in the discipline/major field of accounting in the 1986-87 state study means that their salaries are 18 percent higher than the average of all associate 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 accounting 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



NEW ASST **ASSO** ASST INSTRUCTOR ALL RANKS **PROF PROF PROF PROF** SALARY NUM N/IN DISCIPLINE: BUSINESS AND MANAGEMENT MAJOR FIELD: ACCOUNTING STATE, 1986-87: **AVERAGE** 32892 464 137 34479 52 42 23680 195 77 36169 1353 151 SALARY: 45722 329 109 38397 365 129 FAC MIX 0.04 0.14 1.00 0.34 PCT: 0.24 0.27 SALARY 1.32 1.10 1.11 1.21 FACTOR: 1.15 1.18 ALL MAJOR FIELDS **AVERAGE** 21466 4423 32611 51460 210 26202 1869 SALARY: 39819 17564 32676 15205 27122 14268 FAC MIX 1.00 0.28 0.04 0.09 0.30PCT: 0.34 DISCIPLINE: BUSINESS AND MANAGEMENT STATE, 1989-90: MAJOR FIELD: ACCOUNTING AVERAGE 46562 395 128 40149 517 138 41484 92 60 27980 166 79 44447 1461 155 SALARY: 55206 383 118 FAC MIX 0.06 1.00 PCT: 0.26 0.27 0.35 0.11 SALARY 1.26 1.59 1.14 1.16 FACTOR: 1.21 1.1/ ALL MAJOR FIELDS **AVERAGE** 24499 4733 38213 55567 210 SALARY: 47023 18930 38352 15550 31853 16354 26030 2865 FAC MIX 0.28 0.05 0.09 1.00 PCT: 0.34 0.29 DISCIPLINE: BUSINESS AND MANAGEMENT MAJOR FIELD: ACCOUNTING PRIVATE, 1986-87: AVERAGE SALARY: 46278 137 37/58 213 94 30389 242 107 31903 44 34 23041 64 38 35383 656 150 64 FAC MIX PCT: 0.37 0.07 0.10 1.00 0.21 0.32 SALARY FACTOR: 1.16 1.21 1.19 1.28 1.12 1.16 ALL MAJOR FIFLDS **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: BUSINESS AND MANAGEMENT MAJOR FIELD: ACCOUNTING PRIVATE, 1989-90: AVERAGE SALARY: 56636 43958 232 105 36528 265 118 37655 47 42 28064 48 31 42457 680 159 135 67 FAC MIX 1.00 PCT: 0.20 0.34 0.39 0.07 0.07 SALARY 1.19 1.16 1.13 FACTOR: 1.19 1.19 1.26 ALL MAJOR FIELDS **AVERAGE** 30621 9004 37422 28609 265 SALARY: 4/397 29780 1476 24196 1808 9026 36865 8771 FAC MIX 0.05 0.06 1.00 PCT: 0.32 0.31 0.31



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 accounting was reported in 151 of the 210 state (AASCU) institutions. Average salary of the 1,353 faculty was \$36,169. This average salary was approximately 11 percent (1.11%) 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 accounting was reported in 155 of the same 210 state (AASCU) institutions. The average salary of the 1,461 faculty was \$44,447. This average salary was approximately 16 percent (1.16%) 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 accounting after three years in the state institutions studied was 22.9 percent (\$44,447 minus \$36,169 equals \$8,279). 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 9.1 percent or an average of 3.0 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 17.3 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of accounting (22.9%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 5.7 percent (22.9% minus 17.2% equals 5.7%) less than faculty in the discipline/major field of accounting.

The reader may note that the faculty mix percentage in accounting is lower at the professor rank than at the assistant professor rank in both the state



studies: 0.24 vs 0.34 (1986-87) and 0.26 vs 0.35 (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 higher percentage of professors and a lower percentage of assistant professors compared to accounting in both of the state studies.

Finally, the hiring rate of new assistant professors in accounting is high in the state studies: 3.8 percent (52/1,353) 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 accounting in 1989-90 was 6.3 percent (92/1,461) 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 accounting 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 accounting was reported in 150 of the 265 private institutions. The average salary of the 656 faculty was \$35,383. This average salary was approximately 16 percent (1.16%) 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 accounting was reported in 159 of the same 265 private institutions. The average salary of the 680 faculty was \$42,457. This average salary was approximately 13 percent (1.13%) 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 is accounting after three



years in the private institutions studied was 20 percent (\$42,457 minus \$35,363 equals \$7,074). 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 6.2 percent or 2.1 percent each year above the cost-of-living.

The increase in average salaries for all faculty in ALL MAJOR FOR DS 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 accounting (20%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by .9 percent (20% minus 19.1% equals .9%) less than faculty in the discipline/major field of accounting.

In the discipline/major field of accounting, the reader may note that the faculty mix percentage at the professor rank is much less than the assistant professor rank in the private studies: 0.21 vs. 0.37 (1986-87) respectively; and 0.20 vs. 0.39 (1989-90) respectively. This is quite different from ALL MAJOR FIELDS for both private studies: 0.31 vs. 0.31 (1986-87) respectively; and 0.31 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 accounting in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in accounting in the private studies was greater than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 6.7 percent (44/656) vs. 4.7 percent (1,279/27,249) respectively; and in 1989-90, 6.9 percent (47/680) vs. 5.2 percent (1,476/28,609), respectively. In other words the hiring rate in the discipline/major field of accounting exceeds ALL MAJOR FIELDS in both the private studies of 1986-87 and 1989-90.

### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of accounting 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 both for the baseline year and for the trend year—a total of four studies. A total of 4,150 faculty in the discipline/major field of accounting 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 made, a few of the more important ones are as follows. First, the average faculty salary in the discipline/major field of accounting is currently (1989-90) some 16 and 13 percent above the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for accounting in the private institutions was 5 percent less in comparison to that in the state institutions in 1986-87, and, the overall salary factor in the private institutions is now (1989-90) almost 3 percent lower 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 accounting, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. Accounting faculty salaries in both the state and private institutions exceeded faculty in ALL MAJOR FIELDS at the end of this same



period by 16 percent and 13 percent, respectively. During the past three years the salaries of accounting faculty in the state institutions continued to stay ahead of their colleagues in the private institutions but the "spread" decreased from 5 percent to 3 percent.

Third, in the discipline/major field of accounting the assistant professor rank has a greater percentage compared to full and associate professor ranks for both the state and private studies. The full professor rank is increasing in the state institutions, but decreasing, slightly, in the private institutions.

Fourth, it seems that there continues to be a healthy percentage increase of new assistant professors being hired both in the state institutions (3.8 percent in 1986-87 and 6.3 percent in 1989-90) and in the private institutions (6.7 percent in 1986-87 and 6.9 percent in 1989-90).

Now that a rather significant data base on faculty salaries has been developed, it is anticipated that additional salary-trend studies will be effected both in accounting, and in the other 35 relevant disciplines/major fields, on an annual basis.



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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

TOTAL: 36

MUSIC

NURSING



### APPENDIX B

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

### Participating Institutions

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



### 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 01d 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, Lis 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 Toxas 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):

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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)
Wayme 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)
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**TOTAL: 210** 



## APPENDIX C

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

## Participating Institutions

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



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



Mercy College of Detroit (MI)

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 Mismi (FL) University of Portland (OR) University of Richmond (VA) University of Rio Grande (OH) University of San Diego (CA) University of the South University of Tulsa (OK) Valparaiso University (IN) Viterbo College (WI) Walsh College (OH) Washington and Jefferson College (PA) Washington Bible College (MD) Weslayan 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 BUSINESS ADMINISTRATION AND MANAGEMENT FOR THE YEARS

## 1986-87 AND 1989-90

By
Richard D. Howe
and
Steven L. Widenhouse

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 business administration and management. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by A Classification of Instructional Programs (CIF), 1985. The definition of the discipline/major field of business administration and management in the CIP is as follows:

An instructional program that generally describes the planning, organizing and controlling of a business, including organizational and human aspects, with emphasis on various theories of management, the knowledge and understanding necessary for managing people and functions, and decision making.\*

[\*Gerald S. Malitz, A Classification of Instructional Programs (Washington, D.C.: National Center for Education Statistics, [1985] p. 45.--06.04)]

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



the discipline/major field of business administration and management 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 faculty in business administration and management for both state and private participating institutions by rank including "new assistant professor," the faculty mix percentage (FAC MIX PCT) 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. 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. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of 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 business administration and management 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 1.17 for assistant professors in the discipline/major field of business administration and management in the 1986-87 state study means that their salaries are 17 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 business administration and management 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

NEW ASST ASSO ASST INSTRUCTOR ALL RANKS PROF **PROF** PROF PROF SALARY NUM N/IN DISCIPLINE: BUSINESS AND MANAGEMENT MAJOR FIELD: BUSINESS ADMINISTRATION & MANAGEMENT STATE, 1986-87: AVERAGE SALARY: 43543 512 123 36703 570 128 32855 115 71 22532 229 86 35253 1944 143 31845 635 134 FAC MIX PCT: 0.29 0.33 0.06 0.12 1.65 0.26 SALARY 1.08 1.17 1.25 1.05 FACTOR: 1.09 1.12 ALL MAJOR FIELDS **AVERAGE** 32611 51460 210 SALARY: 39819 17564 32676 15205 27122 14268 26202 1869 21466 4423 FAC MIX 1.00 0.09 PCT: 0.34 0.30 0.28 0.04 DISCIPLINE: BUSINESS AND MANAGEMENT MAJOR FIELD: BUSINESS ADMINISTRATION & MANAGEMENT STATE, 1989-90: AVERAGE 240 90 42189 2037 152 40325 108 60 25809 SALARY: 52072 540 126 43591 626 136 38571 631 134 FAC MIX PCT: 0.31 0.05 0.12 1.00 0.27 0.31 SALARY 1.10 1.05 FACTOR: 1.11 1.14 1.21 1.55 ALL MAJOR FIELDS AVERAGE 26030 2865 24499 4733 38213 55567 210 38352 15550 31853 16354 SALARY: 47023 18930 FAC MIX PCT: 0.28 0.29 0.05 0.09 1.00 0.34 DISCIPLINE: BUSINESS AND MANAGEMENT MAJOR FIELD: BUSINESS ADMINISTRATION & MANAGEMENT PRIVATE, 1986-87: AVERAGE 28251 33985 1173 159 94 53 23699 81 53 SALARY: 44907 82 35825 388 107 28452 460 129 244 FAC MIX 0.39 0.07 1.00 PCT: 0.21 0.33 0.08 SALARY 1.08 FACTOR: 1.12 1.15 1.12 1.13 1.15 ALL MAJOR FIELDS **AVERAGE** SALARY: 40015 8507 31131 8438 25483 8319 24917 1279 20566 1985 31411 27249 265 FAC MIX 1.00 PCT: 0.31 0.31 0.31 0.05 0.07 DISCIPLINE: BUSINESS AND MANAGEMENT PRIVATE, 1989-90: MAJOR FIELD: BUSINESS ADMINISTRATION & MANAGEMENT **AVERAGE** 75 39 40726 1200 162 **SALARY: 52255** 287 96 41/26 390 117 34682 448 138 35195 74 56 27517 FAC MIX 0.37 0.06 0.06 1.00 PCT: 0.24 0.33 SALARY 1.09 FACTOR: 1.10 1.13 1.13 1.18 1.14 ALL MAJOR FIELDS **AVERAGE** SALARY: 47397 9026 30621 9004 24196 1808 37422 28609 265 36865 8/71 29780 1476 FAC MIX 0.05 0.06 1.00 PCT: 0.31 0.310.32



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 business administration and management was reported in 143 of the 210 state (AASCU) institutions. The average salary of the 1,944 faculty was \$35,253. This average salary was approximately 8 percent (1.08%) 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 business administration and management was reported in 152 of the same 210 state (AASCU) institutions. The average salary of the 2,033 faculty was \$42,189. This average salary was approximately 10 percent (1.10%) 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 business administration and management after three years in the state institutions studied was 19.6 percent (\$42,189 minus \$32,253 equals \$6,936). 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 5.8 percent or an average of 1.9 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 business administration and management (19.6%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.4 percent (19.6% minus 17.2% equals 2.4%) less than faculty in the discipline/major field of business administration and management.



The reader may note that the faculty mix percentage in business administration and management is lower at the professor rank than at the assistant professor rank in both the state studies: 0.26 vs 0.29 (1986-87) and 0.27 vs 0.31 (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. 0.30 (1986-87) and 0.34 vs. 0.28 (1989-90), respectively. In other words ALL MAJOR FIELDS has a higher percentage of professors and a lower percentage of assistant professors compared to business administration and management in both of the state studies.

Finally, the hiring rate of new assistant professors in business administration and management in the state studies was higher than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 6 percent (115/1,944) vs. 3.6 percent (1,869/51,460), respectively; and in 1989-90, 5.3 percent (108/2,037) 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 Isiness administration and management was reported in 159 of the 265 private institutions. The average salary of the 1,173 faculty was \$33,985. This average salary was approximately 8 percent (1.08%) 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 business administration and management was reported in 162 of the same 265 private institutions. The average salary of the 1,200 faculty was \$40,726. This average salary was about 9 percent (1.09%) 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 business administration and management after three years in the private institutions studied was 19.8 percent (\$40,726 minus \$33,985 equals \$6,741). 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 6.0 percent or 2.0 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 19.6 percent (\$37,422 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of business administration and management (19.8%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 0.2 percent (19.8% minus 19.6% equals 0.2%) less than faculty in business administration and management.

In the discipline/major field of business administration and management, 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: 0.21 vs. 0.39 (1986-87), respectively; and 0.24 vs. 0.37 (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 lover percentage of assistant professors compared to business administration and management in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in business administration and management in the private studies was greater than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 8.0 percent (94/1,173) vs. 4.6 percent (1,279/27,249), respectively; and in 1989-90, 6.2 percent (74/1,206) vs. 5.1 percent (1,476/28,609), respectively.



### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of business administration and management 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 6,354 faculty in the discipline/major field of business administration and management 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 average faculty salary in the discipline/major field of business administration and management is currently (1989-90) some 10 and 9 percent above the overall average faculty salary of the other ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for business administration and management in the private institutions was less compared to that in the state institutions in 1986-87. The overall salary average in the private institutions is now (1989-90) \$1,463 below that for the state institutions (3.6%).

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in business administration and management, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. Business administration and management faculty salaries in both the state and private institutions exceeded faculty salaries



in ALL MAJOR FIELDS during this same period.

Third, in the discipline/major field of business administration and management 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 approximately the same rate both in the state and private institutions. It seems that the hiring of new assistant professors is slowing down in both 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 business administration and management, 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 Steven L. Widenhouse is a research educationist in the Office of Equal Opportunity Programs 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

HOME ECONOMICS

LETTERS

**GEOLOGY** 

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES TOTAL: 36

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**NURS ING** 



### 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 (IA) 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 Universit (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)	State University of New York College
Murray State University (KY)	at Potsdam (NY)
New Mexico Highlands University (NM)	Stephen F. Austin University (TX)
North Adams State College (MA)	Sul Ross State University (TX)
North Carolina Central University (NC)	Tennessee Technological University (TN)
No: cheast Louisiana University (LA)	Texas A&I University (TX)
Northeast Missouri State University (MO)	Texas ALM University at Galveston (TX)
Northeastern Illinois University (IL)	Texas Woman's University (TX)
Northeastern State University (OR)	Towson State University (MD)
Northern Arizona University (AZ)	Troy State University (AL)
Northern Illinois University (IL)	University of Akron, The (OH)
Northern Kentucky University (KY)	University of Arkansas at Little Rock (
Northern Michigan University (MI)	University of Arkansas at Monticello (A
Northern State University (SD)	University of Central Arkansas (AR)
Oakland University (MI)	University of Colorado at Colorado Spri
Old Dominion University (VA)	University of Colorado at Denver (CO)
Peru State College (NE)	University of HoustonClear Lake (TX)
Pittsburg State University (KS)	University of Maine at Fort Kent (ME)
Plymouth State College (NH)	University of Maryland Baltimore County
Portland State University (OR)	University of Montevallo (AL)
Radford University (VA)	Universtiy of Nebraska at Omaha (NE)
Rhode Island College (RI)	University of Nevada, Las Vegas (NV)
Saginaw Valley State University (MI)	University of North Carolina at Ashevil
Salem State College (MA)	University of North Carolina at Charlot
Sam Houston State University (TX)	University of North Carolina at Greensb
San Diego State University (CA)	University of North Carolina at Wilming
San amon State University (IL)	University of Northern Colorado (CO)
Shepherd College (WV)	University of Northern Iowa (IA)
Shippensburg University of Pennsylvania (PA)	University of North Texas (TX)
Slippery Rock University of Pennsylvania (PA)	University of Pittsburgh at Bradford (P.
Sonoma State University (CA)	University of Pittsburgh at Johnstown (
South Dakota School of Mines & Technology (SD)	University of Science and Arts of Oklah
Southeast Missouri State University (MO)	University of South Alabama, The (AL)
Southeastern Louisiana University (LA)	University of South Carolina at Aiken (
Southeastern Massachusetts University (MA)	University of South Carolina at Spartan
Southern College of Technology (GA)	University of Southern Colorado (CO)
Southern Illinois University at Carbondale (IL)	University of Southern Indiana (IN)
Southern Illinois University at Edwardsville (IL)	University of Southern Maine (ME)
Southern Oregon State College (OR)	University of Southern Mississippi (MS)
Southwest Missouri State University (MO)	University of Southwestern Louisiana (L.
Southwest State University (MN)	University of Tennessee at Chattanooga
Southwest Texas State University (TX)	University of Tennessee at Martin (TN)
Southwestern Oklahoma State University (OK)	University of Texas at Dallas (TX)
St. Cloud State University (MN)	University of Texas at San Antonio (TX)
State University of New York College	University of Texas at Tyler, The (TX)
at Brockport (NY)	University of the Virgin Islands
State University of New York College	St. Croix
at Buffalo (NY)	University of the Virgin Islands
State University of New York College	St. Thomas
at Fredonia (NY)	University of WisconsinEau Claire (WI
State University of New York College	University of WisconsinGreen Bay (WI)
at Old Westbury (NY)	

Potsdam (NY) 7. Austin University (TX) State University (TX) Technological University (TN) University (TX) (University at Galveston (TX) man's University (TX) ate University (MD) te University (AL) y of Akron, The (OH) ty of Arkansas at Little Rock (AR) ty of Arkansas at Monticello (AR) ty of Central Arkansas (AR) y of Colorado at Colorado Springs (CO) ty of Colorado at Denver (CO) y of Houston--Clear Lake (TX) ty of Maine at Fort Kent (ME) ty of Maryland Baltimore County (MD) ty of Montevallo (AL) ly of Nebraska at Omaha (NE) ty of Nevada, Las Vegas (NV) ty of North Carolina at Asheville (NC) ty of North Carolina at Charlotte (NC) ty of North Carolina at Greensboro (NC) ty of North Carolina at Wilmington (NC) y of Northern Colorado (CO) ty of Northern Iowa (IA) y of North Texas (TX) ty of Pittsburgh at Bradford (PA) y of Pittsburgh at Johnstown (PA) ty of Science and Arts of Oklahoma (OK) y of South Alabama, The (AL) ty of South Carolina at Aiken (SC) ty of South Carolina at Spartanburg (SC) y of Southern Colorado (CO) y of Southern Indiana (IN) y of Southern Maine (ME) y of Southern Mississippi (MS) y of Southwestern Louisiana (LA) y of Tennessee at Chattanooga (TN) y of Tennessee at Martin (TN) y of Texas at Dallas (TX) y of Texas at San Antonio (TX) y of Texas at Tyler, The (TX) y of the Virgin Islands--Croix y of the Virgin Islands--Thomas y of Wisconsin--Eau Claire (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)
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TOTAL: 210



