

Armstrong Atlantic State University

Faculty Salary Study

March 6, 2012

Study Committee:

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Executive Summary

On April 8, 2011, Armstrong's President, Dr. Linda Bleiken established a committee representing the four colleges of the university, along with the Office of Institutional Research, with conducting a Faculty Salary Study. There were three priority areas of analysis for salary review, in descending order of priority: faculty with three or less years of service, salary inversions, and salaries by tier. This is a follow-up study to that generated by then-Vice President for Academic Affairs, Dr. Ellen Whitford, as a result of charging the Vice Chair of the former Executive Committee on December 4, 2007 to conduct a faculty salary study.

The 2008 committee agreed to use data from the College and University Professional Association for Human Resources (CUPA-HR) to conduct salary comparisons between Armstrong and peer institutions. The Armstrong Office of Institutional Research submitted the university's faculty salary data to CUPA-HR, and used CUPA-HR's DataOnDemand analysis tool to begin the process of reviewing salary data from Armstrong's peer group. The peer group was selected based on the following criteria: Public, Southern, Masters I, and Non-HBCU; including, for example, Appalachian State and College of Charleston. This returned a list of 45 institutions including Armstrong (Appendix A) and is the same comparison group used in the 2008 study.

The analysis was run by discipline and rank.¹ The resulting Armstrong means were then compared to the CUPA-HR means from our Comparator Group using the Multi-Discipline Report. The committee focused on rank-discipline areas in which the Armstrong salaries fell below the CUPA-HR mean. The committee employed a tiered approach that began considering those areas that were below 80% of the CUPA-HR mean, and assessing the cost to bring each of those areas up in 5% intervals. Example: Determine the level of funding required to bring those that were below 80% up to 80%; then that group would join the next tier, i.e. those below 85% of the CUPA-HR mean.

The committee also considered the cost of living in Savannah relative to the peer group. The most geographically comprehensive data on cost of living were available from Yahoo-Real Estate online. Based on this data, the cost of living in Savannah is 4.6% higher than the mean cost of living in cities where the remaining 44 institutions are found.

Priority 1 Findings: Faculty with 3 or Less Years of Service

Of 25 rank-discipline groupings for which data is available for faculty members with three or less years of service, 18 groupings are below the comparison group mean, while 7 groupings are at or above the mean. In the groupings in which compensation is at 95% or higher of the CUPA-HR mean, 9 of the 13 cases are for faculty members holding the rank of Instructor,

¹ Library faculty data were not included in this analysis. However, VP Thompson has communicated to the committee that this did not exclude library faculty from thorough administrative review and consideration of salary funding allocated for FY12. The committee recommends that library salaries receive formal consideration and inclusion in this report in future years.

while the other four cases in these relative higher compensated groupings are at the rank of Assistant Professor.

The committee found the cost effects of adjusting all salaries toward the mean of the comparison group (not including benefits of about 30% or including a regional cost of living adjustment of 4.6%) would be:

- \$235,394 to reach 100% of the mean
- \$87,112 to reach 95% of the mean
- \$15,314 to reach 90% of the mean
- \$198 to reach 85% of the mean

Priority 2 Findings: Salary Inversions

The committee reviewed salary inversion as an element of its charge. The committee identified 34 potential cases of inverted salaries (using rank-adjusted salary) that could require up to \$221,000 to remedy depending on whether the inversion warranted corrective action. The more pressing cases of four potential cross-rank salary inversions and eight inversions caused by newFY12 hires would require approximately \$35,000 to address, should they all warrant corrective action. The cost figures cited above do not include the cost of benefits or adjustment for the higher cost of living in Savannah.

Priority 3 Findings: Faculty Salary Tier Analysis

The Armstrong Atlantic State University Faculty Salary Study Committee using CUPA-HR data by discipline and rank compared Armstrong compensation to a set of peer group institutions. At Armstrong, there are 101 possible rank and discipline groups, for which comparable CUPA-HR was available for 65 groups. Armstrong is below the CUPA-HR mean of our peer institutions (see Appendix A) in 41 areas by discipline and rank groups and above the mean for 14 groups. The committee found all Armstrong groupings were above 72% of the CUPA-HR mean.