## APPENDIX C

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

## Participating Institutions

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



## Participating Institutions (continued):

George Washington University, The (DC)	Merdith College (NC)
Georgetown University (DC)	Merrimack College (MA)
Georgian Court College (PA)	Milliken University (IL)
GMI Engineering & Management Institute (MI)	Missouri Baptist College (MO)
Gonzaga University (WA)	Monmouth College (NJ)
Gordon-Conwell Theological Seminary (MA)	Moravian College (PA)
Grace College & Theological Seminary (IN)	Morris Brown College (GA)
Guilford College (NC)	Mount Mercy College (IA)
Hamline University (MN)	Mount Saint Mary's College (MD)
Hampton University (VA)	Mount St. Clare College (IA)
Hawaii Pacific College (HI)	Mount Union College (OH)
Heidelberg College (OH)	Mount Vernon College (DC)
Hiram College (OH)	Muskingum College (OH)
Holy Names College (CA)	Nazarene Theological Seminary (MO)
Hood College (MD)	Neumann College (PA)
Huston-Tillotson College (TX)	North Central College (IL)
Iona College (NY)	Northeastern University (MA)
Ithaca College (NY)	Northland College (WI)
John Carroll University (OH)	Northwestern College (IA)
Johns Hopkins University, The (ND)	Northwestern College (NN)
Juniata College (PA)	Norwich University (VT)
Kalamazoo College (MI)	Notre Dame College (NH)
Kenyon College (OH)	Notre Dame College (OH)
King's College (PA)	Notre Dame Seminary (LA)
La Roche College (PA)	Ohio Northern University (OH)
Le Tourneau College (TX)	Ottawa University (KS)
Lebanon Valley College (PA)	Otterbein College (OH)
Lewis & Clark College (OR)	Our Lady of the Holy Cross College (LA)
Lincoln Memorial University (TN)	Our Lady of the Lake University (TX)
Linfield College (OR)	Paine College (GA)
Loras College (IA)	Palm Beach Atlantic College (FL)
Louisiana College (LA)	Park College (MO)
Loyola College in Maryland (MD)	Parks College of St. Louis University (IL)
Luther College (IA)	Pepperdine University (CA)
Lutheran Theological Seminary at Gettysburg (PA)	Piedmont College (GA)
Lycoming College (PA)	Pikeville College (KY)
Lynchburg College (VA)	Polytechnic University (NY)
Madonna College (MI)	Presbyterian College (SC)
Malone College (OH)	Principia College (IL)
Manhattan Christian College (KS)	Quincy College (IL)
Manhattanville College (NY)	Randolph-Macon Woman's College (VA)
Marietta College (OH)	Reed College (OR)
Marist College (NY)	Reformed Bible College (MI)
Mars Hill College (NC)	Regis College (MA)
Mary Baldwin College (VA)	Remsslaer Polytechnic Institute (NY)
Marymount College (NY)	Rhode Island School of Design (RI)
Marywood College (PA)	Rider College (NJ)
Memphis Theological Seminary (TN)	
Mercer University (GA)	Roanoke College (VA)
Mercy College (NY)	Rockford College (IL)
Mercy College of Detroit (MI)	Rockhurst College (MO)
many waste or proposit (111)	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 (VI) 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 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 COMPUTER AND INFORMATION SCIENCE

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## FOR THE YEARS

1986-87 AND 1989-90

Ry
Richard D. Howe
and
Steven L. Widenhouse

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 computer and information science. 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 computer and information science in the CIP is as follows:

A summary of groups of instructional programs that describe the coding, processing, and storage of data through repetitious and highly complex mathematical operations at high speed, and in accordance with strictly defined systems and procedures.\*

[\*Gerald S. Malitz, A <u>Classification of Instructional Programs</u> (Washington, DC.: National Center for Education Statistics, [1985], p. 63.--11)]

This article presents a summary of the overall average salary increases in the discipline/major field of computer and information science 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 computer and information science 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 1982-1984 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 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 computer and information science 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 1.15 for assistant professors in the discipline/major field of computer and information science in the 1986-87 state study means that their salaries are 15 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 computer and information science 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.



NEW ASS0 ASST ASST PROF PROF **PROF** PROF INSTRUCTOR ALL RANKS SALARY NUM N/IN DISCIPLINE: COMPUTER & INFORMATION SCIENCE STATE. 1986-87: MAJOR FIELD: COMPUTER & INFORMATION SCIENCES AVERAGE SALARY: 44476 251 160 36985 383 141 23777 219 91 31322 448 136 31711 60 43 34256 1301 162 FAC MIX PCT: 0.19 0.29 0.34 0.05 0.17 1.00 SALARY **FACTOR: 1.12** 1.13 1.15 1.21 1.05 1.11 ALL MAJOR FIELDS **AVERAGE** SALARY: 39819 17564 32676 15205 27122 14268 26202 1869 21466 4423 32611 / 160 210 FAC MIX PCT: 0.34 0.30 0.28 0.04 0.09 1.00 DISCIPLINE: COMPUTER & INFORMATION SCIENCE STATE, 1989-90: MAJOR FIELD: COMPUTER & INFORMATION SCIENCES AVERAGE SALARY: 52126 315 117 44041 384 137 37794 527 145 39350 72 5€ 26975 212 84 41006 1438 167 FAC MIX PCT: 0.22 0.27 0.37 0.05 0.15 1.00 SALARY FACTOR: 1.11 1.15 1.19 1.51 1.10 1.07 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: COMPUTER & INFORMATION SCIENCE PRIVATE, 1986-87: MAJOR FIELD: COMPUTER & INFORMATION SCIENCES AVERAGE SALARY: 44378 128 39107 217 93 28756 318 144 28140 51 43 22500 95 55 32714 758 180 FAC MIX PCT: 0.17 0.29 0.42 0.07 0.13 1.00 SALARY FACTOR: 1.11 1.16 1.13 1.13 1.09 1.04 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: COMPUTER & INFORMATION SCIENCE PRIVATE, 1989-90: MAJOR FIELD: COMPUTER & INFORMATION SCIENCES **AVERAGE** SALARY: 50028 41707 255 106 119 63 33906 327 150 32841 46 41 26652 67 42 38361 768 188 FAC MIX PCT: 0.15 0.33 0.43 0.06 0.09 1.00 SALARY FACTOR: 1.06 1.13 1.11 1.10 1.10 1.03 ALL MAJOR FIELDS **AVERAGE** SALARY: 47397 9026 36865 8771 30261 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 computer and information science was reported in 162 of the 210 state (AASCU) institutions. The average salary of the 1,301 faculty was \$34,256. This average salary was approximately 5 percent (1.05%) 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 computer and information science was reported in 167 of the same 210 state (AASCU) institutions. The average salary of the 1,438 faculty was \$41,006. This average salary was approximately 7 percent (1.07%) 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 discipline/major field of computer and information science after three years in the state institutions studied was 19.7 percent (\$41,006 minus \$34,256 equals \$6,750). 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 5.9 percent or an average of 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 computer and information science (19.7%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.5 percentage points (19.7% minus 17.2% equals 2.5%) less than faculty in the discipline/major field of computer and information science. 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 computer and information science is lower at the professor rank than at the assistant professor rank in both the state studies: 0.19 vs 0.34 (1986-87) and 0.22 vs 0.37 (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 computer and information science in both of the state studies.

Finally, the hiring rate of new assistant professors in computer and information science in the state studies was higher than the hiring rate in ALL MAJOR FIELDS in 1986-87, 4.6 percent (60/1,301) vs. 3.6 percent (1,869/51,460), respectively; and lower in 1989-90, 5.0 percent (72/1,438) 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 computer and information science was reported in 180 of the 265 private institutions. The average salary of the 758 faculty was \$32,714. This average salary was approximately 4 percent (1.04%) 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 computer and information science was reported in 188 of the same 265 private institutions. The average salary of the 768 faculty was \$38,361. This average salary was about 3 perc at (1.03%) 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 computer and information science after three years in the private institutions studied was 17.3 percent (\$38,361 minus \$32,714 equals \$5,647). 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 3.5 percent or 1.2 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 ALL MAJOR FIELDS (19.1%), therefore, the faculty in the discipline/major field of computer and information science increased their salaries by 1.8 percent (19.1% minus 17.3% equals 1.8%) less than faculty in ALL MAJOR FIELDS. 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 computer and information science, 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: 0.17 vs. 0.42 (1986-87), respectively; and 0.15 vs. 0.43 (1985-90), 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 computer and information science in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in computer and information science in the private studies was greater than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 6.7 percent (51/758) vs. 4.7 percent (1,279/27,249), and in 1989-90, 6.0 percent (46/768) vs. 5.2 percent (1,476/28,609), respectively.



### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of computer and information science 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 4,265 (2.6%) faculty in the discipline/major field of computer and information science participated and were included in the overal: 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 average faculty salary in the discipline/major field of computer and information science is currently (1989-90) some 7 and 3 percent above the overall average faculty salaries of ALL MAJOR FIELDS for both the state and private studies, respectively. The overall average faculty salary for computer and information science in the private institutions was approximately 1 percent lower than in state institutions in the 1986-87 study and in 1989-90. The overall salary average in the private institutions is now (1989-90) approximately 4 percentage points lower 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 computer and information science, in both the state and private institutions, received overall salar increases for three years above the cost-of-living. The "real" salaries of computer and information science faculty in both the state and private institutions grew faster than the



"real" salaries of ALL MAJOR FIELDS during this same period.

Third, in the discipline/major field of computer and information science there is a greater percentage of faculty in the assistant professor rank compared to the full professor rank for both the state and private studies. The full professor rank appears to be increasing at a goodly rate in the state institutions and decreasing in the private institutions. It seems a smaller percentage of new assistant professors are being hired in both 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 analyses will be effected in computer and information science, 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 Steven L. Widenhouse is a research educationist in the Office of Equal Opportunity Programs 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

VISUAL AND PERFORMING ARTS

FOREIGN LANGUAGES

HOME ECONOMICS

**ENGINEERING** 

LETTERS

GEOLOGY

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES TOTAL: 36

MUSIC

**NURSING** 



#### APPENDIX B

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

#### Participating Institutions

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

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



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



Mercy College (NY)

Mercy College of Detroit (MI)

Rockhurst College (MO)

Rocky Mountain College (MI)

#### 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) 5 : thern California College (CA) 5 uthwestern 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 BUSINESS AND MANAGEMENT

#### FOR THE YEARS

## 1986-87 AND 1989-90

By
Richard D. Howe
and
Robert L. Cherry

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 business and management. 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 business and management in the CIP is as follows:

A summary of groups of instructional programs that describe the processes of purchasing, selling, producing, and interchanging of goods, commodities, and services in profit making and non-profit state and private institutions and agencies.\*

[\*Gerald S. Malitz, A <u>Classification of Instructional Programs</u> (Washington, D.C.: National Center for Education Statistics, [1985] p. 44.--06)]



This article presents a summary of the overall average salary increases in the discipline/major field of business and management 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 faculty in business and management for both state and private participating institutions by rank including "new assistant professor," the faculty mix percentage (FAC MIX PCT) 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 1982-1984 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 over time.

The salary is based on a nine-or ten-month academic year salary of full-time faculty only. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of 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 .26 for associate professor of business and management in the 1986-87 state study means that 26 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 1.16 for assistant professors in the discipline/major field of business and management in the 1986-87 state study means that their salaries are 16 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 business and management with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on



NEW **ASSO** ASST ASST PROF PROF PROF INSTRUCTOR ALL RANKS PROF SALARY NUM N/IN DISCIPLINE: BUSINESS AND MANAGEMENT STATE, 1986-87: MAJOR FIELD: BUSINESS AND MANAGEMENT AVERAGE SALARY: 44636 431 75 37479 425 23785 232 60 35351 1645 97 85 31361 557 90 32442 74 FAC MIX PCT: 1.00 0.26 0.26 0.34 0.04 0.14 SALARY FACTOR: 1.12 1.15 1.16 1.24 1.11 1.08 ALL MAJOR FIELDS **AVERAGE** SALARY: 39819 17564 32676 15205 1869 4423 32611 51460 210 27122 14268 26202 21466 FAC MIX PCT: 0.34 0.30 0.09 1,00 0.28 0.04 DISCIPLINE: BUSINESS AND MANAGEMENT STATE, 1989-90: AVERAGE HAJOR FIELD: BUSINESS AND MANAGEMENT SALARY: 52542 359 43090 1307 86 73 44028 355 80 39291 457 76 42025 79 44 28466 136 47 FAC MIX PCT: 1.00 0.27 0.27 0.35 0.06 0.10 SALARY FACTOR: 1.12 1.15 1.23 1.16 1.13 1.61 ALL MAJOR FIELDS AVERAGE SALARY: 47023 18930 38352 15550 31853 16354 26030 2865 24499 4733 38213 55567 210 FAC MIX PUT: 0.34 0.05 0.09 1.00 0.28 0.29 DISCIPLINE: BUSINESS AND MANAGEMENT PRIVATE, 1986-87: MAJOR FIELD: BUSINESS AND MANAGEMENT AVERAGE 896 98 SALARY: 44789 70 38 35178 2.32 55 36114 285 30031 78 37539 34 22925 83 296 2.1 FAC MIX PCT: 0.26 0.32 0.04 0.09 1.00 0.33 SALARY FACTOR: 1.12 1.12 1.16 1.18 1.31 1.11 ALL MAJOR FIFLDS **AVERAGE** SALARY: 40015 8507 1985 31411 27249 265 31131 8438 25433 8319 24917 1279 20566 FAC MIX PCT: 0.31 0.31 0.31 0.05 0.07 1.00 DISCIPLINE: BUSINESS AND MANAGEMENT PRIVATE, 1989-90: MAJOR FIELD: BUSINESS AND MANAGEMENT AVERAGE SALARY: 57229 43 45920 247 29 789 97 183 69 39085 293 78 40486 50 26 29044 66 44609 FAC MIX PCT: 0.23 0.31 1.00 0.37 0.06 0.08 SALARY FACTOR: 1.21 1.25 1.28 1.36 1.20 1.19 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 0.310.05 0.06 1.00



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 business and management was reported in 97 of the 210 state (AASCU) institutions. The average salary of the 1,645 faculty was \$35,351. This average salary was approximately 8 percent (1.08) 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 business and management was reported in 86 of the same 210 state (AASCU) institutions. The average salary of the 1,307 faculty was \$43,090. This average salary was approximately 13 percent (1.13) higher than the average salary of \$38,212 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in business and management after three years in the state institutions studied was 21.9 percent (\$43,090 minus \$35,351 equals \$7,739). 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 8.1 percent or an average of 2.7 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 business and management (21.9%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 4.7 percentage points (21.9% minus 17.2% equals 4.7%) less than faculty in the discipline/major field of business and management. 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 business and management is lower at the professor rank than at the assistant professor rank in both the state studies: 0.26 vs 0.34 (1986-87) and 0.27 vs 0.35 (1988-90), 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 business and management in both of the state studies.

Finally, the hiring rate of new assistant professors in business and management in the state studies was higher than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 4.5 percent (74/1,645) vs. 3.6 percent (1,869/51,460), respectively; and in 1989-90, 6 percent (79/1,307) 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 business and management was reported in 98



of the 265 private institutions. The average salary of the 896 faculty was \$35,128. This average salary was approximately 12 percent (1.12) 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 business and management was reported in 97 of the same 265 private institutions. The average salary of the 789 faculty was \$44,609. This average salary was about 19 percent (1.19) 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 business amd management after three years in the private institutions studied was 27 percent (\$44,609 minus \$35,128 equals \$9,481). 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 13.2 percent or 4.4 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 private institutions studied was 19.1 percent (\$374229 minus \$31,411 equals \$6,011). In comparison to the discipline/major field of business and management (27%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 7.9 percent (27% minus 19.1% equals 7.9%) less than faculty in the discipline/major field of business and management. The inflationadjusted 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 business and management, 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: 0.26 vs. 0.33 (1986-87), respectively; and 0.23 vs. 0.37 (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 business and management because of the tremendous growth in business and management.

Finally, the reader may note that the hiring rate of new assistant professors in business and management in the private studies increased dramatically over the three year span from 1986-87, 3.8 percent (34/896) vs. 6.3 percent, (50/789), 1989-90.

#### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of business and management 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 4,637 faculty in the discipline/major field of business and management 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 average faculty salary in the discipline/major field of business and management is currently



(1989-90) some 13 and 19 percent above the overall average faculty salary of the other 35 disciplines/major fields for both the state and private studies, respectively. The average faculty salary for business and management in the private institutions was 4 percent greater in comparison to that in the state institutions in 1986-87. The overall salary average in real dollars in the private institutions is now (1989-90) \$1,519 greater in comparison to that for the state institutions (3.5%).

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in business and management, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. The "real" salaries of business and management faculty in both the state and private institutions grew faster than the "real" salaries of faculty in ALL MAJOR FIELDS during this same period. Although having an average higher than ALL MAJOR FIELDS, business and management faculty in the state institutions have a little catching up to do in salary in comparison to their colleagues in the private institutions.

Third, in the discipline/major field of business and management 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 greater rate in the state institutions compared to the private institutions. It seems a slightly 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 business and management, 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 Robert L. Cherry is a professor of finance, insurance, and real estate, and director, College of Business Graduate 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

FOREIGN LANGUAGES VISUAL AND PERFORMING ARTS

GEOLOGY

ENGINEERING

HOME ECONOMICS

**LETTERS** 

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES TOTAL: 36

MUSIC

NURSING



#### APPENDIX B

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

#### Participating Institutions

Admss State Co.lege (CO) Alabama State University (AL) Albany State College (GA) Angelo State University (TX) Appalachian State University (NC) Artanens Tech University (AR) Auburn University at Hontgomery (AL) Augusta College (GA) Austin Peay State University (IN) Ball State University (IN) Bemidji State University (HN) Black Nills 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 (VI) Central Connecticut State University (CI) Central Missouri State University (MO) Central State University (UK) Central Washington University (WA) Chadron State College (NE) Christopher Newport College (VA) Citadel, (The) Hilltary College of South Carolina (SC) Clarion University of Pennsylvania (PA) Cleveland State University (OH) College of Staten Island, The (NY) Columbus College (GA) helta State University (MS) Dickinson State University (ND) East Central University (OK) Rast Termessee State University (TN) East Texas State University (IX) East Texas State University at Texarkana (TX) Eastern Connecticut State University (CI) Eastern Illinois University (IL) Eastern Washington University (WA) Edinboro University of Pennsylvania (PA) Fitchburg State Coilege (MA) Florida Atlantic University (FL) Fort Hays State University (RS) Francis Marion College (SC) .1 Frostburg State University (HD) George Mason University (VA)

Georgia College (GA) Georgia Southern College (GA) Glenville State College (WV) Grambling State University (IA) Grand Valley State University (MI) Harris-Stove State College (MO) Henderson State University (AR) Immacao 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) Rearney State College (NE) Reene State College (Nil) Rennesav State University (GA) Kent State University (OH) Lake Superior State University (MI) Lamar University -- Beaumont (TX) Lander College (SC) Levis-Clark State College (1D) Lincoln University (MO) Livingston University (AL) Longwood College (VA) Louisians State University in Shreveport (LA) Louisians Tech University (LA) Haine 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) Metropoiltan State University (MN) Hiddle Tennessee State University (TN) Hillersville University of Pennsylvania (KY) Hississippi University for Homen (HS) Hissouri Southern State College (NO) Hissouri Western State College (HO) Montana College of Mineral Science & Technology (MT) Hontclair State College (NJ) Moorhead State University (MN)

Horehead State University (KY)



## Participating Institutions (continued):

Morgan State University (MD) Murray State University (RY) New Hexico Highlands University (191) North Adams State College (MA) Morth Carolina Central University (MC) Northeast Louisiana University (LA) Northeast Missouri State University (MD) Northeastern Illinois University (IL) Mortheastern State University (OR) Northern Arizona University (AZ) Northern Illinois University (IL) Morthern Rentucky University (RT) Northern Hichigan University (MI) Northern State University (SD) Oakland University (NI) Old Dominion University (VA) Peru State College (NE) Pittsburg State University (RS) Plymouth State College (NH) Portland State University (OR) Radford University (VA) Rhode Island College (RI) Seginar 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 (MD) 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 Oklahoum State University (OR) St. Cloud State University (FM) State University of New York College At Brockport (NY) State University of New York College at Buffalo (NY) State University of New York Coilege at fredonia (NY) State University of New York College at old Westbury (NY)

State University of New York College at Potedam (NY) Stephen F. Austin University (TX) Sul Rose State University (TX) Tennessee Technological University (TN) Texas A&I University (TX) Texas ASH University at Calveston (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 Honticello (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 (HD) University of Montevallo (AL) University of Nebraska at Omnha (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 (IX) 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 Alken (SC) University of South Carolina at Spartanburg (SC) University of Southern Colorado (CD) University of Southern Indiana (IN) University of Southern Haine (HE) University of Southern Mississippi (MS) University of Southwestern Louisians (LA) University of Tennessee at Chattanoogs (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--Pau Claire (WI) University of Wisconsin--Green Ray (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 (RS) Wayne State College (NE) Weber State College (UI) West Chester State College (FA) 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 (CI) Western Illinois University (IL) Western Kentucky University (RY) Western Michigan University (MI) "4" Western Oregon State College (OR) Western State College of Colorado (CO) Wichita State University, (RS) 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 (IX) Central College (IA) Albertus Magnus College (CT) Central Hethodist College (HO) Albion College (MI) Central Wesleyan College (SC) Alfred University (NY) Chapman College (FA) Allegheny College (PA) Christian Brothers College (IN) Allentown College of St. Francis de Sales (PA) Clark University (MA) Alms College (NI) Cogswell Polytechnical University (CA) American University, The (DC) Coker College (SC) Amberst College (MA) College of Hount Saint Vincent (NY) Anna Maria College (MA) College of Houmt St. Joseph (OII) Aquinas College (MI) College of Saint Hary (NE) Arkansas College (AR) College of St. Scholastica (MN) Asbury College (RT) College of St. Thomas (HN) Ashland University (OR) College of the Holy Cross (MA) Augustana College (IL) College of Wooster, The (OH) Amrora University (IL) Concordia College (HN) Avila College (NO) Concordin College (NY) Azuma Pacific University (CA) Concordia Teachers College (NE) Babson College (MA) Cornell College (IA) Raidvin-Wallace College (OH) Covenant College (GA) Bard College (NY) D'Touville College (NY) Barry University (FL) Daniel Webster College (NII) Beaver College (PA) David Lipscomb Coilege (IN) Bellarwine College (RY) Defiance College, The (Oil) Sellevue College (NE) Depaul University (IL) Benedictine College (RS) Dickinson College (PA) Betinme-Cooksan College (FL) Dosne College (NE) Birmingham-Southern College (AL) Dominican College of Blauvelt (NY) Boston University (MA) Dordt College, Inc. (IA) Bradley University (IL) Drake University (IA) Briar Cliff College (AL) Drew University (NJ) Bridgewater College (VA) Drury College (NO) Brighms Young University (UI) Eastern Menmonite College and Bryant College (RI) Seminary (VA) Bryn Mawr College (PA) Eckerd College (FL) **Bucknell University (PA)** Eishurst College (IL) Butler University (IN) Elmira College (NY) Cabrini College (PA) Embry-Riddle Aeronautical University (FL) Canislus College (NY) Emerson College (MA) Capital University (OH) Emory & Henry C. 11ege (VA) Carroll College (NT) Eureka Collage (IL) Carroll College (W1) Fairfield University (CI) Catavba College (NC) Ferrum College (VA) Catholic Theological Union (IL) Fontbonne College (MO) Catholic University of America, The (DC) Franklin and Marshall College (PA) Cedar Crest (PA) Furman University (SC) Cedarville College (Oil) George Fox College (OR)



# Participating Institutions (continued):



#### 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 (VI) Sales College (NC) School of the Ozarks, The (NO) 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 (NI) Simpson College (IA) Skidmore College (NY) Southern California College (CA) Southwestern Assemblies of God College (TX) Spaiding University (RY) 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) Stovens 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 (RY) Tri-State University (IN) Trinity College (DC) Trinity College of Vermont (VI) 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 Semindry (IA) University of Findley, The (OH) University of Hartford (CT)

University of La Verne (CA) University of Minmi (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 Sait Lake City (UT) Westminster Theological Seminary (PA)

TOTAL: 265



# SALARY-TREND STUDY OF FACULTY IN BUSINESS ECONOMICS FOR THE YEARS

## 1986-87 AND 1989-90

By
Richard D. Howe
and
Larry Ellis

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 business 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 business economics in the CIP is as follows:

An instructional program that describes the principles and methods for organizing a business firm and for combining resources to produce goods and services, taking account of costs, profits and the nature and extent of competition in markets.\*

[\* Gerald S. Malitz, A <u>Classification of Instructional</u>

<u>Programs</u> (Washington, D.C.: National Center for Education Statistics, [1985], p.45.--06.0501)]

This article presents a summary of the overall average salary increases in the discipline/major field of business 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 (AAS-CU) 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 business economics faculty for both state and private participating institutions by rank including "new assistant professors," the faculty mix percentage (FAC MIX PCT) 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. 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. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of 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 business economics 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 1.09 for assistant professors in the discipline/major field of business economics in the 1986-87 state study means that their salaries are 9 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 business 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 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.



NEW **ASSO ASST** ASST **PROF** PROF PROF PROF INSTRUCTOR ALL RANKS SALARY NUM N/IN DISCIPLINE: BUSINESS AND MANAGEMENT STATE, 1986-87: MAJOR FIELD: BUSINESS ECONOMICS AVERAGE **SALARY: 41741** 277 96 34398 267 98 29502 267 90 28993 48 36 23861 58 42 34531 869 111 FAC MIX PCT: 0.32 0.31 0.31 0.06 0.07 1.00 SALARY FACTOR: 1.05 1.05 1.09 1.11 1.11 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 0.04 0.28 0.09 1.00 DISCIPLINE: BUSINESS AND MANAGEMENT STATE, 1989-90: MAJOR FIELD: BUSINESS ECONOMICS AVERAGE SALARY: 49461 226 71 41049 193 65 36400 194 66 35802 38 25 26194 33 22 41836 646 82 FAC MIX PCT: 0.35 0.30 0.30 0.06 0.05 1.00 SALARY FACTOR: 1.05 1.07 1 14 1.38 1.07 1.09 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: BUSINESS AND MANAGEMENT PRIVATE, 1986-87: MAJOR FIELD: BUSINESS ECONOMICS AVERAGE SALARY: 42000 153 80 33839 28033 241 101 179 91 27592 33 24 21249 38 22 32384 611 161 FAC MIX PCT: 0.25 0.29 0.39 0.05 0.06 1.00 SALARY FACTOR: 1.05 1.09 1.10 1.11 1.03 1.05 ALL MAJOR FIELDS **AVERAGE SALARY: 40015** 8507 31131 8438 25483 8319 24917 1279 20566 1985 31411 27249 265 FAC MIX 0.31 PCT: 0.31 0.31 0.05 0.07 1.00 DISCIPLINE: BUSINESS AND MANAGEMENT PRIVATE, 1989-90: MAJOR FIELD: BUSINESS ECONOMICS **AVERAGE** SALARY: 50154 103 54 40315 167 76 33759 170 72 35169 23 17 25858 23 16 39378 463 106 FAC MIX PCT: 0.22 0.36 0.37 0.05 0.05 1.00 SALARY FACTOR: 1.06 1.09 1.10 1.18 1.07 1.05 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 business economics was reported in 111 of the 210 state (AASCU) institutions. The average salary of the 869 faculty was \$34,531. 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 business economics was reported in 82 of the same 210 state (AASCU) institutions. The average salary of the 646 faculty was \$41,836. This average salary was approximately 9 percent (1.09%) 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 business economics after three years in the state institutions studied was 21.3 percent (\$41,836 minus \$34,531 equals \$7,305). 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 7.5 percent or an average of 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 state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison 1) the discipline/major field of business economics (21.3%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 4.1 percent (21.3% minus 17.2% equals 4.1%) less than faculty in the discipline/major field of business economics.

The reader may note that the faculty mix percentage in business economics is higher at the professor rank than at the assistant professor rank in both the state studies: 0.32 vs 0.31 (1986-87) and 0.35 vs 0.30 (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 somewhat similar percentage of professors and assistant professors compared to business economics in both of the state studies.

Finally, the hiring rate of new assistant professors in business economics is high in the state studies: 5.5 percent (48/869) 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 business economics in 1989-90 was 5.9 percent (39/646) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS that same year. In other words with the hiring rate in the discipline/major field of business economics being higher than that for ALL MAJOR FIELDS in both of the state studies indicates that business economics continues to be a "growing" discipline nationally.

# 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 business economics was reported in 141 of the 265 private institutions. The average salary of the 611 faculty was \$32,384. This average salary was approximately 5 percent (1.05%) 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 business economics was reported in 106 of the same 265 private institutions. The average salary of the 463 faculty was \$39,378. This average salary was approximately 5 percent (1.05%) 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 business economics after three years in the private institutions studied was 21.6 percent (\$39,378 minus \$32,384 equals \$6,994). 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 (\$37,423 minus \$31,411 equals \$6,011). In comparison to ALL MAJOR FIELDS (19.1%), therefore, the faculty in the discipline/major field of business economics increased their salaries by 2.5 percent (21.6% minus 19.1% equals 2.5%) more than faculty in ALL MAJOR FIELDS.

In the discipline/major field of business 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: 0.25 vs. 0.39 (1986-87), respectively; and 0.22 vs. 0.37 (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 business economics in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in business economics in the private studies was greater than the hiring rate in ALL MAJOR FIELDS in 1986-87, 5.4 percent (33/611) vs. 4.7 percent (1,279/27,249), respectively; and lower in 1989-90, 5 percent (23/463) vs. 5.2 percent (1,476/28,609), respectively. In other words the hiring rate in the discipline/major field of business economics exceeds ALL MAJOR FIELDS in the private study of 1986-87 and is lower in the private study of 1989-90.



## CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of business 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 2,589 faculty in the discipline/major field of business 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 average faculty salary in the discipline/major field of business economics is currently (1989-90) some 9 and 5 percent above the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for business economics in the state institutions was greater in comparison to that in the private institutions in 1986-87. The overall salary factor in the state institutions is now (1989-90) 4 percent higher than the overall average in comparison to that for the private institutions: 1.09 vs. 1.05, respectively.

Second, the CPI of October 1988, in comparison to the CPI of October 1985, indicates that the faculty in business economics, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. Business economics faculty salaries in both the state and private institutions exceeded faculty in ALL MAJOR FIELDS during this same



period.

Third, in the discipline/major field of business economics the assistant professor rank has a greater percentage compared to the full professor rank for the private studies and just the opposite is the case for the state studies. The full professor rank appears to be increasing more quickly in the state institutions. It seems that a slightly higher 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 studies will be effected in business 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 Larry Ellis is the chairperson of the department of 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

FOREIGN LANGUAGES

VISUAL AND PERFORMING ARTS

**GEOLOGY** 

HOME ECONOMICS

LETTERS

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES

TOTAL: 36

MUSIC

NURSING



#### APPENDIX B

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

#### Participating Institutions

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



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)

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)

State University of New York College



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

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



George Washington University, The (DC)	Merdith College (NC)
Georgetown University (DC)	Merrimack College (MA)
Georgian Court College (PA)	Milliken University (IL)
GMI Engineering & Management Institute (MI)	Missouri Baptist College (MO)
Gonzaga University (WA)	Monmouth College (NJ)
Gordon-Conwell Theological Seminary (MA)	Moravian College (PA)
Grace College & Theological Seminary (IN)	Morris Brown College (GA)
Guilford College (NC)	Mount Mercy Coilege (IA)
Hamline University (MN)	Mount Saint Mary's College (MD)
Hampton University (VA)	Mount St. Clare College (IA)
Hawaii Pacific College (HI)	Mount Union College (OH)
Heidelberg College (OH)	Mount Vernon College (DC)
Hirama College (OH)	Muskingum College (OH)
Holy Names College (CA)	Nazarene Theological Seminary (MO)
Hood College (MD)	Neumann College (PA)
Huston-Tillotson College (TX)	North Central College (IL)
Iona College (NY)	Northeastern University (MA)
Ithaca College (NY)	Northland College (WI)
John Carroll University (OH)	Northwestern College (IA)
Johns Hopkins University, The (MD)	Northwestern College (MN)
Juniata College (PA)	Norwich University (VT)
Kalamazoo College (MI)	Notre Dame College (NH)
Kenyon College (OH)	Notre Dame College (TH)
Ring's College (PA)	Notre Dame Seminary (LA)
La Roche College (PA)	Ohio Northern University (OH)
Le Tourneau College (TX)	Ottawa University (KS)
Lebanon Valley College (PA)	Otter of College (OH)
Lewis & Clark College (OR)	Our Lady of the Holy Cross College (IA)
Lincoln Memorial University (TN)	Our Lady of the Lake University (TX)
Linfield College (OR)	Paine College (GA)
Loras College (IA)	Palm Beach Atlantic College (FL)
Louisiana College (LA)	Park College (MO)
Loyols College in Maryland (MD)	
Luther College (IA)	Parks College of St. Louis University (IL)
Lutheran Theological Seminary at Gettysburg (PA)	Pepperdine University (CA) Piedmont College (GA)
Lycoming College (PA)	2 ,
Lynchburg College (VA)	Pikeville College (KY)
Madonna College (MI)	Polytechnic University (NY)
Malone College (OH)	Presbyterian College (SC)
Manhattan Christian College (RS)	Principia College (IL)
Manhattanville College (NY)	Quincy College (IL)
	Randolph-Macon Woman's College (VA)
Marietta College (OH)	Reed College (OR)
Marist College (NY)	Reformed Bible College (MI)
Mars Hill College (NC)	Regis College (MA)
Mary Baldwin College (VA)	Rensslaer Polytechnic Institute (NY)
Marymount College (NY)	Rhode Island School of Design (RI)
Marywood College (PA)	Rider College (NJ)
Memphis Theological Seminary (TN)	Roanoke College (VA)
Mercer University (GA)	Rockford College (IL)
Mercy College (NY)	Rockhurst College (MO)
Mercy College of Detroit (MI)	Rocky Mountain College (MT)



Rose-Hulman Institute of Technology (IN) Ressell 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 (VI) 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 Mismi (FL) University of Portland (OR) University of Richmond (VA) University of Rio Grande (OH) University of San Diego (CA) University of the South 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 CHEMISTRY

### FOR THE YEARS

## 1986-87 AND 1989-90

By
Richard D. Howe
and
Donald W. Sink

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 chemistry. 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 chemistry in the CIP is as follows:

A group of instructional programs that describe the micro and macro structure of matter, of the changes matter undergoes, of the energy involved in these changes, and of the models that interpret and the theories and laws that describe these phenomena.\*

[\*Gerald S. Malitz, A <u>Classification of Instructional Programs</u> (Washington, D.C.: National Center for Education Statistics, [1985], p. 129.--40.05)]

This article presents a summary of the overall average salary increases in the discipline/major field of chemistry 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 1939-90. 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 chemistry 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 1089-90) and with the CPI (Consumer Price Index) of changes in cost-of-living.

The CPI uses a base period of 1982-1984 and 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 yields 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. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of 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 .25 for associate professor of chemistry in the 1986-87 state study means that 25 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 .96 for assistant professors in the discipline/major field of chemistry in the 1986-87 state study means that their salaries are 4 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 chemistry 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/II	ASSO PROF I 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
STATE, 1986-87:  MAJOR FIELD: CHEMISTRY, GENERAL					
AVERAGE SALARY: 39700 761 163 FAC MIX	32420 359 144		24631 47 40	20649 30 22	34754 1435 180
PCT: 0.53 SALARY	0.25	0.20	0.03	0.02	1.00
FACTOR: 1.00	0.99	0.96	0.94	0.96	1.07
		ALL MAJOR	FIELDS		
AVERAGE SALARY: 39819 17584	00/3/ 1000				
FAC MIX	32676 15205	27122 14268	26202 1869	21466 4423	32611 51460 210
PCT: 0.34	0.30	0.28	0.04	0.09	1.00
SIATE, 1989-90: AVERAGE		DISCIPLINE: PHYS MAJOR FIELD: CHEM	ICAL SCIENCES IISTRY, GENERAL		
SALARY: 47083 811 175 FAC MIX	37638 337 137	30294 320 136	29186 69 58	23101 42 31	40750 1510 184
PCT: 0.54 SALARY	0.22	0.21	0.05	0.03	1.00
FACTOR: 1.00	0.98	0.95	1.12	0.94	1.07
		ALL MAJOR	FIELDS		
AVERAGE SALARY: 47023 18930	38352 15550	21052 1625	0.000 0-1-		
FAC MIX PCT: 0.34	0.28	31853 16354	26030 2865	24499 4733	38213 55567 210
		0.29	0.05	0.09	1.00
PRIVATE, 1986-87:  AVERAGE  DISCIPLINE: PHYSICAL SCIENCES  MAJOR FIELD: CHEMISTRY, GENERAL					
SALARY: 40200 499 186 FAC MIX	30262 264 147	24461 225 134	23175 42 35	19863 25 22	33612 1013 233
PCT: 0.49 SALARY	0.26	0.22	0.04	0.02	1.00
FACTOR: 1.00	0.97	0.96	0.93	0.97	1.07
		ALL MAJOR	FIELDS		
AVERAGE					
SALARY: 40015 8507 FAC MIX	31131 8438	25483 8319	24917 1279	20566 1985	31411 27429 265
PCT: 0.31	0.31	0.31	0.05	0.07	1.00
PRIVATE, 1989-90:  AVERAGE  DISCIPLINE: PHYSICAL SCIENCES  MAJOR FIELD: CHEMISTRY, GENERAL					
SALARY: 47348 513 188 FAC MIX	35053 265 147	29471 230 142	27386 38 34	23650 18 17	39749 1026 235
PCT: 0.50 SALARY	0.26	0.22	0.04	0.02	1.00
FACTOR: 1.00	0.95	0.96	0.92	0.98	1.06
ALL MAJOR FIELDS					
AVERAGE SALARY: 47397 9026	26965 0774	20681			
FAC MIX PCT: 0.32	36865 8771	30621 9004	29870 1476	24196 1808	37422 28609 265
101: U.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 chemistry was reported in 180 of the 210 state (AASCU) institutions. The average salary of the 1,435 faculty was \$34,754. This average salary was approximately 7 percent (1.07%) 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 chemistry was reported in 18% of the same 210 state (AASCU) institutions. The average salary of the 1,510 faculty was \$40,750. This average salary was approximately 7 percent (1.07%) 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 chemistry after three years in the state institutions studied was 17 3 percent (\$40,750 minus \$34,754 equals \$5,996). 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 3.5 percent or an average of 1.2 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 ALL MAJOR FIELDS (17.2%), therefore, the faculty in the discipline/major field of chemistry increased their salaries by 0.1 percent (17.3% minus 17.2% equals 0.1%) more than faculty in ALL MAJOR FIELDS. 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 chemistry 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; 0.53 vs. 0.20 (1986-87) respectively; and 0.54 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 chemistry in both state studies.