The committee found the cost effects of adjusting all salaries toward the mean of the comparison group (not including benefits of about 30% or including a regional cost of living adjustment of about 4.6%) would be:

- \$601,025 to reach 100% of the mean
- \$275,921 to reach 95% of the mean
- \$100,713 to reach 90% of the mean
- \$38,819 to reach 85% of the mean
- \$13,327 to reach 80% of the mean

The Faculty Salary Study Committee found that 14 Armstrong faculty in nine discipline and rank groups had the *lowest mean salary among* their 44 peer comparator institutions. The committee strongly recommends that these areas receive top priority for review and allocation of equity adjustments in salary. All of the areas listed can be adjusted to within 90% of the CUPA-HR mean for approximately \$45,425 (not including benefits or the cost of living adjustment).

The committee suggests that any supplemental funding for faculty salaries or redirection of institutional funds address the areas in a systematic way that will insure Armstrong salaries better align with those of the peer comparators.

This salary study should not be interpreted to suggest that faculty members ought to be paid at precisely the mean salary of their rank and discipline. There may be mitigating factors underlying why certain faculty members are paid below or above the mean salary for their rank and discipline. The formulaic methodology used by the salary study committee could not and did not consider these various mitigating factors. The findings reported in this document should be viewed as a starting point for further investigation on a case-by-case basis by relevant administrators (department head, dean, and vice president for academic affairs) in the chain of authority for a given faculty member to assess whether a salary adjustment is warranted.

Introduction: College and University Professional Association for Human Resources (CUPA-HR) and CIP Codes

In 2011, Armstrong Atlantic State University submitted data to the CUPA-HR National Faculty Salary Survey. This submission consisted of uploading a file that has aggregate faculty salary information by discipline and rank. Each discipline is identified according to Classification of Instructional Programs (CIP) Codes set by the National Center for Education Statistics established by the Department of Education. CUPA-HR uses four-digit CIP Codes.

Each faculty member at Armstrong was assigned a CIP Code upon hire at the institution. The CIP's purpose is to provide a taxonomic scheme that will support the accurate tracking, assessment, and reporting of fields of study and program completions activity. The file that is uploaded to CUPA-HR for analysis aggregates campus human resources data by discipline and rank, and produces a mean for each. The minimum and maximum salaries are also uploaded by discipline and rank. Once the file is submitted, CUPA-HR runs an edit process and the DataOnDemand product is released.

DataOnDemand is a CUPA-HR product that allows institutions to select comparison groups and then run reports for the selected comparators. The reports include mean and median salary by discipline and rank as well as a salary range. The data will show the percent at which the Focus Institution (Armstrong) differs from the CUPA-HR mean and median. DataOnDemand is a hands-on application that provides the institution and specific users direct access to survey data from institutions across the country. However, there are five restrictions for confidentiality:

- No salary data are linked to a given institution (except where a user has permission to see his/her institution's data).
- No salary data are reported for discipline and rank positions with fewer than five responding institutions.
- Weighted salary data are not reported for positions in which one institution's data represents more than 25% of the total incumbents.
- A comparison group must include a minimum of eight institutions that participate in the survey.
- Each comparison group created must differ by at least three institutions from all other existing and deleted comparison groups and the user's institution.

The committee used 2010-2011 data in the DataOnDemand tool to complete this study.

Tier Group Analysis

The study takes a tiered approach to addressing these salary equity issues. Initially, the areas that are the largest percentage below the CUPA-HR mean are identified, and then a salary adjustment is computed that would increase their salaries to those of the next tier above them, and so on until the areas are incrementally increased to the mean of the comparison group. All Armstrong means by rank and discipline are compared to the comparison group's mean of the same discipline and rank. The committee chose to work with the means because CUPA-HR provides only the means for the Focus Institution (Armstrong) and not the median salary for discipline and rank. However, the committee did run a separate analysis comparing medians that produced similar results.

Each tier identified will show those areas that are below 80%, from 80%-85%, from 85%-90%, from 90%-95%, and from 95% to 100% of the CUPA-HR mean. The analysis proceeds incrementally by identifying a given discipline and rank group in a tier which then migrates up into the next tier. (Hypothetical example: Assume the group "Assistant Professor of Biology" is at 76.7% of the CUPA-HR mean. The analysis will show the group in the first tier and it will show the amount of funds required to move the group to the next tier, which is 80% of the CUPA-HR mean. The group "Assistant Professor of Biology" would then be a member of the 80%-85% tier and the analysis would show the cost of moving all affected areas to 85% of the CUPA-HR mean). This approach will allow the university to work with internally redirected funds or any additional funds that the state may allocate and apply in a systematic and incremental approach to adjust the salaries of the discipline and rank groups that are at the greatest deviation below the comparable means of the rank and discipline groups of the peer institutions.