Finally, the hiring rate of new assistant professors in chemistry is moderate in the state studies: 3.3 percent (47/1,435) 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 chemistry in 1989-90 was 4.6 percent (69/1,510) 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 chemistry is lower than for ALL MAJOR FIELDS in 1986-87 and 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 chemistry was reported in 233 of the 265 private institutions. The average salary of the 1,013 faculty was \$33,612. This average salary was approximately 7 percent (1.07%) higher than the average salary of \$31,411 for all 27,429 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 chemistry was reported in 235 of the same 265 private institutions. The average salary of the 1,026 faculty was \$39,749. This average salary was approximately 6 percent (1.06%) 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 chemistry after three years in the private institutions studied was 18.2 percent (\$39,749 minus \$33,612 equals \$6,137). The CPI of increased cost-of-living between October 1987 and October 1989 was 13.8 percent. A more realistic increase, therefore, in average faculty salaries over the three-year time period is 4.4 percent or 1.5 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 chemistry (18.2%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 0.9 percent (19.1% minus 18.2% equals 0.9%) more than faculty in the discipline/major field of chemistry.

Because the discipline major field of chemistry 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: 0.49 vs. 0.22 (1986-87) respectively; and 0.50 vs. 0.22 (1989-90) respectively. This differs from ALL MAJOR FIELDS; FAC MIX PCT are equal or nearly equal 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 chemistry in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in chemistry in the 1986-87 private study was lower than the hiring rate in ALL MAJOR FIELDS; 3.4 percent (42/1,013) vs. 4.7 percent (1,279/27,429) respectively; and in the 1989-90 private study, quite lower: 3.7 percent (38/1,026) vs. 5.2 percent (1,476/28,609) respectively.



#### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of chemistry 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 4,984 (3.1%) faculty in the discipline/major field of chemistry 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 average faculty salary in the discipline/major field of chemistry is currently (1989-90) some 7 percent above the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for chemistry in the private institutions was 3.4 percent lower in actual dollars than that in the state institutions in 1986-87. The overall salary average in the private institutions is now (1989-90) only 2.5 percent less than that in the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in chemistry, in both the state and private institutions, received slight overall salary increases for three years above the cost-of-living. Chemistry faculty salaries in both the state and private institutions were some 6 and 7 percent ahead of faculty in ALL MAJOR FIELDS at the end of this same period.



Third, since the discipline/major field of chemistry 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 both the state and private institutions. It seems a healthy percentage of new assistant professors are being hired 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 salary-trend analysis will be effected in chemistry, and in other disciplines/major fields, on an annual basis.

## APPENDICES:



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 Donald W. Sink is a professor of chemistry and dean of the College of Arts & Sciences at Appalachian State University, Boone, North Carolina.

A - OVERALL LIST OF SELECTED DISCIPLINES, page 10

B - LIST OF STATE Participating Institutions, page 11

C - LIST OF PRIVATE Participating Institutions, page 14

#### A PENDIX A

#### OVERALL LIST OF SELECTED DISCIPLINES

ACCOUNTING PHILOSOPHY AND RELIGION

BUS'NESS 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

VISUAL AND PERFORMING ARTS

FOREIGN LANGUAGES

ENGINEERING

HOME ECONOMICS

**LETTERS** 

**GEOLOGY** 

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES TOTAL: 36

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 (VI) 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 (OR) East Tennessee State University (TN) East Texas State University (TX) East Texas State University at Texarkana (TX) Eastern Connecticut State University (CI) Rastern Illinois University (IL) Eastern Washington University (WA) Edinboro University of Pennsylvania (PA) Fitchburg State College (MA) Florida Atlantic University (FL) Fort Hays State University (RS) Francis Marion College (SC) 111 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 (HI) 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) Rearmey State College (NE) Reene State College (NH) Rennesav State University (GA) Kent State University (OH) Lake Superior State University (MI) Lamar University--Beaumont (TX) Langer 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) Hary Washington College (VA) Mayville State University (ND) Memphis State University (TN) Mesa State College (CO) Metropolitan State College (CO) Metropolitan State University (13) Hiddle Tennessee State University (TN) Hillersville University of Pennsylvania (KY) Mississippi Universit for Women (MS) Missouri Southern Stars College (MO) Hissouri Western State College (MO) Montana College of Mineral Science & Technology (MT) Montclair State College (NJ) Moorhead State University (MN)

Morehead State University (RY)



Morgan State University (MD) Murray State University (RY) New Mexico Highlands University (R4) North Adams State College (NA) North Carolina Central University (NC) Northeast Louisiana University (LA) Northeast Missouri State University (MO) Northeastern Illinois University (IL) Northeastern State University (OM) Northern Arizona University (AL) Northern Illinois University (72) Northern Kentucky University (Rt) Northern Hichigan University (MI) Northern State University (SD) Cakland University (MI) Old Dominion University (VA) Peru State College (NE) Pittsburg State University (RS) Plymouth State College (NH) Portland State University (CR) Radford University (VA) Rhode Is!and College (RI) Saginav Valley State University (MI) Salem State College (MA) See 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 (MD) Southeastern Louisiana University (LA) Southeastern Massachusetts University (MA) Southern College of Technology (GA) Southern Illinois University at Carbondale (IL) Southern Illinois University at Edwardsville (II.) 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 Prockport (NY) State University of New York College at Buffalo (NY) State University of New York College  $I_{I}$ at Fredonia (NY) State University of New York College at Old Westbury (NY)

State University of New York College at Potsdag (NY) Stephen F. Austin University (TX) Sul Ross State University (TX) Tennessee Technological University (IN) 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 Honticello (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 Rent (ME) University of Maryland Baltimore County (ND) 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 Roth Carolina at Wilmington (NC) University of Northern Colorado (CO) University of Northern Iowa (IA) University of North Texas (TX) University of Pittsturgh 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 Chattaneoga (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 Wisconsi: -- Eau Claire (WI) University of Wisconsin--Green Bay (WI)



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 (RS) 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 1-chnology (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 Chilege (OR) Western State College of Colorado (CO) Wichita State University, (RS) William Paterson College (NJ) Winston-Sales State University (NC)

## TOTAL: 210

## APPENDIX C

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

# Participating Institutions

Abilone Chaletian University (79)	Control College (18)
Abilene Christian University (TX) Albertus Magnus College (CT)	Central College (IA) Central Methodist College (MO)
Albion College (NI)	Central Wesleyan College (SC)
Alfred University (NY)	Chapgan College (PA)
Allegheny College (PA)	Christian Brothers College (IN)
Allentown College of St. Francis de Sales (PA)	Clark University (MA)
Alma College (MI)	Cogswell Polytechnical University (CA)
American University, The (DC)	Coker College (SC)
Acherst College (MA)	College of Hount Saint Vincent (NY)
Arma Haria College (MA)	College of Hount St. Joseph (OH)
Aquinas College (HI)	College of Saint Mary (NE)
Arkansas College (AR)	College of St. Scholastica (MN)
Asbury College (RY)	College of St. Thomas (MM)
Ashland University (OH)	College of the Holy Cross (MA)
Augustana College (IL)	College of Wooster, The (OH)
Aurora University (IL)	Concordia College (HN)
Avila College (NO)	Concordia College (NY)
Azusa Pacific University (CA)	Concordia Teachers College (NE)
Babson College (HA)	Cornell College (IA)
Baldwin-Wallace College (OH)	Covenant College (GA)
Bard College (NY)	D'Youville College (NY)
Barry University (FL)	Daniel Webster College (NH)
Beaver College (PA)	David Lipscomb College (TN)
Bellarmine College (RY)	Defiance College, The (M)
Bellevue College (NE)	Depaul University (IL)
Benedictine College (RS)	Dickinson College (PA)
Bethune-Cookman College (FL)	Dozne College (NE)
Birmingham-Southern College (AL)	Dominican College of Blauvelt (NY)
Boston University (MA)	Dordt College, Inc. (IA)
Bradley University (IL)	Drake University (IA)
Briar Cliff College (AL)	Drew University (NJ)
Bridgewater College (VA)	Drury College (MO)
Brigham Young University (UT)	Eastern Hennonite College and
Bryant College (RI)	Seminary (VA)
Bryn Hawr College (PA)	Eckerd College (FL)
Bucknell University (PA)	Elmhurst College (IL)
Butler University (IN)	Elmira College (NY)
Cabrini College (PA)	Embry-Riddle Aeronautical University (FI.)
Canisius College (NY)	Emerson College (MA)
Capital University (OH)	Emory & Henry College (VA)
Carroll College (MT)	Eureka College (IL)
Carroll College (WI)	Fairfield University (CT)
Catawba College (NC)	Fernus College (VA)
Catholic Theological Union (IL)	Fontbonne College (MO)
Catholic University of America, The (DC)	Franklin and Marshall College (PA)
Cedar Crest (PA)	Furman University (SC)
Cedarville College (OH)	George Fox College (OR)



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



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 (TM) 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 (1A) 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 COMMUNICATION TECHNOLOGIES

## FOR THE YEARS -

## 1986-87 AND 1989-90

By
Richard D. Howe
and
Patton 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 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 communication technologies. 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 communication technologies in the CIP is as follows:

A summary of groups of instructional programs that prepare individuals to support and assist communication professionals and skilled communication workers. Programs stress specialized, practical knowledge related to the mechanical, scientific, or technical aspects of communications. These groups include the technologies of educational media; motion picture; photography; and, radio and television production and broadcasting.\*

[Gerald S. Malitz, A <u>Classification of Instructional Programs</u> (Washington, D.C.: National Center for Education Statistics, [1985] p. 62.--10.)]

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



the discipline/major field of communication technologies 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 communication technologies faculty for both private and state participating institutions by rank, including "new assistant professor," 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. 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. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of 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 .26 for associate professor of communication technologies in the 1986-87 state study means that 26 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 0.89 for associate professors in the discipline/major field of communication technologies in the 1986-87 state study means that their salaries are 11 percent lower than the average of all associate 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 communication technologies 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



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NEW ASST ASSO ASST ALL RANKS INSTRUCTOR **PROF PROF** PROF PROF SALARY NUM N/IN DISCIPLINE: COMMUNICATION TECHNOLOGIES MAJOR FIELD: RADIO, TV PROD, & BROADCASTING TECH STATE. 1986-1987: AVERAGE 20403 10 29898 107 15 SALARY: 37164 9 29061 25197 32 11 23438 37 28 11 FAC MIX 1.00 0.30 0.04 0.09 PCT: 0.35 0.26 SALARY 0.95 0.92 0.89 FACTOR: 0.93 0.89 0.93 ALL MAJOR FIELDS AVERAGE 32611 51460 210 4423 27122 14268 26202 1869 21466 SALARY: 39819 17564 32676 15205 FAC MIX 0.09 1.00 0.30 0.28 0.04 0.34 PCT: DISCIPLINE: COMMUNICATION TECHNOLOGIES MAJOR FIELD: RADIO, TV PROD & BROADCASTING TECH STATE, 1989-90: AVERAGE 9 29556 24958 37892 85 SALARY: 48847 31 7 37631 19 8 29028 29 1 FAC MIX 1.00 0.22 0.34 0.01 0.07 PCT: 0.36 SALARY 0.99 FACTOR: 1.04 0.98 0.91 1.14 1.02 ALL MAJOR FIELDS **AVERAGE** 38213 55567 210 SALARY: 47023 18930 38532 15550 31853 16354 26030 2865 24499 4733 FAC MIX 0.05 0.09 1.00 PCT: 0.34 0.28 0.29 DISCIPLINE: COMMUNICATION TECHNOLOGIES MAJOR FIELD: RADIO, TV PROD, & BROADCASTING TECH PRIVATE, 1986-87: AVERAGE 82 27 SALARY: 31792 28992 24315 41 19 24880 7 22061 14 25880 12 10 15 10 FAC MIX PCT: 0.18 0.50 0.09 0.17 1.00 0.15 SALARY 0.82 0.95 1.00 1.07 FACTOR: 0.79 0.93 ALL MAJOR FIELDS **AVERAGE** 31411 27249 265 20566 1985 SALARY: 40015 8507 31131 8438 25483 8319 24917 1279 FAC MIX 0.05 0.07 1.00 PCT: 0.31 0.31 0.31 DISCIPLINE: COMMUNICATION TECHNOLOGIES MAJOR FIELD: RADIO, TV PROD, & BROADCASTING TECH PRIVATE, 1989-90: AVERAGE 35019 28106 10 20947 6 5 31268 68 19 SALARY: 40913 1. 1.7 10 29443 38 13 FAC MIX 0.09 1.00 0.15 PCT: 0.10 0.25 0.56 **SALARY** 0.94 0.87 0.84 FACTOR: 0.86 0.95 0.96 ALL MAJOR FIELDS **AVERAGE** SALARY: 47397 9026 36865 8771 30621 9004 29780 1476 24196 1808 37422 28609 265 FAC MIX 1.00 0.05 0.06 0.32 0.31 PCT: 0.31



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 communication technologies was reported in 15 of the 210 state (AASCU) institutions. The average salary of the 107 faculty was \$29,898. This average salary was approximately 8 percent (0.92%) 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 communication technologies was reported in 9 of the same 210 state (AASCU) institutions. The average salary of the 85 faculty was \$37,892. This average salary was about 1 percent (0.99%) 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 communication technologies after three years in the state institutions studied was 26.7 percent (\$37,892 minus \$29,898 equals \$7,994). 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 12.9 percent or an average of 4.3 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 state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of communication technologies (26.7%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 9.5 percent (26.7% minus 17.2% equals 9.5%) more than faculty in the discipline/major field of communication technologies.

The reader may note that the faculty mix percentage in communication technologies is higher at the professor rank than at the assistant professor rank

in both the state studies: 0.35 vs. 0.30 (1986-87) and 0.36 vs. 0.34 (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 percandage of professors and a lower percentage of assistant professors compared to communication technologies in both of the state studies.

Finally, the hiring rate of new assistant professors in communication technologies was higher in comparison to ALL MAJOR FIELDS in the 1986-87 state study: 3.7 percent (4/107) vs. 3.6 percent (1,869/51,460), respectively. The hiring rate of new assistant professors in communication technologies in 1989-90, however, was less than that of ALL MAJOR FIELDS: 1.2 percent (1/85) 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 communication technologies was reported in 27 of the 265 private institutions. The average salary of the 82 faculty was \$25,880. This average salary was approximately 18 percent (0.82) 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 communication technologies was reported in 19 of the same 265 private institutions. The average salary of the 68 faculty was \$31,268. This average salary was approximately 16 percent (0.84) 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 communication technol-



ogies after three years in the private institutions studied was 20.8 percent (\$31,268 minus \$25,880 equals \$5,388). 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 percent or 2.3 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 communication technologies (20.8%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.7 percent (20.8% minus 19.1% equals 1.7%) less than faculty in the discipline/major field of communication technologies.

In the discipline/major field of communication technologies, the rea er may note that the faculty mix percentage at the professor rank is lower than at the assistant professor rank in the 1986-87 private studies: 0.15 vs. 0.50, respectively; and also lower in the 1989-90 private studies: 0.10 vs. 0.56, 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 compared to communication technologies in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in communication technologies in the private studies was much greater than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 8.5 percent (7/82) vs. 4.7 percent (1,279/27,249), respectively; and in 1989-90, 14.7 percent (10/68) vs. 5.2 percent (1,476/28,609), respectively. In other words the hiring rate in the discipline/major field of communication technologies greatly exceeds that of ALL MAJOR FIELDS in both the private studies.

#### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of communication technologies 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 342 faculty in the discipline/major field of communicatio.: technologies 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 average faculty salary in the discipline/major field of communication technologies is currently (1989-90) some 1 and 16 percent below the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for communication technologies in the private institutions was approximately 10 percent less in comparison to that in the state institutions 1986-87. The overall salary average in the private institutions is now (1989-90) 15 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 communication technologies, in both the state and private institutions, received overall salary increases for three years above the cost-of-living. Communication technologies faculty salaries in the state institutions lagged slightly behind faculty salaries in ALL MAJOR FIELDS during this same period and faculty in the private institutions were much behind.



Third, in the discipline/major field of communication technologies the assistant professor rank has a lesser percentage compared to the full professor rank for the state studies but is much greater for the private studies. The full professor rank appears to be increasing rather slowly in the state institutions and declined dramatically in the private institutions. It seems a smaller percentage of new assistant professors in communication technologies are being hired in the state institutions but just the opposite is true in 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 communication technologies, 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 Patton Reighard is professor of communication arts and assistant dean of the College of Fine & Applied Arts 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

TOTAL: 36

MUSIC

NURSING



#### APPENDIX B

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

#### Participating Institutions

Adams State College (CO) Georgia College (GA) Alabama State University (AL) Georgia Southern College (GA) Albany State College (GA) Glenville State College (WV) Angelo State University (TX) Grambling State University (LA) Appalachian State University (NC) Grand Valley State University (MI) Arkansas Tech University (AR) Narris-Stowe State College (MO) Auburn University at Montgomery (AL) Henderson State University (AR) Augusta College (GA) Hussacao University College (PR) Austin Peay State University (TN) Idaho State University (ID) Ball State University (IN) Illinois State University (IL) Bemidji State University (MN) Indiana State University (IN) Black Hills State University (SD) Indiana University of Pennsylvania (PA) Bluefield State College (WV) Jackson State University (MS) Bridgewater State College (MA) Jacksonville State University (AL) California State University, Bakersfield (CA) James Madison University (WV) California State University, Hayward (CA) Rearney State College (NE) California University of Pennsylvania (PA) Reene State College (NH) Castleton State College (VT) Kennesaw State University (GA) Central Connecticut State University (CT) Kent State University (ON) Central Missouri State University (MO) Lake Superior State University (MI) Central State University (OK) Lamar University--Beammont (IX) Central Washington University (WA) Lander College (SC) Chadron State College (NE) Lewis-Clark State College (ID) Christopher Newport College (VA) Lincoln University (MO) Citadel, (The) Military College of Livingston University (AL) South Carolina (SC) Longwood College (VA) Clarion University of Pennsylvania (PA) Louisiana State University in Shreveport (LA) Cleveland State University (OH) Louisiana Tech University (LA) College of Staten Island, The (NY) Maine Maritime Academy (ME) Columbus College (GA) Mansfield University of Pennsylvania (PA) Delta State University (MS) Marshall University (WV) Dickinson State University (ND) Mary Washington College (VA) East Central University (OK) Mayville State University (ND) East Tennessee State University (TN) Memphis State University (TN) East Texas State University (TX) Mesa State College (CO) East Texas State University Metropolitan State College (CO) at Texarkana (TX) Metropolitan State University (MN) Eastern Connecticut State University (CT) Middle Tennessee State University (TN) Eastern Illinois University (IL) Millersville University of Pennsylvania (KY) Eastern Washington University (WA) Mississippi University for Women (MS) Edinboro University of Pennsylvania (PA) Missouri Southern State College (MO) Fitchburg State College (MA) Missouri Western State College (MO) Florida Atlantic University (FL) Montana College of Mineral Science Fort Hays State University (KS) & Technology (MI) Prancis Marion College (SC) Muntclair State College (NJ) 1 , Prostburg State University (MD) Moorhead State University (MN) George Mason University (VA) Morehead State University (KY)



Morgan State University (MD)
Murray State University (RY)
New Mexico Highlands University (NH)
North Adams State College (MA)
North Carolina Central University (NC)
Northeast Louisiana University (LA)
Northeast Hissouri 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)
Saginav Valley State University (MI)
Salem State College (MA)
Sam Houston State University (TX)
Sen 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 Hissouri 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 Hissouri State University (MO)
Southwest State University (MN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (MR)
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)
or are mearing Aut.)