Priority 1: Faculty with Three or Fewer Years of Service

The top priority area under review for salary adjustment was for the faculty members with three or fewer years of service at Armstrong. The data set identifies these 95 faculty by discipline, and how they compare to the CUPA-HR mean. Of 25 rank-discipline groupings for which data is available for faculty members with three or less years of service, 18 groupings are below the CUPA-HR mean, while 7 groups are at or above the mean. In the groupings in which compensation is at 95% or higher of the CUPA-HR mean, 9 of the 13 cases are for faculty members holding the rank of Instructor.

| Table 1. Faculty with 3 or Fewer Years of Service By Rank-Discipline Group Percent of CUPA-HR Mean | | | | |
|---|------------|-----------------------------|----|--------------------------|
| CIP & DISCIPLINE | RANK | % of the CUPA-HR Mean | N | Lowest Among Peers |
| Tier I. Below 80%: | None | -- | 0 | |
| Tier II. 80% to 85% | | | | |
| 45.06 Economics | Assistant | 84.7 | 1 | X |
| Tier III. 85% to 90% | | | | |
| 13.13 Teacher Ed & Prof Dev, Subjects | Assistant | 86.9 | 4 | X |
| 13.13 Teacher Ed & Prof Dev, Subjects | Instructor | 87.9 | 1 | |
| 27.01 Mathematics | Assistant | 89.2 | 6 | |
| 54.01 History | Assistant | 89.5 | 6 | |
| 45.11 Sociology | Assistant | 89.8 | 1 | |
| Tier IV. 90% to 95% | | | | |
| 16.09 Foreign Languages, Literatures and Linguistics | Assistant | 91.5 | 2 | |
| 42.01 General Psychology | Assistant | 92.2 | 4 | |
| 26.01 General Biology | Assistant | 92.6 | 7 | |
| 43.01 Criminal Justice & Corrections | Assistant | 93.0 | 2 | |
| 40.08 Physics | Assistant | 93.6 | 3 | |
| 40.08 Physics | Instructor | 94.3 | 1 | |
| Tier V. 95% to 100% | | | | |
| 27.01 Mathematics | Instructor | 95.2 | 4 | |
| 51.16 Nursing | Assistant | 95.3 | 8 | |
| 23.01 General English | Instructor | 95.5 | 6 | |
| 13.10 General Education | Instructor | 95.8 | 1 | |
| 31.05 Health & Physical Education/Fitness | Instructor | 97.0 | 1 | |
| 51.16 Nursing | Assistant | 97.7 | 1 | |
| Groups Greater than 100% | | | | |
| 13.12 Teacher Ed & Prof Dev, Levels & Methods | Assistant | 100.0 | 11 | |
| 13.13 Teacher Ed & Prof Dev, Subjects | Instructor | 103.2 | 1 | |
| 23.01 General English | Instructor | 104.2 | 2 | |
| 40.05 Chemistry | Instructor | 104.3 | 5 | |
| 51.23 Rehabilitation & Therapeutic Professions | Assistant | 106.3 | 1 | |
| 42.01 General Psychology | Instructor | 108.0 | 1 | |
| 26.01 General Biology | Instructor | 112.2 | 2 | |

Given the Tier groups identified above, the aggregate cost to move each tier group to the bottom range of the next tier group is provided below. At Armstrong there are 18 rank-discipline groups for which compensation is less than the CUPA-HR mean for the comparison group. The total cost effect for this aggregate grouping (including those from Tier I, Tier II, Tier III, Tier IV, and Tier V) to adjust them to the CUPA-HR mean would be \$235,394 in salary adjustments (not including benefits or the cost of living adjustment).

| Table 2. Faculty with Three Years or Less Service: Tier, Number, Funds Required to Reach Next Tier | | | |
|---|--|---------|-------------------|
| | Number of Discipline- Rank Groups | % Range | Funds Required |
| Tier I. Less than 80% | 0 | To 80% | \$0 |
| Tier II. 80% to 85% | 1 | To 85% | \$198 |
| Tier III. 85% to 90% | 6 | To 90% | \$15,314 |
| Tier IV. 90% to 95% | 12 | To 95% | \$87,112 |
| Tier V. 95% to 100% | 18 | To 100% | \$235,394 |

Priority 2: Salary Inversions

Salary inversion is generally considered a troubling compensation issue, for it implies that faculty members with more years in service at an institution may, in fact, have lower salaries than recent faculty hires in the same discipline and rank group. This may be greatly demoralizing for the faculty member whose salary is truly inverted.