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 ASM University at Galveston (TX) Texas Woman's University (TX) Towson State University (MD) T. Jy 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)



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

ERIC

\*Full Text Provided by ERIC

## APPENDIX C

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

# Participating Institutions

Abilene Christian University (TX)	Central College (IA)
Albertus Magnus College (CT)	Central Methodist College (MO)
Albion College (MI)	Central Wesleyan College (SC)
Alfred University (NY)	Chapman College (PA)
Allegheny College (PA)	Christian Brothers College (TN)
Allentown College of St. Francis de Sales (PA)	Clark University (MA)
Alma College (MI)	Cogswell Polytechnical University (CA)
American University, The (DC)	Coker College (SC)
Amherst College (MA)	College of Mount Saint Vincent (NY)
Anna Maria College (MA)	College of Mount St. Joseph (OH)
Aquinas College (MI)	College of Saint Mary (NE)
Arkansas College (AR)	College of St. Scholastica (MN)
Asbury College (KY)	College of St. Thomas (MN)
Ashland University (OH)	College of the Holy Cross (MA)
Augustana College (IL)	College of Wooster, The (OH)
Aurora University (IL)	Concordia College (MN)
Avila College (NO)	Concordia College (NY)
Azusa Pacific University (CA)	Concordia Teachers College (NE)
Babson College (MA)	Cornell College (IA)
Baldwin-Wallace College (OH)	
Bard College (NY)	D'Youville College (NY)
Barry University (FL)	Daniel Webster College (NH)
Beaver College (PA)	David Lipscomb College (TN)
Bellarwine College (KY)	Defiance College, The (OH)
Bellevue College (NE)	Depaul University (IL)
Benedictine College (RS)	Dickinson College (PA)
Bethune-Cookman College (FL)	Dosne College (NE)
Birmingham-Southern College (AL)	Dominican College of Blauvelt (NY)
Boston University (MA)	Dordt College, Inc. (IA)
Bradley University (IL)	Drake University (IA)
Briar Cliff College (AL)	Drew University (NJ)
Bridgewater College (VA)	Drury College (MO)
Brigham Young University (UT)	Eastern Mennonite College and
Bryant College (RI)	Seminary (VA)
Bryn Mawr College (PA)	Eckerd College (FL)
Bucknell University (PA)	Elmhurst College (IL)
Butler University (IN)	Elmira College (NY)
Cabrini College (PA)	Embry-Riddle Aeronautical University (FL)
Canisius College (NY)	Emerson College (NA)
Capital University (OH)	Emory & Henry College (VA)
Carroll College (MT)	Eureka College (IL)
Carroll College (WI)	Fairfield University (CT)
Catawba College (NC)	Ferrum College (VA)
Catholic Theological Union (IL)	Fontbonne College (MO)
Catholic University of America, The (DC)	Franklin and Marshall College (PA)
Cedar Crest (PA)	Furman University (SC)
Cedarville College (OH)	George Fox College (OR)
· ··· = · = · · · · · · · · · · · · · ·	ANTENION COLLEGE (CV)



George Washington University, The (DC)	Merdith College (NC)
Georgetown University (DC)	Herrimack College (MA)
Georgian Court College (PA)	Milliken University (IL)
GMI Engineering & Management Institute (MI)	Missouri Baptist College (MO)
Gonzaga University (WA)	Monmouth College (NJ)
Gordon-Conwell Theological Seminary (MA)	Moravian College (PA)
Grace College & Theological Seminary (IN)	Morris Brown College (GA)
Guilford College (NC)	Hount Hercy College (IA)
Ramline University (MN)	Hount Saint Mary's College (MD)
Hampton University (VA)	Hount St. Clare College (IA)
Hawaii Pacific College (HI)	Mount Union College (OH)
Heidelberg College (OH)	Mount Vernon College (DC)
Hiram College (OH)	Muskingum College (OH)
Holy Names College (CA)	Mazarene Theological Seminary (F /
Rood College (MD)	Neumann College (PA)
Muston-Tillotson College (TX)	North Central College (IL)
Iona College (NY)	Northeastern University (MA)
Ithaca College (NY)	Northland College (WI)
John Carroll University (OH)	Northwestern College (IA)
Johns Hopkins University, The (MD)	Northwestern College (MN)
Juniata College (PA)	Norwich University (VI)
Ralamazoo College (MI)	Notre Dame College (NH)
Kenyon College (OH)	Notre Dame College (OH)
King's College (PA)	Notre Dame Seminary (LA)
La Roche College (PA)	Ohio Northern University (OH)
Le Tourneau College (TX)	Ottawa University (RS)
Lebanon Valley College (PA)	Otterbein College (OH)
Lewis & Clark College (OR)	Our Lady of the Holy Cross College (LA)
Lincoln Memorial University (TN)	Our Lady of the Lake University (TX)
Linfield College (OR)	Paine College (GA)
Loras College (IA)	Palm Beach Atlantic College (FL)
Louisiana College (LA)	Park College (MO)
Loyola College in Maryland (MD)	Parks College of St. Louis University (IL)
Luther College (IA)	Pepperdine University (CA)
Lutheran Theological Seminary at Gettysburg (PA)	Piedmont College (GA)
Lycowing College (PA)	Pikeville College (KY)
Lynchburg College (VA)	Polytechnic University (NY)
Hadonna College (HI)	Presbyterian College (SC)
Malone College (OH)	Principia College (IL)
Hanhattan Christian College (KS)	Quincy College (IL)
Hanhattanville College (NY)	Randolph-Macon Woman's College (VA)
Marietta College (OH)	Reed College (OR)
Marist College (NY)	Reformed Bible College (MI)
Hars Hill College (NC)	Regis College (MA)
Mary Baldwin College (VA)	Remsslaer Polytechnic Institute (NY)
Marymount College (NY)	Rhode Island School of Design (RI)
Marywood College (PA)	Rider College (NJ)
Hemphis Theological Seminary (TN)	Rosnoke College (VA)
Mercer University (GA)	Rockford College (IL)
Mercy College (NY)	Rockhurst College (MO)
Mercy College of Detroit (MI)	Rocky Mountain College (MT)
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Rose-Hulman Institute of Technology (IR) Russell Sage Coilege (NY) Secred Heart University (CT) Saint John's University (HN) 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 (VI) Sales 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 (RY) Springfield College (NA) 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) Susquehamma 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) . 1 University of Hartford (CT)

University of La Verne (CA) University of Mismi (FL) University of Portland (OR) University of Richmond (VA) University of Rio Grande (OH) University of San Diego (CA) University of the South 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 COMMUNICATIONS

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Patton 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 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 communications. 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 communications in the CIP is as follows:

A summary of groups of instructional programs that describe the creation, transmission, and evaluation of messages.

[\*Gerald S. Malitz, A <u>Classification of Instructional Programs</u> (Washington, D.C.: National Center for Education Statistics, [1985], p. 61.--09.)]

This article presents a summary of the overall average salary increases in the discipline/major field of communications 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 these 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 communications 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. 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. It does not include any faculty members teaching less than 51 percent. Salary for summer academic work, fringe benefits, and perquisites are not included in the salary data. The average salary is based on the study information with the assumption that all employees were full-time. The average salary displayed is an average of 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 .28 for associate professor of communications in the 1986-87 state study means that 28 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 professors in the discipline/major field of communications in the 1986-87 state study means that their salaries are 2 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 communications 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.



	PR SALARY	ROF NUM N	/IN		iso Rof Num n/1	n sai	ASST ASST PROF PROF SALARY NUM N/IN SALARY NUM N/IN			/IN	INSTR SALARY	UCTOR NUM N	/IN		RANKS NUM N/IN		
STATE.	1986-87	<u>':</u>								municat Prunicat							
	: 38831	264	97	31264	326 13	.5 2!	5652	392	121	24697	60	43	20846	196	7 <b>9</b>	29358	1178 139
FAC NI PCI:	0.22			0.28		(	0.33			0.05			0.17			1.00	
SALARY FACTOR				0.96		(	0.95			0.94			0.97			0.90	
								ALL MA	JOR	FIELDS							
AVERAG		17564		99676	15705	0.	7100	1/0/0		26202	1869		21466	4423		22611	51460 210
FAC NI		1/304		32676	13203			14268		0.04	1007		0.09	4423		1.00	J1460 Z10
PCT:	0.34			0.30			0.28 Mect	DITME.	CON	MUNICAT:	TONG		U.U <del>3</del>			1.00	
STATE,	1989-90	<u>):</u>								MUNICAT							
	: 45249	287	104	36845	367 12	2 29	9684	489	130	28334	88	53	24169	217	87	34021	1360 147
PCT: SALARY	0.21			0.27		(	0.36			0.06			0.16			1.00	
FACTOR	: 0.96			0.96		(	0.93			1.09			0.99			0.89	
								ALL MA	JOR	FIELDS							
AVERAG SALARY	E : 47023	18930		38352	15550	3	1853	16354		26030	2865		24499	4733		38213	55567 210
FAC MI PCT:	X 0.34			0.28		(	0.29			0.05			0.09			1.00	
		,	_		•					AG MIT G + 47	<b>S</b> ava			<u></u>			<del></del>
	E. 1986-	<u>-87:</u>								municat Municat							
AVERAG SALARY FAC MI	: 36126	118	57	30775	166 8	31 2	4319	222	87	23800	36	28	19962	63	45	28187	569 126
PCT: SALARY	0.21			0.29		(	0.39			0.06			0.11			1.00	
	: 0.91			0.99		(	0.95			0.96			0.97			0.90	
								ALL MA	JOR	FIELDS							
AVERAG SALARY FAC NI	: 40015	8507		31131	8438	2	5483	8319		24917	1279		20566	1985		31411	27249 265
PCT:	0.31			0.31		(	0.31			0.05			0.07			1.00	
	E, 1989-	<u>-90:</u>								MUNICAT MUNICAT							
	: 43872	137	69	36702	227	95 28	8446	316	119	26351	54	38	23231	90	57	33015	770 155
FAC MI	0.18			0.29		;	0.41			0.07			0.12			1.00	
SALARY FACTOR	: 0.93			1.00		(	0.93			0.88			0.96			0.88	
								ALL M	JOR	FIELDS							
AVERAG	E : 47397	9026	1	36865	8771	2:	0261	9004		29780	1476		24196	1808		37477	28609 265
FAC MI PCT:		,,,,,	•	0.31			0.31	, uu-		0.05	2-71 U		0.06	2000		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 communications was reported in 139 of the 210 state (AASCU) institutions. The average salary of the 1,178 faculty was \$29,358. This average salary was approximately 10 percent (0.90%) 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 communications was reported in 147 of the same 210 state (AASCU) institutions. The average salary of the 1,360 faculty was \$34,021. This average salary was approximately 11 percent (0.89%) 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 communications after three years in the state institutions studied was 15.9 percent (\$34,021 minus \$29,358 equals \$4,663). 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 2.1 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 communications (15.9%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.3 percent (17.2% minus 15.9% equals 1.3%) more than faculty in the discipline/major field of communications.

The reader may note that the faculty mix percentage in communications is lower at the professor rank than at the assistant professor rank in both the state studies: 0.22 vs 0.33 (1986-87) and 0.21 vs 0.36 (1989-90), respectively. The differences in faculty mix percentage at the ranks of professor and assis-



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 communications in both of the state studies.

Finally, the hiring rate of new assistant professors in communications is high in the state studies: 5.1 percent (60/1,178) 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 communications in 1989-90 was 6.5 percent (88/1,360) 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 communications is more than for ALL MAJOR FIELDS in the state study of 1986-87. And, the hiring rate in the discipline/major field of communications is also higher than for ALL MAJOR FIELDS in the state study of 1986-87. And, the hiring rate

## 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 communications was reported in 126 of the 265 private institutions. The average salary of the 569 faculty was \$28,187. This average salary was approximately 10 percent (0.90%) 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 communications was reported in 155 of the same 265 private institutions. The average salary of the 770 faculty was \$33,015. 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 communications after



three years in the private institutions studied was 17.1 percent (\$33,015 minus \$28,187 equals \$4,828). 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 3.3 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 communications (17.1%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2 percent (19.1% minus 17.1% equals 2%) more than faculty in the discipline/major field of communications.

In the discipline/major field of communications, 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: 0.21 vs. 0.39 (1986-87), respectively; and 0.18 vs. 0.41 (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 communications in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in communications in the private studies was greater than the hiring rate in ALL MAJOR FIELDS both in 1986-87, 6.3 percent (36/569) vs. 4.7 percent (1,279/27,249), respectively; and in 1989-90, 7.0 percent (54/770) vs. 5.2 percent (1,476/28,609), respectively. In other words the hiring rate in the discipline/ major field of communications exceeds ALL MAJOR FIELDS in both the private studies of 1986-87 and 1989-90.



# CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of communications 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 3,262 faculty in the discipline/major field of communications 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 to made, a few of the more important ones are as follows. First, the average faculty salary in the discipline/major field of communications is currently (1989-90) approximately 11 percent and 12 percent below the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for communications in the private institutions was approximately the same in comparison to that in the state institutions in 1986-87. The overall salary factor in the private institutions is now (1989-90) 1 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 communications, in both state and private institutions, received overall salary increases for three years above the cost-of-living. However, communications faculty salaries in both the state and private institutions lagged behind those of ALL MAJOR FIELDS during this same period. Communications faculty in both state and private institutions have some catching up to do in salary in comparison to their colleagues in ALL MAJOR FIELDS.



Third, in the discipline/major field of communications the assistant professor rank has a greater percentage compared to full professor for both the state and private studies. The full professor rank appears to be decreasing in the state institutions, and decreasing more so in the private institutions. It seems a smaller percentage of new assistant professors in ALL MAJOR FIELDS are being hired in comparison to communications in both 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 communications, and in other disciplines/major fields, on an annual basis.

#### APPENDICES:



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 Patton Reighard is professor of communication arts and assistant dean of the College of Fine and Applied Arts at Appalachian State University, Boone, North Carolina.

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 RE' ITED PROGRAMS

CURRICULUM AND INSTRUCTION SOCIOLOGY

DRAMATIC ARTS SPECIAL EDUCATION

DRAWING SPEECH PATHOLOGY/AUDIOLOGY

EDUCATION STUDENT COUNSELING AND PERSONNEL

ENGINEERING

VISUAL AND PERFORMING ARTS

FOREIGN LANGUAGES

HOME ECONOMICS

LETTERS

GEOLOGY

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES TOTAL: 36

MUSIC

NURSING



#### APPENDIX B

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

#### Participating Institutions

Adams State College (CO) Georgia College (GA) Alabama State University (AL) Georgia Southern College (GA) Albamy State College (GA) Glenville State College (WV) Angelo State University (TX) Grambling State University (LA) Appalachian State University (NC) Grand Valley State University (MI) Arkansas Tech University (AR) Harris-Stove State College (MO) Auburn University at Montgomery (AL) Henderson State University (AR) Augusta College (GA) Humacao University College (PR) Austin Peay State University (TN) Idaho State University (ID) Ball State University (IN) Illinois State University (IL) Bemidji State University (MN) Indiana State University (IN) Black Hills State University (SD) Indiana University of Pennsylvania (PA) Bluefield State College (WV) Jackson State University (MS) Bridgewater State College (MA) Jacksonville State University (AL) California State University, Bakersfield (CA) James Madison University (WV) California State University, Hayward (CA) Kearney State College (NE) California University of Pennsylvania (PA) Keene State College (NH) Castleton State College (VI) Kennesaw State University (GA) Central Connecticut State University (CT) Rent State University (OH) Central Missouri State University (MO) Lake Superior State University (MI) Central State University (OK) Lamar University -- Beaumont (TX) Central Washington University (WA) Lander College (SC) Chadron State College (NE) Lewis-Clark State College (ID) Christopher Newport College (VA) Lincoln University (MO) Citadel, (The) Military College of Livingston University (AL) South Carolina (SC) Longwood College (VA) Clarion University of Pennsylvania (PA) Louisiana State University in Shreveport (LA) Cleveland State University (OH) Louisiana Tech University (LA) College of Staten Island, The (NY) Maine Maritime Academy (NE) Columbus College (GA) Mansfield University of Pennsylvania (PA) Delta State University (MS) Marshall University (WV) Dickinson State University (ND) Mary Washington College (VA) East Central University (OK) Mayville State University (ND) East Tennessee State University (TN) Memphis State University (TN) East Texas State University (TX) Mesa State College (CO) East Texas State University Metropolitan State College (CO) at Texarkana (TX) Metropolitan State University (MN) Eastern Connecticut State University (CT) Middle Tennessee State University (TN) Eastern Illinois University (IL) Millersville University of Pennsylvania (KY) Eastern Washington University (WA) Mississippi University for Women (MS) Edinboro University of Pennsylvania (PA) Missouri Southern State College (MO) Fitchburg State College (MA) Missouri Western State College (MO) Florida Atlantic University (FL) Montana College of Mineral Science Fort Hays State University (KS) & Technology (MT) Francis Marion College (SC) Montclair State College (NJ) 1 1 Frostburg State University (MD) Moorhead State University (MN) George Mason University (VA)



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Morehead State University (KY)

Horgan 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 (MD)
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)
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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)
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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 Alabams, 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)



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 (UI) West Choster 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



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## APPENDIX C

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

# Participating Institutions

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



George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Menagement Institute (MI)
Gonzaga University (WA)
Gordon-Conwell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Ramline University (MR)
Ampton University (VA)
Hawaii Pacific College (HI)
Heidelberg College (OH)
Hiram College (OH)
Holy Names College (CA)
Rood 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)
Renyon College (OR)
Ring's College (PA)
La Roche College (PA)
Le Tourneau College (TX)
Lebanon Valley College (PA)
Lewis & Clark College (CR)
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)
Hercer University (GA)
Hercy College (NY)
Mercy College of Detroit (MI)
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Merdith College (NC) Merrimsck College (MA) Milliken University (IL) Missouri Baptist College (MO) Monmouth College (NJ) Moravian College (PA) Morris Brown College (GA) Mount Hercy 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 (VI) 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) Rensslaer 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)



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 (VI) Sales 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) Siens 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 (IX) 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 (VI) 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) . 1 University of Hartford (CT)

University of La Verne (CA) University of Mismi (FL) University of Portland (OR) University of Richmond (VA) University of Rio Grande (OH) University of San Diego (CA) University of the South University of Tulsa (OK) Valparaiso University (IN) Viterbo College (WI) Walsh College (OH) Washington and Jefferson College (FA) Washington Bible College (ND) Wesleran 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 CURRICULUM AND INSTRUCTION FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Arthur Quickenton

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 curriculum and instruction. 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 curriculum and instruction in the CIP is as follows:

An instructional program that describes the theories, methods, and procedures of designing, controlling, developing, and integrating educational activities and programs.\*

[\*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 66.--13.0301.)]

This article presents a summary of the overall average salary increases in the discipline/major field of curriculum and instruction 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 curriculum and instruction 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 1982-1984 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 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 curriculum and instruction 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 a PRIVATE 1989-90. For example, a SALARY FACTOR of 0.98 for assistant professors in the discipline/major field of curriculum and instruction in the 1986-87 state study means that their salaries are approximately 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 curriculum and instruction 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.