The identification of inverted salaries necessarily implies a direct comparison of one faculty member's salary to another faculty member's salary within a department both across ranks and within ranks. The differences in salary may be attributable to a large number of factors including, but not limited to rank, terminal degree, starting salary (market competition), years in service, responsibilities and duties, annual performance reviews, and specialty within discipline. It is beyond the charge to the Faculty Salary Study Committee to review all of these factors, and other pertinent issues, that may affect the salary of a given faculty member with respect to salary inversion. Nonetheless, the committee was charged with studying the matter of salary inversion in a general manner. Thus, with respect to salary inversion, the findings reported below are aggregated by college and school, and should be considered preliminary investigative findings. The findings reported below should be considered a starting point for further investigation on a case-by-case basis by relevant administrators (department heads, deans, and the vice president for academic affairs) in the chain of authority for a given faculty member.

In general, the methodology used to identify potential cases of inversion casts the widest net possible so as to avoid the error of overlooking potentially relevant cases. The committee chooses to err on the side of caution. While this methodology generates more cases for review by relevant administrators, the committee considers the trade-off of specificity vs. workload a meritorious one to make because of the potential demoralization of faculty members involved.

A case of potential salary inversion is said to be identified when, within a department,

- a faculty member holding lower rank has a higher salary than a faculty member holding a higher rank (e.g., associate pay exceeds full professor pay, or assistant pay exceeds associate pay.) This is defined as a case of cross-rank inversion; or
- a faculty member hired at a more recent date has a salary that exceeds the salary of a faculty member hired at an earlier date when both faculty members currently hold the same rank (e.g., assistant professor hired in 2007 has a higher salary than an assistant professor hired in 2006.) This is defined as a case of within-rank inversion, and it may hold within each rank considered (full professor, associate professor, and assistant professor).

Cross-rank inversions are cases that likely generate a great degree of demoralization for the faculty member involved, and thus should be relatively high priority cases when considered for further examination and remedy, where warranted. Within-rank inversions at the rank of assistant professor are likely to be driven by competitive market conditions affecting starting salary, but other factors may play a role as well. Within-rank inversions at the rank of associate professor and full professor are less likely to be driven by market competition, as compared to other factors such as duties and responsibilities, annual performance evaluations, and long term productivity over the course of a faculty member's career. This does not mean to imply that

cases of within-rank inversions among associate professors and full professors should be unilaterally discarded as lacking merit, but that they be assigned a lower priority in terms of investigation and remedy, where warranted.

The data used for this analysis is the 2010-11 Armstrong faculty salary data submitted to CUPA-HR. Also included are data for new faculty hires for the start of the FY12 year. The salaries studied included faculty with tenure and those on tenure track. The salaries of department heads were not included in the analysis. The data do not include non-tenure track teaching faculty, nor does it include administrators holding faculty appointments.

The methodology controls for rank by computing and comparing rank-adjusted salary. The rank-adjusted salary is computed by subtracting \$4,500 from a full professor’s salary. The salary is adjusted downward by \$4,500 to account for the \$2,000 incremental pay adjustment when being promoted from assistant to associate and the \$2,500 incremental pay adjustment when being promoted from associate to full professor. The salary for associate professors is adjusted downward by \$2,000 to account for the pay increment upon promotion to associate professor from assistant. The salary of assistant professors is not adjusted – their rank serves as the basis of comparison. The following example illustrates why this method was used:

An associate professor (Dr. A) hired in 2001 currently earns a salary of \$45,500. An assistant professor (Dr. B) in the same department was hired in 2006 and currently earns \$44,500. Although the assistant professor’s current salary is less than the associate professor’s salary, the associate’s pay has presumably been adjusted upward in the amount of \$2,000 upon promotion. The method of computing Dr. A’s rank-adjusted salary of \$43,500 is as follows: \$45,500 - \$2,000. This adjustment allows a more direct comparison to Dr. B’s rank-adjusted salary (\$44,500). Thus, if the two faculty members in question held the same rank, Dr. A’s salary would be inverted by \$1,000. Again, the methodology identifies this as a potential case of inversion that merits further investigation and, if warranted, a remedy in compensation.

Table 3. Potential Cases of Salary Inversions at Armstrong, 2010-11

| | Cross-Rank Inversions | Within-Rank Inversions: Full Professor | Within-Rank Inversions: Associate Professor | Within-Rank Inversions: Assistant Professor |
|--|----------------------------------|---|--|--|
| College or School | | | | |
| COE | 0 | 0 | 0 | 3 |
| COHP | 0 | 2 | 0 | 1 |
| COLA | 3 | 8 | 2 | 5* |
| CST | 1 | 2 | 5 | 5* |
| Totals, by type | 4 | 12 | 7 | 14 |
| *Inverted by new hire for FY12: COLA=4, CST=4. | | | | |
| All Cases: 37 total: 4 cross-rank, 33 within-rank (8 by new FY12 hires). | | | | |

As demonstrated in Table 3, a total of 37 potential cases of salary inversion were identified in the rank-adjusted salary data. Of these, four potential cases of cross-rank salary inversions were identified, three of which were in the College of Liberal Arts. Twelve potential cases of within-rank inversions were identified among full professors, seven potential cases were identified among associate professors, and fourteen potential cases were identified among assistant professors. Among assistant professors, 8 within-rank inversions exist because of hiring a new assistant at a higher salary than currently employed assistants. Four of each of these cases were in the College of Liberal Arts and the College of Science and Technology.

An estimate of the aggregate salary adjustment required to simply eliminate the inversions (\$1,000 to Dr. A in the above example) ranges from \$160,000 to \$221,000. The upper figure is unlikely to be relevant, for that is the salary adjustment required to remedy the inversion for all 37 cases. It is highly unlikely that all 37 cases warrant a salary adjustment to address the inversion. However, the more pressing cases of 4 cross-rank potential inversions would likely require approximately \$6,531 to remedy, while \$28,076 would be required to address cases where currently employed assistant professors will be inverted by new assistant professors for FY12. The approximate salary adjustment required to alleviate all with-rank inversions among professors is \$150,000; among associate professors is \$29,000; and among assistant professors is \$7,500 (in addition to the \$28,000 for inversions caused by new hires).

| | College Total | Cross Rank | Within- Rank Prof | Within- Rank Assoc | Within- Rank Asst | Within- Rank Asst By New Hire |
|-------|------------------|---------------|-------------------------|--------------------------|-------------------------|--|
| COE | 2,600 | - | - | - | 2,600 | - |
| COHP | 18,070 | - | 14,473 | - | 3,597 | - |
| COLA | 128,693 | 2,628 | 104,720 | 6,880 | 1,286 | 13,179 |
| CST | 71,619 | 3,903 | 31,370 | 21,645 | 5 | 14,897 |
| Total | 220,982 | 6,531 | 150,363 | 28,525 | 7,488 | 28,076 |

Again, note that the aggregate salary adjustment figures cited in the previous paragraph would simply alleviate the inversions, but not address pay differentials across and within ranks that may be reasonable based on experience and years in service. Recalling the example, it may be viewed as disconcerting that Dr. A's inversion-corrected, but rank-adjusted salary of \$44,500 (\$45,500 + \$1000 - \$2,000) is equal to Dr. B's. This implies that Dr. A's five additional years of experience and service to Armstrong have a marginal value of \$0 to the university as compared to Dr. B, lacking any mitigating factors.

Priority 3: Faculty Salary Tier Analysis

The Armstrong Atlantic State University Faculty Salary Study Committee using CUPA-HR data by discipline and rank compared Armstrong compensation to a set of peer group institutions. At Armstrong, there are 101 possible rank and discipline groups, for which comparable CUPA-HR was available for 65 groups. Armstrong is below the CUPA-HR mean of our peer institutions (see Appendix A) in 41 areas by discipline and rank groups and above the mean for 14 groups. The committee found that all Armstrong groupings were above 72% of the CUPA-HR mean. The study found that in order to bring Armstrong faculty currently below the CUPA-HR means up to the appropriate CUPA-HR means would require \$601,025 (not including benefits or the cost of living adjustment).