NEW **ASSO ASST** ASST PROF INSTRUCTOR PROP PROF PROF ALL RANKS SALARY NUM N/IN DISCIPLINE: EDUCATION STATE. 1986-87: MAJOR FIELD: CURRICULUM AND INSTRUCTION AVERAGE SALARY: 39057 236 39 32423 195 39 21640 37 18 17 26669 135 33 23696 28 33069 603 43 FAC MIX PCT: 0.39 0.32 0.22 0.05 1.00 0.06 SALARY FACTOR: 0.98 0.98 1.01 0.99 0.90 1.01 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: EDUCATION PUBLIC. AVERAGE <u> 1989-90:</u> NAJOR FIELD: CURRICULUM AND INSTRUCTION **SALARY:** 45502 231 37727 183 43 44 31045 184 43 30241 32 20 24538 47 22 37644 645 48 FAC NIX PCT: 0.36 0.28 0.29 0.05 0.07 1.00 SALARY FACTOR: 0.97 0.98 0.97 1.00 0.99 1.16 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: EDUCATION PRIVATE, 1986-87: MAJOR FIELD: CURRICULUM AND INSTRUCTION AVERAGE **SALARY: 47337** 5 15 36365 24 27261 23 10 6 24759 7 5 20000 1 1 35394 63 12 FAC MIX PCT: 0.24 0.38 0.37 0.11 0.02 1.00 SALARY FACTOR: 1.18 1.17 1.07 0.99 0.97 1.13 ALL MAJOR FIELDS AVERAGE SALARY: 40015 8507 31131 8439 25483 8319 24917 1279 20566 1985 31411 27249 265 FAC MIX 0.31 PCT: 0.31 0.31 0.05 0.07 1.00 DISCIPLINE: EDUCATION PRIVATE. 1989-90: MAJOR FIELD: CURRICULUM AND INSTRUCTION AVERAGE **SALARY: 50178** 7 40212 20 27 8 31683 23 30000 8 1 1 40257 70 11 FAC MIX PCT: 0.29 0.39 0.33 1.00 0.01 SALARY FACTOR: 1.06 1.09 1.03 1.01 1.08 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 0.05 0.31 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 curriculum and instruction was reported in 43 of the 210 state (AASCU) institutions. The average salary of the 603 faculty was \$33,069. This average salary was approximately 1 percent (1.01%) 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 curriculum and instruction was reported in 48 of the same 210 state (AASCU) institutions. The average salary of the 645 faculty was \$37,644. This average salary was 1 percent lower than (.99%) 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 discipline/major field of curriculum and instruction after three years in the state institutions studied was 13.8 percent (\$37,644 minus \$33,069 equals \$4,575). 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 0.0 percent 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 curriculum and instruction (13.8%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 3.4 percentage points (17.2% minus 13.8% equals 3.4%) more than faculty in the discipline/major field of curriculum and instruction. 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 curriculum and instruction is higher at the professor rank than at the assistant professor



rank in both the state studies: 0.39 vs 0.22 (1986-87) and 0.36 vs 0.29 (1989-90), or an average of 1.1 percent per year, 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 in the 1986-87 study. However in the 1989-90 study, ALL MAJOR FIELDS has a lower percentage of professors and an equal percentage (29%) of assistant professors with curriculum and instruction.

Finally, the hiring rate of new assistant professors in curriculum and instruction in the 1986-87 state study was slightly higher than the hiring rate in ALL MAJOR FIELDS, 4.6 percent (28/603) vs. 3.6 percent (1,869/51,460), respectively. Currently, in 1990-91, the hiring rate in curriculum and instruction is slightly lower than the hiring rate in ALL MAJOR FIELDS, 5.0 percent (32/645) 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 curriculum and instruction was reported in 12 of the 265 private institutions. The average salary of the 63 faculty was \$35,394. This average salary was approximately 13 percent (1.13%) higher than the average salary of \$31,411 for all 27,249 faculty in ALL MAJOR FIELDS.

In the PRIVATE 1989-90 salary study in the above table, the discipline/major field of curriculum and instruction was reported in 11 of the same 265 private institutions. The average salary of the 70 faculty was \$40,257. This average salary was about 8 percent (1.08%) 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 curriculum and instruction after three years in the private institutions studied was 13.7 percent (\$40,257 minus \$35,394 equals \$4,863). 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 -0.1 percent or less than 0.1 percent each year less than 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 curriculum and instruction (13.7%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 5.4 percent (19.1% minus 13.7% equals 5.4%) more than faculty in curriculum and instruction. 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 curriculum and instruction, the reader may note that the faculty mix percentage at the professor rank was lower than at the assistant professor rank in the 1986-87 private study: 0.24 vs. 0.37, respectively; and was lower in the 1989-90 private study: 0.29 vs. 0.33, respectively. The faculty mix percentage at the professor rank was similar to the assistant professor rank for ALL MAJOR FIELDS for both private studies: 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 curriculum and instruction in the 1986-87 private study was higher than the hiring rate in ALL MAJOR FIELDS, 11.0 percent (7/63) vs. 4.6 percent (1,279/27,249), respectively. Also, in the 1989-90 private study, the hiring rate in curriculum and instruction was less than that for ALL MAJOR FIELDS, 1.4 percent (1/70) vs. 5.2 percent (1,476/28,609), respectively.



#### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/ major field of curriculum and instruction 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 1,381 of curriculum and instruction faculty discipline/major field in the 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 average faculty salary in the discipline/major field of curriculum and instruction is now, 1989-90, some 1 percent and 8 percent above the overall average faculty salaries in ALL MAJOR FIELDS in the state and private studies, respectively. The average faculty salary for curriculum and instruction in the private institutions was approximately 12 percentage points more compared to that in the state institutions in 1986-87 and in 1989-90. The overall salary factor in the private institutions is now (1989-90) 9 percent more above that for the state institutions.

Second, the CPI of October 1989, in comparison to the CPI of October 1986, indicates that the faculty in curriculum and instruction, in both the state and private institutions, received overall salary increases for three years at all above the cost-of-living. The "real" salaries of Curriculum and instruction faculty in the state institutions lagged behind faculty in ALL MAJOR FIELDS in 1989-90, but in the private institutions faculty salaries averaged eight percent above ALL MAJOR FIELDS.



Curriculum and instruction faculty in the state institutions have some catching up to do in salary in comparison to their colleagues in ALL MAJOR FIELDS.

Third, in the discipline/major field of curriculum and instruction there is a greater percentage of faculty in the assistant professor rank compared to the assistant professor rank in the state studies. In the private studies the full professor rank was much greater in comparison to the assistant professor rank both in the 1986-87 study and the 1989-90 study. The full professor rank appears to be slightly increasing in the private institutions, whereas the full professor rank appears to be slightly decreasing in the state studies and increasing in the private studies. 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 curriculum and instruction, 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 Arthur Quickenton is an associate professor of curriculum and instruction, 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 EFUCATION

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

ENGINEERING SERVICES

VISUAL AND PERFORMING ARTS

FOREIGN LANGUAGES

HOME ECONOMICS

**LETTERS** 

GEOLOGY

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES

MUSIC

NURSING

TOTAL: 36



#### 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)  $t_{-t}$ 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) Rearney 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)



Morgan State University (MD)
hurray State University (KY)
New Mexico Highlands University (NH)
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 U iversity (OK)
Northern Arizona University (A2)
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 (HN)
Southwest Texas State University (TX)
Southwestern Oklahoma State University (OK)
St. Cloud State University (NN)
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State University of New Yor: College at Brockport (NY)
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- · · · · · · · · · · · · · · · · · · ·
State University of New York College
State University of New York College at Buffalo (NY)
State University of New York College at Buffalo (NY) State University of New York College
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 Buffalo (NY) State University of New York College

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 ASM 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 HoustonClear 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 WisconsinEau Claire (WI)
University of WisconsinGreen Bay (WI)
The state of the s



University of Wisconsin--La Crosse (WI) University of Wiscensin--Oshkosh (WI) University of Wiscomsin--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 Rentucky University (RY) Western Michigan University (MI) Western Oregon State College (OR) Western State College of Colorado (CO) Wichita State University, (KS) William Faterson College (NJ) Winston-Salem State University (NC)

TOTAL: 210



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## APPENDIX C

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

# Participating Institutions

Abilene Christian University (TX)	Central College (IA)
Albertus Magnus College (CT)	Central Methodist College (MO)
Albion College (MI)	Central Wesleyan College (SC)
Alfred University (NY)	Chapman College (PA)
Allegheny College (PA)	Christian Brothers College (TN)
Allentown College of St. Francis de Sales (PA)	Clark University (MA)
Alma College (MI)	Cogswell Polytechnical University (CA)
American University, The (DC)	Coker College (SC)
Anherst College (MA)	College of Mount Saint Vincent (NY)
Anna Maria College (MA)	College of Mount St. Joseph (OH)
Aquinas College (MI)	College of Saint Mary (NE)
Arkensas College (AR)	College of St. Scholastica (MN)
Asbury College (KY)	College of St. Thomas (MN)
Ashland University (OH)	College of the Holy Cross (MA)
Augustana College (IL)	College of Wooster, The (OH)
Aurora University (IL)	Concordia College (NN)
Avila College (MO)	Concordia College (NY)
Azusa Pacific University (CA)	Concordia Teachers College (NE)
Babson College (MA)	Cornell College (IA)
Baldvin-Wallace College (OH)	Covenant College (GA)
Bard College (NY)	D'Youville Colline (NY)
Barry University (FL)	Daniel Webster College (NH)
Beaver College (PA)	David Lipscomb College (TN)
Bellarwine College (KY)	Defiance College, The (OH)
Bellevue College (NE)	Depaul University (IL)
Benedictine College (RS)	Dickinson College (PA)
Bethune-Cookman College (FL)	Doane College (NE)
Birmingham-Southern College (AL) Boston University (MA)	Dominican College of Blauvelt (NY)
Bradley University (IL)	Dordt College, Inc. (IA)
Briar Cliff College (AL)	Drake University (IA) Drew University (RJ)
Bridgewater College (VA)	Drury College (MO)
Brigham Young University (UT)	2 , ,
Bryant College (RI)	Eastern Hennonite College and Seminary (VA)
Bryn Mawr College (PA)	Eckerd College (FL)
Bucknell University (PA)	Elmhurst College (IL)
Butler University (IN)	Elmira College (NY)
Cabrini College (PA)	Embry-Riddle Aeronautical University (FL)
Canisius College (NY)	Emerson College (MA)
Capital University (OH)	Emory & Henry College (VA)
Carroll College (MT)	Eureka College (IL)
Carroll College (WI)	Fairfield University (CI)
Catavba College (NC)	Ferrum College (VA)
Catholic Theological Union (IL)	Fontbonne College (MO)
Catholic University of America, The (DC)	<del></del>
Cedar Crest (PA)	Franklin and Marshall College (PA)
Cedarville College (OH)	Furman University (SC)
cenaratile correse (ou)	George Fox College (OR)



George Washington University, The (DC)	Meredith College (NC)
George Cown University (DC)	Merrimack College (NA)
Georgian Court College (PA)	Milliken University (IL)
CMI Engineering & Management Institute (MI)	Missouri Baptist College (MO)
Gonzaga University (WA)	Monmouth College (NJ)
Gordon-Conwell Theological Seminary (MA)	Moravian College (PA)
Grace College & Theological Seminary (IN)	Morris Brown College (GA)
Guilford College (NC)	Mount Mercy College (IA)
Hamline University (MN)	Mount Saint Mary's College (MD)
Hampton University (VA)	Mount St. Clare College (IA)
Hawaii Pacific College (HI)	Mount Union College (OH)
Heidelberg College (CH)	Mount Vernon College (DC)
Hiram College (CH)	Muskingum College (OH)
Holy Names College (CA)	Nazarene Theological Seminary (MO)
Hood College (MD)	Neumann College (PA)
Huston-Tillotson College (TX)	North Central College (IL)
Iona College (NY)	Northeastern University (MA)
Ithaca College (NY)	orthland College (WI)
John Carroll University (OH)	Northwestern College (IA)
Johns Hopkins University, The (MD)	Northwestern College (MN)
Juniata College (PA)	Norwich University (VT)
Kalamazoo College (MI)	Notre Dame College (NH)
Kenyon College (OH)	Notre Dame College (OH)
King's College (PA)	Notre Dame Seminary (LA)
La Roche College (PA)	Ohio Northern University (OH)
Le Tourneau College (TX)	Ottawa University (KS)
Lebanon Valley College (PA)	Otterbein College (OH)
Lewis & Clark College (OR)	Our Lady of the Holy Cross College (LA)
Lincoln Memorial University (TN)	Our Lady of the Lake University (TX)
Linfield College (OR)	Paine College (GA)
Loras College (IA)	Palm Beach Atlantic College (FL)
Louisiana College (LA)	Park College (NO)
Loyola College in Maryland (MD)	Parks College of St. Louis University (IL)
Luther College (IA)	Pepperdine University (CA)
Lutheran Theological Seminary at Gettysburg (PA)	Piedmont College (GA)
Lycoming College (PA)	Pikeville College (KY)
Lynchburg College (VA)	Polytechnic University (NY)
Madonna College (MI)	Presbyterian College (SC)
Malone College (OH)	Principia College (IL)
Manhattan Christian College (KS)	Quincy College (IL)
Manhattanville College (NY)	Randolph-Macon Woman's College (VA)
Marietta College (OH)	Reed College (OR)
Marist College (NY)	Reformed Bible College (MI)
Mars Hill College (NC)	Regis College (MA)
Mary Baldwin College (VA)	Rensselser Polytechnic Institute (NY)
Marymount College (NY)	Rhode Island School of Design (RI)
Marywood College (PA)	Rider College (NJ)
Memphis Theological Seminary (TN)	Roanoke College (VA)
Mercer University (GA)	Rockford College (IL)
Mercy College (NY)	Rockhurst College (MO)
Mercy College of Detroit (MI)	Rocky Mountain College (MT)



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 DRAMATIC ARTS

# FOR THE YEARS

# 1986-87 AND 1989-90

By
Richard D. Howe
and
Linda D. Smith

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 dramatic arts. 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 dramatic arts in the CIP is as follows:

An instructional program that describes the development, theory, and processes of creating live performances through human expressive modalities.\*

\*Gerald S. Malitz, A <u>Classification of Instructional Programs</u> (Washington, DC.: National Center for Education Statistics, [1985], p. 158.--50.0501.)]

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



the discipline/major field of dramatic arts 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 dramatic arts 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 1982-1984 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 fulltime 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 dramatic arts 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 0.89 for assistant professors in the discipline/major field of dramatic arts in the 1986-87 state study means that their salaries are 11 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 dramatic arts 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



NEW ASSO ASST ASST **PROF PROF** PROF PROF INSTRUCTOR **ALL RANKS** SALARY NUM N/IN DISCIPLINE: VISUAL & PERFORMING ARTS STATE, 1986-87: MAJOR FIELD: DRAMATIC ARTS AVERAGE SALARY: 38939 168 78 30921 153 74 24184 207 87 22070 29 20837 25 49 34 29982 577 104 FAC MIX PCT: 0.29 0.27 0.36 0.05 0.08 1.00 SALARY FACTOR: 0.98 0.95 0.89 0.84 0.97 0.92 ALL MAJOR FIELDS **AVERAGE** SALARY: 39819 17564 32676 15205 27122 14268 26202 1869 21466 4423 32611 51460 210 FAC MIX 0.34 PCT: 0.30 0.28 0.04 0.09 1.00 DISCIPLINE: VISUAL & PERFORMING ARTS 1989-90: STATE. MAJOR FIELD: DRAMATIC ARTS AVERAGE SALARY: 44859 208 85 35317 197 85 28750 255 101 26826 64 43 23747 29 35034 704 119 FAC MIX PCT: 0.30 0.28 0.36 0.09 1.00 0.06 SALARY FACTOR: 0.95 0.92 0.90 1.03 0.97 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: VISUAL & PERFORMING ARTS PRIVATE 1986-87: MAJOR FIELD: DRAMATIC ARTS SALARY: 36633 56 28962 112 98 68 23504 167 91 21246 29 22 18991 30 29 27834 407 131 FAC MIX PCT: 0.24 0.28 0.41 0.07 0.07 1.00 SALARY FACTOR: 0.92 0.93 0.92 0.85 0.92 0.89 ALL MAJOR FIELDS **AVERAGE** SALARY: 40015 8507 31131 8438 25483 8319 20566 1985 24917 1279 31411 27249 265 FAC MIX PCT: 0.31 0.31 0.31 0.05 0.07 1.00 DISCIPLINE: VISUAL & PERFORMING ARTS PRIVATE, 1989-90: MAJOR FIELD: DRAMATIC ARTS AVERAGE SAT.ARY: 41851 100 ú2 33951 126 71 27562 152 88 26362 21 20 31 26 32665 414 133 23650 FAC MIX PCT: 0.24 0.30 0.38 0.05 0.07 1.00 SALARY FACTOR: 0.88 0.92 0.90 0.89 0.98 0.87 ALL MAJOR FIELDS **AVERAGE** SALARY: 47397 9026 36865 8771 30621 9004 29780 1476 24196 1808 37422 28609 265 FAC MIX 0.32 PCT: 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 dramatic arts was reported in 104 of the 210 state (AASCU) institutions. The average salary of the 577 faculty was \$29,982. This average salary was approximately 8 percent (0.92%) lower than the average salary of \$32,611 for all 51,460 faculty in ALL MAJOR FIELDS in the 1985-87 state study.

In the STATE 1989-90 salary study in the above table, the discipline/major field of dramatic arts was reported in 119 of the same 210 state (AASCU) institutions. The average salary of the 704 faculty was \$35,034. This average salary was approximately 8 percent (0.92%) lower than the average salary of \$38,232 for all 55,567 faculty in ALL MAJOR FIELDS in the 1989-90 state study.

The increase in average salaries for all faculty in dramatic arts after three years in the state institutions studied was 16.9 percent (\$35,034 minus \$29,982 equals \$5,052). 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 3.1 percent or an average of 1.0 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 therefore, the faculty in the discipline/major field of dramatic arts increased their salaries by 0.3% less, than the faculty in ALL MAJOR FIELDS (17.2% minus 16.9% equals 0.3%).

The reader may note that the faculty mix percentage in dramatic arts is lower at the professor rank than at the assistant professor rank in both the



state studies: 0.29 vs 0.36 (1986-87) and 0.30 vs 0.36 (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 dramatic arts in both of the state studies.

Finally, the hiring rate of new assistant professors in dramatic arts is high in the state studies: 5.0 percent (29/577) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1985-86. Also, the hiring rate of new assistant professors in dramatic arts in 1989-90 was 9.1 percent (64/704) 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 dramatic arts is more 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 dramatic arts was reported in 131 of the 265 private institutions. The average salary of the 407 faculty was \$27,834. This average salary was approximately 11 percent (0.89%) 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 dramatic arts was reported in 133 of the same 265 private institutions. The average salary of the 414 faculty was \$32,665. This average salary was approximately 13 percent (0.87%) 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 dramatic arts after three years in the private institutions studied was 17.4 percent (\$32,665 minus \$27,834 equals \$4,831). 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 3.6 percent or approximately 1.2 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 dramatic arts (17.4%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.7 percentage points (19.1% minus 17.4% equals 1.7%) more than faculty in the discipline/major field of dramatic arts. 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 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 field of dramatic arts at the professor rank is less than at the assistant professor rank in the private studies: 0.24 vs. 0.41 (1986-87), respectively; and 0.24 vs. 0.38,(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 dramatic arts in both private studies.

Finally, the reader may note that the hiring rate of new assistant professors in dramatic arts in the 1986-87 private study was higher than the hiring rate in ALL MAJOR FIELDS, 7.1 percent (29/407) vs. 4.7 percent (1,279/27,249),

respectively. However, in the 1989-90 state study the hiring rate of new assistant professors in dramatic arts was slightly less than that in ALL MAJOR FIELDS, 5.1 percent (21/414) vs. 5.2 percent (1,476/28,609), respectively.

# CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of dramatic arts 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 2,102 faculty in the discipline/major field of dramatic arts 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 average faculty salary in the discipline/major field of dramatic arts is currently (1989-90) some 8 and 13 percent below the overall average faculty salary of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for dramatic arts in the private institutions is approximately 3 percent less in comparison to that in the state institutions in 1986-87. The overall faculty salary average in the private institutions is now (1989-90) 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 dramatic arts, in both the state and private in-



stitutions, received overall salary increases for three years above the cost-of-living. Dramatic arts faculty salaries in both the state and private institutions lagged behind faculty in ALL MAJOR FIELDS during this same period.