Tier I: Areas below 80%

Using the Armstrong mean and comparing it to the mean of the comparison group, four discipline and rank areas were below 80% of the CUPA-HR mean. The total cost effect for this group to adjust them to the next tier, or 80% of the CUPA-HR mean, would be **\$13,327** in salary adjustments (not including benefits or the cost of living adjustment).

| CIP & DISCIPLINE | FIELD | RANK | % of the CUPA-HR Mean | N | Lowest Among Peers |
|--------------------------------------|-------|-----------|-----------------------|---|--------------------|
| 13.10 Special Ed & Teaching | | Professor | 72.4 | 1 | X |
| 42.01 General Psychology | | Professor | 74.5 | 1 | X |
| 45.10 Political Science & Government | | Professor | 77.1 | 1 | X |
| 50.07 Fine & Studio Art | | Associate | 79.0 | 1 | X |

Tier II: Areas below 85%

Using the Armstrong mean and comparing it to the mean of the comparison group, eight discipline and rank areas were below 85% of the CUPA-Mean. The four areas do include the areas identified in Tier I. Those areas do not reappear in the Tier II list but are accounted for in the total cost effect. The total cost effect for this group (including those from Tier I) to adjust them to the next tier, or 85% of the CUPA-HR mean, would be **\$38,819** in salary adjustments (not including benefits or the cost of living adjustment).

| CIP & DISCIPLINE | FIELD | RANK | % of the CUPA-HR Mean | N | Lowest Among Peers |
|---|-------|-----------|-----------------------|---|--------------------|
| 13.12 Teacher Ed & Prof Dev, Levels & Methods | | Professor | 81.5 | 1 | X |
| 45.06 Economics | | Professor | 81.6 | 2 | X |
| 27.01 Mathematics | | Professor | 84.1 | 2 | X |
| 45.06 Economics | | Assistant | 84.7 | 1 | X |

Tier III: Areas below 90%

Using the Armstrong mean and comparing it to the mean of the comparison group, nineteen discipline and rank areas were below 90% of the CUPA-HR mean. The eleven areas do include the areas identified in Tier I and Tier II. Those areas do not reappear in the Tier III list but are accounted for in the total cost effect. The total cost effect for this group (including those from Tier I and Tier II) to adjust them to the next tier, or 90% of the CUPA-HR mean, would be **\$100,713** in salary adjustments (not including benefits or the cost of living adjustment).

Table 7. Areas Below 90%

| CIP & DISCIPLINE | FIELD | RANK | % of the CUPA-HR Mean | N | Lowest Among Peers |
|---|-------|------------|-----------------------|---|--------------------|
| 45.11 Sociology | | Associate | 86.7 | 1 | |
| 13.13 Teacher Ed & Prof Dev, Subjects | | Assistant | 86.9 | 4 | X |
| 26.01 General Biology | | Associate | 87.2 | 3 | |
| 13.12 Teacher Ed & Prof Dev, Levels & Methods | | Instructor | 87.9 | 1 | |
| 38.01 Philosophy | | Assistant | 88.5 | 1 | |
| 50.09 Music | | Professor | 88.5 | 2 | |
| 27.01 Mathematics | | Assistant | 89.2 | 6 | |
| 54.01 History | | Assistant | 89.5 | 6 | |
| 26.01 General Biology | | Professor | 89.5 | 1 | |
| 54.01 History | | Professor | 89.8 | 4 | |
| 45.11 Sociology | | Assistant | 89.8 | 1 | |

Tier IV: Areas below 95%

Using the Armstrong mean and comparing it to the mean of the comparison group, thirty-five discipline and rank areas were below 95% of the CUPA-HR mean. The forty-three areas do include the areas identified in Tier I, Tier II, and Tier III. Those areas do not reappear in the Tier IV list but are accounted for in the total cost effect. The total cost effect for this group (including those from Tier I, Tier II and Tier III) to adjust them to the next tier, or 95% of the CUPA-HR mean, would be **\$275,921** in salary adjustments (not including benefits or the cost of living adjustment).