Third, in the discipline/major field of dramatic arts, 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 slightly in the state institutions, compared to the private institutions. It seems a higher 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 studies will be effected in dramatic arts, and in other disciplines/major fields, on an annual basis.

#### APPENDICES:



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 Linda D. Smith is associate director of the Career Development Center at Appalachian State University, Boone, North Carolina.

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

VISUAL AND PERFORMING ARTS FOREIGN LANGUAGES

GEOLOGY

ENGINEERING

HOME ECONOMICS

**LETTERS** 

LIBRARY AND ARCHIVAL SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES TOTAL: 36

MUSIC

NURSING



#### APPENDIX B

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

#### Participating Institutions

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



Morgan State University (ND) Murray State University (RY) 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 1, at Predonia (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 AAM 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 Oklahosa (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)



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 (RS) 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 Culorado (CO) Wichita State University, (RS) William Paterson College (NJ) Winston-Salem State University (NC)

TOTAL: 210

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# APPENDIX C

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

# Participating Institutions

Abilene Christian University (TX)	Central College (IA)
Albertus Magnus College (CT)	Central Methodist College (MO)
Albien College (NI)	Central Wesleyan College (SC)
Alfred University (NY)	Chapman College (PA)
Allegheny College (PA)	Christian Brothers College (TN)
Allentown College of St. Francis de Sales (PA)	Clark University (MA)
Alma College (MI)	Cogswell Polytechnical University (CA)
American University, The (DC)	Coker College (SC)
Amherst College (MA)	College of Mount Saint Vincent (NY)
Anna Maria College (MA)	College of Mount St. Joseph (OH)
Aquinas College (HI)	College of Saint Mary (NE)
Arkansas College (AR)	College of St. Scholastica (MN)
Asbury College (RY)	College of St. Thomas (MN)
Ashland University (OH)	College of the Holy Cross (MA)
Augustana College (IL)	College of Wooster, The (OH)
Aurora University (IL)	Concordia College (MN)
Avila College (MO)	Concordia College (NY)
Azusa Pacific University (CA)	Concordia Teachers College (NE)
Babson College (MA)	Cornell College (IA)
Baldwin-Wallace College (OH)	Covenant College (GA)
Bard College (NY)	D'Youville College (NY)
Barry University (FL)	Daniel Webster College (NH)
Beaver College (PA)	David Lipscomb College (TN)
Bellarmine College (KY)	Defiance College, The (OH)
Bellevue College (NE)	Depaul University (IL)
Benedictine College (RS)	Dickinson College (PA)
Bethune-Cookman College (FL)	Doane College (NE)
Birmingham-Southern College (AL)	Dominican College of Blauvelt (NY)
Boston University (MA)	Dordt College, Inc. (IA)
Bradley University (IL)	Drake University (IA)
Briar Cliff College (AL)	Drew University (NJ)
Bridgewater College (VA)	Drury College (MO)
Brigham Young University (UT)	Eastern Mennonite College and
Bryant College (RI)	Seminary (VA)
Bryn Hawr College (PA)	Eckerd College (FL)
Bucknell University (PA)	Elmhurst College (IL)
Butler University (IN)	Elmira College (NY)
Cabrini College (PA)	Embry-Riddle Aeronautical University (FL)
Canisius College (NY)	Emerson College (MA)
Capital University (OH)	Emory & Henry College (VA)
Carroll College (MT)	Eureka College (IL'
Carroll College (WI)	Fairfield University (CT)
Catawba College (NC)	Ferrum College (14)
Catholic Theological Union (IL)	Fontbonne College (MO)
Catholic University of America, The (DC)	Franklin and Marshall College (PA)
Cedar Crest (PA)	Furman University (SC)
Cedarville College (ON)	Conros For Callege (OP)



George Washington University, The (DC)
Georgetown University (DC)
Georgian Court College (PA)
GMI Engineering & Management Institute (MI)
Gonzaga University (WA)
Gordon-Convell Theological Seminary (MA)
Grace College & Theological Seminary (IN)
Guilford College (NC)
Hamline University (MN)
Hampton University (YA)
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)
<del></del> • •
Marymount College (NY)
Marywood College (PA)  Mamphie Theological Seminary (TN)
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Morcor University (GA)
Mercy College (NY)
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Meredith College (NC) Merrimack College (MA) Milliken University (IL) Missouri Baptist College (NO) 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 (ON) 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 (NN) 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)



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 (VI) 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 FINE ARTS/DRAWING FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Linda D. Smith

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 fine arts/drawing. 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 fine arts/drawing in the CIP is as follows:

An instructional program that describes the aesthetic qualities, techniques, and creative processes for communicating ideas, feelings, and inner visions through representation by lines; a delineation of form without reference to color.\*

[\*Gerald S. Malitz, <u>A Classification of Instructional Programs</u> (Washington, DC.: National Center for Education Statistics, [1985], p.159.--50.705.)]



This article presents a summary of the overall average salary increases in the discipline/major field of fine arts/drawing 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 fine arts/drawing 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 the "real" salary increases is yielded.

The salary is based on a nine- or ien-month academic year salary of full-time faculty only. Full-time faculty members are those who teach 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 .34 for associate professor of fine arts/drawing in the 1986-87 state study means that 34 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 fine arts/drawing 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 fine arts with the entire data base for each study.

Of particular import to the reader is noting the size of the sample on



NEW ASST ASST **ASSO** PROF PROF **PROF** PROF INSTRUCTOR ALL RANKS SALARY RRM N/IN SALARY NUM N/IN DISCIPLINE: VISUAL & PERFORMING ARTS STATE, 1986-87: MAJOR FIELD: DRAWING AVERAGE SALARY: 37246 521 121 30600 485 129 25339 379 121 23541 51 39 31258 1436 146 45 36 20354 FAC MIX PCI: 0.36 0.34 0.26 0.03 0.04 1.00 SALARY FACTOR: 0.94 0.94 0.93 0.90 0.95 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 DISCIPLINE: VISUAL & PERFORMING ARTS STATE. 1989-90: MAJOR FIELD: DRAWING AVERAGE SALARY: 43514 522 116 35669 437 124 28781 359 117 26949 74 48 23728 59 32 36335 1377 137 FAC MIX 11. PCT: 0.38 0.05 0.32 0.26 0.04 1.00 SALARY FACTOR: 0.93 0.90 0.95 0.91 1.04 0.97 ALL MAJOR FIELDS AVERAGE SALARY: 47023 18930 31853 16354 38352 15550 26030 2865 24499 4733 38213 55567 210 FAC MIX PCI: 0.34 0.28 0.05 0.29 0.09 1.00 DISCIPLINE: VISUAL & PERFORMING ARTS PRIVATE. 1986-87: MAJOR FIELD: DRAWING AVERAGE 186 107 SALARY: 35230 28502 213 103 23295 190 105 21903 31 24 20710 35 26 28485 624 171 FAC MIX PCT: 0.30 0.34 0.05 0.30 0.06 1.00 SALARY FACTOR: 0.88 0.92 0.91 1.01 0.88 0.91 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 0.05 0.31 0.07 1.00 DISCIPLNE: VISUAL & PERFORMING ARTS PRIVATE. 1989-90: MAJOR FIELD: DRAWING AVERAGE SALARY: 41724 142 87 32462 178 112 27197 168 101 28888 24 18 23602 24 22 32888 512 163 FAC MIX PCT: 0.28 0.35 0.33 0.05 0.05 1.00 SALARY FACTOR: 0.88 0.88 0.89 0.97 0.98 0.88 ALL MAJOR FIELDS AVERAGE SALARY: 47397 9026 36865 8771 30621 9004 29780 1476 24196 1808 37422 28609 265 FAC MIX PCI: 0.32 0.31 10.31 0.05 0.06 1.00



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 fine arts/drawing was reported in 146 of the 210 state (AASCU) institutions. The average salary of the 1,436 faculty was \$31,258. 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 fine arts/drawing was reported in 137 of the same 210 state (AASCU) institutions. The average salary of the 1,377 faculty was \$36,335. This average salary was approximately 5 percent (0.95%) 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 fine arts/drawing after three years in the state institutions studied was 16.2 percent (\$36,335 minus \$31,258 equals \$5,077). 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 fine arts/drawing (16.2%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 1.0 percentage points (17.2% minus 16.2% equals 1.0%) more than faculty in the discipline/major field of fine arts/drawing. 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 fine arts/drawing was greater at the professor rank than at the assistant professor rank in the 1986-87 state study; 0.36 vs. 0.26, respectively. In the 1989-90 state study the full professor rank is still higher than the assistant professor rank; 0.38 vs. 0.26, 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 (1985-87) 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 fine arts/drawing in both of the state studies.

Finally, the hiring rate of new assistant professors in fine arts/drawing was low in the state studies: 3.1 percent (45/1,436) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Presently, the hiring rate of new assistant professors in fine arts/drawing is 5.4 percent (74/1,377) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS. In other words the hiring rate in the discipline/major field of fine arts/drawing is less than for ALL MAJOR FIELDS in the 1986-87 state studies and is slightly higher in the state studies of 1939-90.

# 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 fine arts/drawing was reported in 171 of the 265 private institutions. The average salary of the 624 faculty was \$28,485. This average salary was approximately 9 percent (0.91%) 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 fine arts/drawing was reported in 163 of the same 265 private institutions. The average salary of the 512 faculty was \$32,888. 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 fine arts after three years in the private institutions studied was 15.5 percent (\$32,888 minus \$28,485 equals \$4,403). 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 1.7 percent or 0.6 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 fine arts/drawing (15.5%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 3.6 percent (19.1% minus 15.5% equals 3.6%) more than faculty in the discipline/major field of fine arts/drawing. The inflation-adjusted increase for faculty in ALL MAJOR FIELDS was 5.3 percent or an average of 1.8



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percent per year over the three-year period.

The reader may note that the faculty mix percentage in the discipline/major field of fine arts/drawing is equal at the professor rank and at the assistant professor rank for 1986-87: 0.30 vs. 0.30, respectively. However, for 1989-90, the faculty mix percentange for fine arts/drawing is slightly lower at the professor rank than at the assistant professor rank: 0.28 vs. 0.33, respectively. This is slightly different than ALL MAJOR FIELDS for the private studies: 0.31 vs. 0.31 (1986-87), respectively; and 0.32 vs. 0.31 (1989-90), respectively.

Finally, the hiring rate of new assistant professors in fine arts/drawing was low in the state studies: 3.1 percent (45/1,436) in 1986-87 vs. 3.6 percent (1,869/51,460) in ALL MAJOR FIELDS in 1986-87. Presently, the hiring rate of new assistant professors in the fine arts/drawing is 5.4 percent (74/1,377) vs. 5.2 percent (2,865/55,567) in ALL MAJOR FIELDS. In other words the hiring rate in the discipline/major field of fine arts/drawing is less than for ALL MAJOR FIELDS in the 1886-87 studies and is slightly higher in the state studies of 1989-90.

#### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of fine arts/drawing 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 3,949 faculty in the discipline/major field of fine arts/drawing 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 fine arts/drawing is currently (1989-90) some 5 and 12 percent below the overall faculty salary factor of ALL MAJOR FIELDS for both the state and private studies, respectively. The average faculty salary for fine arts/drawing in the private institutions was approximately 5 percent less in comparison to that in the state institutions in 1986-87. The overall faculty salary average in the private institutions is now (1989-90) approximately 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 fine arts/drawing in both state and private institutions received overall salary increases for three years above the cost-of-living. The "real" salaries of fine arts/drawing faculty in both the private institutions have some catching up to do in salary in comparison with their colleagues in ALL MAJOR FIELDS.

Third, currently (1989-90) in the discipline/major field of fine arts/drawing the full professor rank is higher than the assistant professor rank in the state and and lower in the private institutions. It seems an average percentage of new assistant professors are being hired in 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 fine arts/drawing, 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 Linda D. Smith is associate director of the Offfice of Career Development at Appalachian State University, Boone, North Carolina.

#### APPENDICES:

A) OVERALL LIST OF SELECTED DISCIPLINES, page 10

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- 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 RDUCATION

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

TOTAL: 36

MUSIC

NURSING



#### APPENDIX B

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

#### Participating Institutions

Admin State College (CD) Alabama State University (AL) Albany State College (GA) Angelo State University (IX) Appalachian State University (NC) Arkansas Tech University (AR) Amburn University at Montgomery (AL) Augusta College (CA) Austin Peay State University (IN) Ball State University (IN) Braidji State University (HN) Black Hills State University (SD) Bisefield State College (WV) Bridgewater State College (MA) California State University, Bakersfield (CA) California State University, Hayward (CA) California University of Permsylvania (PA) Castleton State College (VI) Central Connecticut State University (CI) Central Missouri State University (MO) Central State University (OR) Central Washington University (WA) Chadron State College (NE) Christopher Newport College (VA) Citadel, (The) Hilltary College of South Carolina (SC) Ciarion University of Pennsylvania (PA) Cleveland State University (OR) College of Statem Island, The (NY) Columbus College (GA) Dolta State University (MS) Dickinson State University (ND) East Central University (OX) East Termessee State University (IN) East Texas State University (IX) East Texas State University at Texarkana (1X) Eastern Connecticut State University (CT) Enstern Illinois University (IL) Eastern Washington University (WA) Edinboro University of Pennsylvania (PA) Fitchburg State College (MA) Florida Atlantic University (FL) Cort Hoys State University (RS)  $^{\mathbb{F}}l_{\pmb{I}}$ Francis Marion College (SC) Frostburg State University (MD) George Mason University (VA)

Georgia College (GA) Georgia Southern Cours (GA) Clenville State College (WV) Grambling State University (IA) Grand Valley State University (HI) Marris-Stove 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 Permsylvania (PA) Jackson State University (MS) Jacksonville State University (AL) James Hadison University (WV) Rearney State College (NE) Reens State College (NH) Remesav State University (CA) Rent State University (OH) Lake Superior State University (MI) Lawer University -- Beaumont (TX) Lander College (SC) Levis-Clark State College (ID) Lincoln University (MO) Livingston University (AL) Longwood College (VA) Louisiana State University in Shrevepor: (LA) Louisians Tech University (LA) Maine Maritime Academy (MK) Hansfield University of Pennsylvania (PA) Harshall University (WV) Hary Washington College (VA) Mayville State University (ND) Memphis State University (TN) Mesa State College (CO) Metropolitan State College (CO) Metropolitan State University (MM) Hiddle Tennesses State University (TR) Hillersville University of Pennsylvania (RT) Hississippi University for Women (MS) Missouri Southern State College (MD) Hissouri Western State College (HD) Hontana College of Hineral Science & Technology (MI) Montciair State College (NJ) Hoorhead State University (MN)

Horehead State University (RY)

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Morgan State University (PD) Murray State University (K?) New Hexico Highlands University (NI) Morth Adams State College (MA) Morth Carolina Central University (NC) Northeast Louisiana University (LA) Northeast Missouri State University (MD) Northeastern Illinois University (IL) Mortheastern State University (OR) Northern Arizona University (AZ) Morthern Illinois University (IL) Morthern Rentucky University (RY) **Northern Nichigan University (HI)** Morthern State University (SD) Omkland University (MI) Old Dominion University (VA) Peru State College (NE) Pittsburg State University (RS) 344 Plymouth State College (NN) Portland State University (OR) Redford University (YA) Mode Island College (RI) Saginaw Valley State University (HI) Sales State College (MA) See Houston State University (1X) San Diego State University (CA) Sangamon State University (1L) Shepherd College (NY) Shippensburg University of Pennsylvania (PA) Slippery Rock University of Permaylvania (PA) School State University (CA) South bakets School of Mines & Technology (SD) Southeast Missouri State University (MD) Southeastern Louisians University (LA) Southeastern Massachusetts University (MA) Southern College of Technology (GA) Southern illinois University at Carbondale (11) Southern Illinois University at Edwardsville (IL) Southern Oregon State College (OR) Southwest Hissouri State University (NO) Southwest State University (MM) Southwest Texas State University (17) Southwestern Oklahoma State University (OR) St. Cloud State University (MM) State University of New York College At Brockport (AY) State University of New York College At Buffalo (MY) 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 Potadam (NY) Stephen F. Austin University (TX) Sui Ross State University (TX) Temessee Technological University (IN) Texas A&I University (TX) Texas ACM University at Calveston (TX) Texas Woman's University (TX) Towson State University (MD) Troy State University (AL) University of Akron, The (OII) University of Arkawans at Little Rock (AR) University of Arkansas at Honticello (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 Haine at Fort Rent (ME) University of Maryland Baltimore County (MD) University of Montevalle (AL) University of Mebrasks at Omedia (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 (NG) 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 Okiahous (OR) University of South Alabams, 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 Haine (HE) University of Southern Hississippi (MS) University of Southwestern Louisiana (LA) University of Tennessee at Chattanooga (IN) University of Tennessee at Hartin (IN) 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 Ciaire (WI) University of Wisconsin--Green Bay (WI)



University of Wisconsin--La Crosse (WI) University of Wisconsin--Oshkosh (W1) University of Wisconsin--Plattville (WI) Vaidosta State College (CA) Valley City State University (HD) Washburn University of Topeks (RS) Wayne State College (NZ) Weber State College (UT) West Chester State College (PA) West Georgia College (GA) Went Texas State University (TX) West Virginia institute of Technology (WV) West Virginia State Coilege (WV) Western Carolina University (NC) Western Connecticut State University (CI) Western illinois University (IL) ! Western Kentucky University (RT)
Western Michigan University (MI) Western Oregon State College (OR) Western State College of Colorado (CO) Wichita State University, (RS) William Paterson College (NJ) Winston-Sales State University (NC)

TOTAL 210

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## APPENDIX C

# CUPA Private (AASCU) Faculty Salary Studies: 1985-87 and 1989-90

#### Participating Institutions

Abilera Christian University (TX) Albertus Hagnus College (CI) Albian College (MI) Alfred University (NY) Allegheny College (PA) Allentown College of St. Francis de Sales (PA) Alms College (NI) American University, The (DC) Asherst College (NA) Asma Haria College (MA) Aquinas College (NI) Arkanass College (AR) Asbury College (RT) Baran. Ashland University (OH) Augustana College (IL) Amora University (1L) Avila College (NO) Axuss Pacific University (CA) Rabaon College (MA) Raidwin-Wallace College (OH) Bard College (NY) Barry University (FL) Beaver College (PA) Bellarmine College (RT) Bellerue College (NE) Menedictine College (RS) Betinne-Cooksan College (FL) Bitmingham-Southern College (AL) Boston University (NA) Bradley University (11) Brist Cilff College (AL) Bridgewater College (VA) Brigham Toung University (UI) Bryant College (R1) Bryn Hawx College (PA) Bucknell University (FA) Butler University (IN) Cabrial Coilege (PA) Canisius College (NY) Capital University (OH) Carroll College (Hr) Carroll College (W1) Catavba College (NC) Catholic Theological Union (IL) Cathelic University of America, The (DC) Codar Crest (PA) Cedarville College (OH)