Table 8. Areas Below 95%

| CIP & DISCIPLINE | FIELD | RANK | % of the CUPA-HR Mean | N | Lowest Among Peers |
|--|---------|-----------|-----------------------|---|--------------------|
| 31.05 Health & Physical Education/Fitness | | Associate | 90.5 | 1 | |
| 51.07 Health & Med Admin Svcs | | Assistant | 91.0 | 1 | |
| 54.01 History | | Associate | 91.1 | 2 | |
| 16.09 Foreign Languages, Literatures and Linguistics | Romance | Associate | 91.2 | 2 | |
| 16.09 Foreign Languages, Literatures and Linguistics | Romance | Assistant | 91.5 | 2 | |
| 50.07 Fine & Studio Art | | Professor | 91.6 | 1 | |
| 42.01 General Psychology | | Assistant | 92.2 | 4 | |
| 26.01 General Biology | | Assistant | 92.6 | 7 | |
| 13.12 Teacher Ed & Prof Dev, Levels & Methods | | Associate | 92.9 | 2 | |

| | | | | | |
|--|--|------------|------|---|--|
| 43.01 Criminal Justice & Corrections | | Assistant | 93.0 | 2 | |
| 40.05 Chemistry | | Professor | 93.4 | 1 | |
| 16.09 Foreign Languages, Literatures and Linguistics | | Professor | 93.5 | 1 | |
| 40.08 Physics | | Assistant | 93.6 | 3 | |
| 23.01 English Language and Literature | | Professor | 93.7 | 5 | |
| 50.05 Dramatic/Theatre Arts & Stagecraft | | Assistant | 93.9 | 1 | |
| 40.08 Physics | | Instructor | 94.3 | 1 | |

Tier V: Areas below 100%

Using the Armstrong mean and comparing it to the mean of the comparison group, forty-eight discipline and rank areas were below 100% of the CUPA-HR mean. The fifty-seven areas do include the areas identified in Tier I, Tier II, Tier III and Tier IV. Those areas do not reappear in the Tier V list but are accounted for in the total cost effect. The total cost effect for this group (including those from Tier I, Tier II, Tier III, and Tier IV) to adjust them to 100% of the CUPA-HR mean would be **\$601,025** in salary adjustments (not including benefits or the cost of living adjustment).

Table 9. Areas Below 100%

| CIP & DISCIPLINE | FIELD | RANK | % of the CUPA-HR Mean | N | Lowest Among Peers |
|---|-------|------------|-----------------------|---|--------------------|
| 40.05 Chemistry | | Assistant | 95.0 | 4 | |
| 13.12 Teacher Ed & Prof Dev, Levels & Methods | | Assistant | 95.0 | 4 | |
| 45.11 Sociology | | Instructor | 95.1 | 2 | |
| 23.01 English Language and Literature | | Associate | 95.2 | 6 | |
| 27.01 Mathematics | | Instructor | 95.2 | 4 | |
| 51.16 Nursing | | Instructor | 95.3 | 8 | |
| 40.05 Chemistry | | Associate | 95.4 | 3 | |
| 23.01 English Language and Literature | | Assistant | 95.5 | 6 | |
| 45.10 Political Science & Government | | Associate | 95.5 | 1 | |
| 31.05 Health & Physical Education/Fitness | | Instructor | 97.0 | 1 | |
| 50.09 Music | | Associate | 97.6 | 1 | |
| 27.01 Mathematics | | Associate | 98.3 | 4 | |
| 51.16 Nursing | | Assistant | 98.7 | 6 | |

Cost of Living Index and Effect on Aggregate Salary Adjustment

As part of this study, the committee considered cost of living data which varies across states and regions. In an attempt to address this issue with respect to salary levels, cost of living data were gathered for the cities that host the 45 institutions referenced in the study. The most geographically comprehensive data on cost of living were available from Yahoo-Real Estate online.² Based on this data, the cost of living in Savannah is 4.6% higher than the mean cost of living in the areas hosting the remaining 44 institutions. Salary computations should reflect the relatively higher cost of living in Savannah. For example, if the mean salary for a rank and discipline was \$40,000, the cost-of-living adjusted comparable salary in Savannah would be \$41,840, that is, 1.046 x \$40,000. Aggregate salary adjustment data by tier and the corresponding cost of living adjusted figure is provided in Table 10.

| | Aggregate Salary Adjustment | Cost of Living Adjusted Aggregate Salary Adjustment |
|----------|-----------------------------|---|
| Tier I | \$13,025 | \$13,624 |
| Tier II | \$38,819 | \$40,604 |
| Tier III | \$100,713 | \$105,345 |
| Tier IV | \$275,921 | \$288,613 |
| Tier V | \$601,025 | \$628,672 |

Conclusion and Recommendations

An administratively stated top priority for analysis was the group of faculty with three or less years of service at Armstrong. Of 25 rank-discipline groupings for which data is available, 18 groupings are below the CUPA-HR mean, while 7 groups are at or above the mean. It is recommended that additional steps be taken to adjust the salaries of these faculty members toward the mean of the comparison group. Retention of these junior faculty members will be enhanced by doing so.