Central College (IA) Central Methodist College (HO) Central Wasleyan College (SC) Chapman College (FA) Christian Brothers College (IN) Clark University (MA) Cogswell Polytechnical University (CA) Coker College (SC) College of Hount Saint Vincent (NY) College of Hount St. Joseph (OII) College of Saint Mary (NE) College of St. Scholastica (MN) College of St. Thomas (HN) College of the Noly Cross (MA) College of Wooster, The (OH) Concordia College (MN) Concordia College (NY) Concordia Teachers College (NE) Cornell College (1A) Covenant College (CA) D'Touville College (NY) Daniel Webster College (NII) David Lipscomb College (TN) Defiance College, The (Oil) Depaul University (II.) Dickinson College (PA) Dome College (NE) Dominican college of Binuvelt (NY) Dordt College, Inc. (1A) Drake University (IA) Drew University (MJ) Drury College (NO) Eastern Remonite College and Seminary (VA) Eckerd College (FL) Einhurst Coilege (IL) Eimira Coilege (NY) Embry-Riddle Aeronautical University (FL) Emerson College (MA) Emory & Henry College (VA) Eureka College (1L) Fairfield University (CI) Ferrum College (VA) Fontbonne College (HO) Franklin and Marshall College (PA) Furman University (SC) George Fox Cullege (OR)



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George Washington University, The (DC) Georgetown University (DC) Georgian Court College (PA) CMI Engineering & Management Institute (NI) Gonzaga University (WA) Gordon-Conveil Theological Seminary (MA) Grace College & Theological Seminary (IN) Guifford College (NC) Hamiline University (MN) Hampton University (VA) Navaii Pacific College (HI) Heidelberg College (CH) Hiram College (OH) Holy Names College (CA) Hood College (MD) Huston-Tillotson College (TX), ..... Iona College (NY) Ithaca Coilege (NY) John Carroll University (OII) Johns Hopkins University, The (HD) Juniata Coilege (PA) Kalamazoo College (NI) Kenyon College (Oil) King's College (PA) La Roche College (PA) Le Tournesu College (TX) Lebanon Valley College (PA) Levis & Clark College (OR) Lincoln Memorial University (IN) Linfield College (OR) Loras College (1A) Louisiana College (IA) Loyola College in Maryland (MD) Luther College (IA) Lutheran Theological Seminary at Gettysburg (PA) Lycoming College (PA) Lynchburg College (VA) Hadonna College (HI) Malone College (OH) Manhattan Christian College (RS) Hanhattanville College (NY) Marietta College (CH) Marist College (NY) Mars Hill College (NC) Hary Baldwin College (VA) Marymount College (NY) Marywood College (PA) Hempiles Theological Seminary (IN) 11 Mercer University (GA) Hercy College (NY) Hercy College of Detroit (MI)

Meredith College (NC) Merrimack College (MA) Hilliken University (II.) Missouri Baptist College (MO) Hormouth College (NJ) Moravian College (PA) Horris Brown College (GA) Mount Hercy College (IA) Mount Saint Mary's College (ND) Hount St. Clare College (1A) Hount Union College (OH) Mount Vernon College (DC) Huskingum College (CH) 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 (VI) Notre Dame College (NII) Notre Dame College (OH) Notre Dame Seminary (LA) Ohio Northern University (OH) Ottawa University (RS) 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) Pledmont College (GA) Pikeville College (KY) Polytechnic University (NY) Presbyterian College (SC) Principia College (IL) Quincy College (IL) Randolph-Hacon 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 (MU) Rocky Housitain College (MT)



Rose-Hulman Institute of Lechnology (IN) Russell Sage College (NY) Sacred Heart University (CT) Saint John's University (HN) Saint Joseph College (CI) Saint Joseph's College (IN) Saint Mary's College (MI) Saint Mary's College (MN) Saint Mary's College of California (CA) Saint Heinrad College (IN) Saint Michael's College (VI) 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 (1A) Skidmore College (NY) Southern California College (CA) Southwestern Assemblies of God College (TX) Spalding University (RY) 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) Taliadega College (AL) Taylor University (IN) Texas Christian University (TX) Transylvania University (RY) Tri-State University (IN) Trinity College (DC) Trinity College of Vermont (VI) Trinity University (TX) United Theological Seminary of the Twin Cities (NN) University of Charleston, The (SC) University of Dayton (OH) University of Detroit (MI) University of Dubuque Theological Seminary (1A) University of Findley, The (OH) University of Hartford (CT)

University of La Verne (CA) University of Hiami (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 (CA) West Virginia Wesleyan College (WV) Western Maryland College (HD) Westmar College (IA) Westminster College of Salt Lake City (UT) Westminster Theological Seminary (PA)

TOTAL: 265

# SALARY-TREND STUDY OF FACULTY IN EDUCATION

FOR THE YEARS

1986-87 AND 1989-90

By
Richard D. Howe
and
Steven L. Widenhouse

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 education. The disciplines were chosen from among those defined by the Higher Education General Information Study (HEGIS) Taxonomy and by <u>A Classification of Instructional Programs</u> (CIP), 1985. The definition of the discipline/major field of education in the CIP is as follows:

A summary of groups of instructional programs that describe the art or processes of imparting knowledge, developing the powers of reasoning and judgement, and preparing others intellectually for a more mature life.

[\*Gerald S. Malitz, A Classification of Instructional Programs (Washington, DC.: National Center for Education Statistics, [1985], p. 66.--13.)]

This article presents a summary of the overall average salary increases in the discipline/major field of education 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 education faculty for both state and private participating institutions by rank, including "new assistant rofessor," 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 1982-1984 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 change 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 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 education 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 1.00 for associate professors in the discipline/major field of education in the 1986-87 state study means that their salaries are less then 1 percent lower than the average salary of all associate 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 education 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 DISCIPLINE:		·		INSTRUCTOR SALARY NUM N/IN			RANKS NUM N/IN
STATE.	1986-8	<u> </u>					: EDUCATIO					
SALARY FAC MI	: 39601 X	887 104	32690	752 109	26351	538 98	25177	85 42	21163	150 51	33115	2327 113
PCT: SALARY	0.38		0.32		0.23		0.04		0.06		1.00	
FACTOR	: 0.99		1.00		0.97		0.96		0.99		1.02	
ALL MAJOR FIELDS												
AVERAGI SALARY: FAC MID	39819	17564	32676	15205	27122	14268	26202	1869	21466	4423	32611	51460 210
PCT:	0.34		0.30		0.28		0.04		0.09		1.00	
STATE, 1989-90: DISCIPLINE: EDUCATION MAJOR FIELD: EDUCATION												
AVERAGI SALARY: FAC MID	46646	744 100	37833	604 94	30592	593 96	29734	132 61	23376	111 44	38153	2052 106
PCI: SALARY	0.36		0.29	4	0.29		0.06		0.05		1.00	
FACTOR	: 0.9 <del>9</del>		0.99		0.96		1.14		0.95		1.00	
ALL MAJOR FIELDS												
	47023	18930	38352	15550	31853	16354	26030	2965	24499	4733	38213	55567 210
FAC MID PCT:	0.34		0.28		0.29		0.05		0.09		1.00	
			<del></del>						·-··		<del></del> .	
PRIVATE, 1986-87; DISCIPLINE: EDUCATION AVERAGE MAJOR FIELD: EDUCATION												
	37400	303 94	29483	314 107	24764	267 97	22542	37 31	22523	54 27	30296	938 145
PCT: SALARY	0.32		0.33		0.28		0.04		0.06		1.00	
<b>FACTOR</b> :	0.93		0.95		0.97		0.90		1.10		0.96	
ALL MAJOR FIELDS												
AVERAGE SALARY: FAC MIX	40015	8507	31131	8438	25483	8319	24917	1279	20566	1985	31411	27249 265
PCI:	0.31		0.31		0.31		0.05		0.07		1.00	
PRIVATE. 1989-90: DISCIPLINE: EDUCATION AVERAGE MAJOR FIELD: EDUCATION												
	43810	344 100	34879	355 118	28845	340 113	27591	65 55	24863	58 37	35279	1097 153
PCT: SALARY	0.31		0.32		0.31		0.06		0.05		1.00	
FACTOR:	0.92		0.95		0.94		0.93		1.03		0.94	
ALL MAJOR FIELDS												
	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 education was reported in 113 of the 210 state (AASCU) institutions. The average salary of the 2,327 faculty was \$33,115. 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 education was reported in 106 of the same 210 state (AASCU) institutions. The average salary of the 2,052 faculty was \$38,153. This average salary was approximately the same as 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 education after three years in the state institutions studied was 15.2 percent (\$38,153 minus \$33,115 equals \$5,038). 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 1.4 percent or an average of 0.5 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 state institutions studied was 17.2 percent (\$38,213 minus \$32,611 equals \$5,602). In comparison to the discipline/major field of education (15.2%), therefore, the faculty in ALL MAJOR FIELDS increased their salaries by 2.0 percentage points (17.2% minus 15.2% equals 2.0%) more than faculty in the discipline/major field of education. In "real" or inflationadjusted terms, faculty in ALL MAJORS FIELDS increased their slaries over the period by 3.4 percent.

The reader may note that the faculty mix percentages in education are higher at the professor rank than at the assistant professor rank for both of the state studies. The faculty mix percentages of professor and assistant



professor are 0.38 and 0.23 (1986-87) respectively; and 0.36 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 vs. 0.28 (1986-87), respectively; and 0.34 vs. 0.29 (1989-90) respectively. In other words ALL MAJOR FIELDS has a lower percentage of full professors and a higher or similar percentage of assistant professors when compared to education in both of the state studies.

Finally, the hiring rate of new assistant professors in education is very similar in the 1986-87 state study compared to ALL MAJOR FIELDS: 3.7 percent (85/2,327) vs. 3.6 percent (1,869/51,460), respectively. In 1989-90, however, the hiring rate of new assistant professors in education is higher than that of ALL MAJOR FIELDS: 6.5 percent (132/2,052) 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 education was reported in 145 of the 265 private institutions. The average salary of the 938 faculty was \$30,296. This average salary was approximately 4 percent (0.96%) 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 major field of education was reported in 153 of the same 265 private institutions. The average salary of the 1,097 faculty was \$35,279. This average salary was approximately 6 percent (0.94%) lower than 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 education after three



years in the private institutions studied was 16.4 percent (\$35,279 minus \$30,296 equals \$4,983). 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 2.6 percent or 0.9 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 ALL MAJOR FIELDS (19.1%), therefore, the faculty in the discipline/major field of education increased their salaries by 2.7 percent (19.1% minus 16.4% equals 2.7%) less than faculty in ALL MAJOR FIELDS. 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 in the field of education, the faculty mix percentage is rather similar at the professor rank and at the assistant professor rank in the private studies: 0.32 vs. 0.28 (1986-87), respectively; and 0.31 vs. 0.31 (1989-90), respectively. These proportions are also very similar to those at the same ranks for ALL MAJOR FIELDS in 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 education was lower than the hiring rate in ALL MAJOR FIELDS in the 1986-87 private study: 3.9 percent (37/938) vs. 4.7 percent (1,279/27,249), respectively, and higher in the 1989-90 private study: 5.9 percent (65/1097) vs. 5.2 percent (1,476/28,607), respectively. In other words the hiring rate in the discipline/ major field of education is greater than that for ALL MAJOR FIELDS in the 1989-90 private study.



#### CONCLUDING REMARKS

This article presented salary-trend information on the academic discipline/major field of education 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 6,414 faculty in the discipline/major field of education 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 average faculty salary in the discipline/major field of education is currently (1989-90) equal to and 6 percent lower in the state and private institutions, respectively, than the overall average faculty salary of ALL MAJOR FIELDS. The average faculty salary for education in the private institutions was lower 6 percentage points in comparison to that in the state institutions in 1986-87. The overall faculty salary average in the private institutions is now (1989-90), approximately 6 percent less compared to that for the state institutions.

Second, the CPI of October 1989, in comparison to the CFI of October 1986, indicates that the faculty in education, in both the state and private institutions, received overall salary increases for three years above the cost-of-living The "real" salaries of Education faculty in the state and private institutions lagged behind faculty salaries in ALL MAJOR FIELDS during



the same period, howeve. Education faculty in private institutions have some catching up to do in salary in comparison with faculty in ALL MAJOR FIELDS and their colleagues in the state institutions.

Third, in the discipline/major field of education, the assistant professor rank has a much lower percentage of faculty compared to the full professor rank in the state institutions for both 1986-87 and 1989-90, while in the private institutions this difference is much less pronounced. The full professor rank appears to be decreasing at a slightly faster rate in the state than in the private institutions. It seems that an increasing percentage of new assistant professors are being hired 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 salary-trend studies will be effected in education, 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 Steven L. Widenhouse is a research educationist in the Office of Equal Opportunity Programs 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

CHEMISTRY

PHILOSOPHY AND RELIGION

BUSINESS ADMINISTRATION AND MANAGEMENT

PHYSICAL EDUCATION

BUSINESS AND MANAGEMENT

PHYSICAL SCIENCES

BUSINESS ECONOMICS

**PHYSICS** 

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

ENGINEERING

SERVICES

FOREIGN LANGUAGES

VISUAL AND PERFORMING ARTS

**GEOLOGY** 

HOME ECONOMICS

**LETTERS** 

LIBRARY AND ARCHIVA, SCIENCES

LIFE SCIENCES

MATHEMATICS

MULTI-INTERDISCIPLINARY STUDIES

TOTAL: 36

MUSIC

NURSING

#### APPENDIX B

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

#### Participating Institutions

Admas State College (CO) Alabama State University (AL) Albany State College (GA) Angelo State University (1%) Appalachian State University (NC) Arkansas Tech University (AR) Auburn University at Hontgowery (24) Augusts College (CA) Austin Peay State University (TN) Ball State University (IN) Bemidji State University (MM) 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 (VI) Central Connecticut State University (CT) Central Missouri State University (MD) Central State University (OR) Central Washington University (WA) Chadron State College (NE) Christopher Newport Coilege (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 (CI) 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 (RS) Francis Harion College (SC) 1 11 Frostburg State University (MD) George Mason University (VA)

Georgia College (GA) Georgia Southern College (GA) Gienville State College (WV) Grambling State University (IA) Grand Tailey State University (MI) Harris-Stove State College (HD) Henderson State University (AR) Humacao University College (PR) Idaho State University (ID) Illinois State University (IL) Indiana State University (IN) Indiana University of Permsylvania (PA) Jackson State University (MS) Jacksonville State University (AL) James Madison University (WV) Rearney 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 (50) Lowis-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) Hary Washington College (VA) Mayville State University (ND) Memphis State University (TN) Hera State College (CO) Metropolitan State College (CO) Hetropolitan State University (MN) Hiddle Tennessee State University (TN) Hillersville University of Pennsylvania (KY) Hississippi University for Women (HS) Hissouri Southern State College (MO) Hissouri Western State College (HO) Montana College of Hineral Science & Technology (MI) Moniciair State College (NJ) Moorhead State Universit (MN)

Horehead State University (RY)



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Morgan State University (MD) **Murray State University (RY)** New Mexico Righlands University (RM) North Adams State College (MA) North Carolina Central University (NC) Northeast Louisians University (LA) Northeast Missouri State University (MD) Mortheastern Illinois University (IL) Northeastern State University (OR) Rorthern Arizona University (AZ) Northern Illinois University (IL) Northern Rentucky University ("Y) Northern Michigan University (MI) Rosthern State University (SD) Oakland University (MI) Old Dominion University (VA) Peru State College (NE) Pittsburg State University (RS) 40. Plymouth State College (四) Portland State University (OR) Radford University (VA) Rhode Island College (RI) Saginaw Valley State University (MI) Sales State Tollege (MA) Sam Houston State University (TX) San Diego State University (CA) Sangamon State University (1L) Shepherd College (WV) Shippensburg University of Pennsylvania (PA) Slippery Rock University of Pennsylvania (PA) Suroma State University (CA) South Dakota School of Mines & Technology (SD) Southeast Missouri State University (MD) Southeastern Louisiana University (LA) Southeastern Massachusetts University (MA) Southern Coilege 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 (FM) 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 fredenia (NY) State University of New York College at Old Westbury (NY)

State University of New York College at Potsdam (NY) Stephen I'. Austin University (TX) Sul Ross State University (TX) Tennessee Technological University (TN) Texas A&I University (TX) Texas AGN 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 Honticello (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 (ID) 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 (00) University of Northern Iowa (IA) Un versity of North Texas (IX) 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 Aiker (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 (IN) 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)



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 (RS) Wayne State College (NE) Weber State College (UI) 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 (CI) Western Illinois University (IL) Western Rentucky University (RY) Western Michigan University (MI) " Western Oregon State College (OR) Western State College of Colorado (CO) Wichita State University, (RS) William Paterson College (NJ) Winston-Sales State University (NC)

## TOTAL: 210

19 4



## APPENDIX C

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

## Participating Institutions

Abilene Christian University (TX)	Central College (IA)
Albertus Hagnus College (CT)	Central Hethodist College (HO)
Albion College (HI)	Central Wasleyan College (SC)
Alfred University (RY)	Chapman College (PA)
	Christian Brothers College (TN)
Allegheny College (PA)	_ , ,
Allentown College of St. Francis de Sales (PA)	Clark University (NA)
Aim College (HI)	Cogswell Polytechnical University (CA)
American University, The (DC)	Coker College (SC)
Amherst College (MA)	College of Mount Saint Vincent (NY)
Arma Haria College (MA)	College of Hount St. Joseph (OH)
Aquinas College (HI)	College of Saint Hary (NE)
Arkansas College (AR)	College of St. Scholastica (HN)
Asbury College (KY)	College of St. Thomas (FN)
Ashland University (OH)	College of the Holy Cross (MA)
Augustana College (IL)	College of Wooster, The (OH)
Aurora University (IL)	Concordia College (MN)
Avila College (NO)	Concordia College (NY)
Azusa Pacific University (CA)	Concordia Teachers College (NE)
Babson College (MA)	Cornell College (IA)
Baldwin-Wallace College (OH)	Covenant College (GA)
Bard College (NY)	D'Youville College (NY)
Barry University (FL)	Daniel Webster College (NH)
Beaver College (PA)	David Lipscomb College (TN)
Bellarmine College (KY)	Defiance College, The (OH)
Bellevue College (ME)	Depaul University (IL)
Benedictine College (RS)	Dickinson College (PA)
Bethume-Cookman College (FL)	Doame College (NE)
Birmingham-Southern College (AL)	Dominican College of Bimuvelt (NY)
Boston University (MA)	Dordt College, Inc. (IA)
Bradley University (II.)	Drake University (IA)
Briar Cliff College (AL)	Drew University (NJ)
Bridgewater College (VA)	Drury College (MO)
Brighen Young University (UT)	Eastern Menmonite College and
Bryant College (RI)	Seminary (VA)
Bryn Hawr College (PA)	Eckerd College (FL)
Bucknell University (PA)	Elmhurst College (IL)
Butler University (IN)	Elmira College (NY)
Cabrini College (PA)	Embry-Riddle Aeronautical University (FL)
Canisius College (NY)	Emerson College (HA)
Capital University (ON)	Emory & Henry College (VA)
Carroll College (NT)	Eureka College (IL)
Carroll College (WI)	Fairfield University (CT)
Catawba College (NC)	- ·
math 10. mt - 1 - 5 - 4 - 4 - 4 - 4 - 4	Ferrum College (VA)
Catholic introcates of imprior The 1993	Fontbonne College (MO)
Catholic University of America, The (DC) Cedar Crest (PA)	Franklin and Marshall College (PA)
•	Furman University (SC)
Cedarville College (OH)	George Fox College (OR)



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George Washington University, The (DC) Georgetown University (DC) Georgian Court College (PA) CMI 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) Labanon 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 (CH) Marist College (NY) Mars Hill College (NC) Mary Baldwin College (VA) Marymount College (NY) Marywood College (PA) 11 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 (NO) 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 (VI) 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) Pictmont College (GA) Pikeville College (KY) Poly schnic 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 Hountain College (MT)

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 (HI) Saint Mary's College (NN) Saint Mary's College of California (CA) Saint Meinrad College (IN) Saint Michael's College (VI) 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) Tailadega Coilege (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 (FA) 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** 