The committee also notes there is a relatively high concentration (9 of the 13 cases) of faculty members with 3 or less years of service holding the rank of Instructor in the 95%-100% tier and among those with greater than the comparison group mean salary. At Armstrong, instructors are not tenure track employees. This apparently puzzling allocation of resources merits further review.

The committee reviewed salary inversion as an element of its charge. The committee identified 34 potential cases of inverted salaries when using rank-adjusted salary, including eight cases caused by the hiring of new faculty for FY12. These cases merit further review by

² <http://realestate.yahoo.com/Georgia/Savannah/neighborhoods>

relevant administrators to assess whether the inversion warrants corrective action. The caveats discussed above also apply to the analysis of salary compression and inversion.

The committee found that 14 Armstrong faculty in nine discipline and rank groups had the lowest mean salary among their 44 peer comparator institutions. The committee strongly recommends that these areas receive top priority for review and allocation of equity adjustments in salary. These areas can be adjusted to within 90% of the CUPA-HR mean for approximately \$45,425 (not including benefits or cost of living adjustments). After these areas are addressed, the committee suggests that any supplemental funding for faculty salaries or redirection of institutional funds address shortcomings in other Tiers in a systematic way that will make Armstrong salaries align better with peer comparators.

The committee also recommends that the current CIP Codes for all faculty at Armstrong be reevaluated and that CIP codes be better aligned with Armstrong's peer institutions. Armstrong had seventeen areas that were not comparable because in the 45 institution peer group there were none coded similarly. Armstrong's peers do not use **.99 codes or the category, "Other". The committee recommends that the deans and the Office of Institutional Research work to recode Armstrong faculty that are currently coded as "Other" or appear to be in a discipline code that is not used by any of Armstrong's peers. More appropriate, consistent codes should be applied.

This process of recoding should involve the deans and department heads from the relevant academic areas. This recommendation is reiterated strongly for attention from administrative personnel. The faculty salary study completed in 2008 recommended the CIP coding problems be addressed and the committee is puzzled by the lack of administrative response during the three years following the release of the report. Improper coding creates idiosyncratic distortions in the analysis that may disadvantage faculty members. Potential coding problems known to the committee include some faculty in the College of Health Professions and some faculty in the Department of Criminal Justice, Social and Political Science in the College of Liberal Arts.

Another potential idiosyncratic problem in the analysis by discipline-rank group arises when former administrators rejoin the ranks of the teaching faculty. It may be the case that the former administrator's salary remains inflated as compared to other faculty in the same discipline-rank group. Administrators are advised to be mindful of this phenomenon when evaluating the salaries for individual faculty members in the affected discipline-rank group.

This salary study should not be interpreted to suggest that faculty members ought to be paid at exactly the mean salary of their rank and discipline. There may be mitigating factors underlying why certain faculty members are paid below or above the mean salary for their rank and discipline. These additional factors should be taken into account when making adjustments to a faculty member's salary.

These factors could include but are not limited to:

- The faculty member does not hold a terminal degree in his or her discipline.

- The faculty member's specialty in the discipline may be typically paid lower or higher than other specialties in the same discipline.
- The faculty member's time in rank is low or high by comparison to peers of same rank. For example, a newly promoted Associate or Full Professor should not necessarily expect to be paid the mean salary of their respective rank and discipline.
- The faculty member does not perform all the duties typically associated with a full-time tenure track position, such as student advising, committee work, etc.
- The faculty member may perform additional duties beyond those typically expected for a full-time tenure track position, such as coordinator, director, etc.
- The faculty member's performance evaluations have been below or above average.

The formulaic methodology used by the salary study committee could neither consider nor incorporate these mitigating factors. For example, annual faculty evaluations are a component of confidential personnel files that the committee does not have the authority to review. However, faculty evaluations and other factors, such as those listed above, play a role in the compensation received by any given faculty member. The point of the above discussion is to prevent the abuse of the findings of this report. If, for example, a faculty member is paid below the mean compensation for rank and discipline, routinely has below average annual evaluations, does not participate in the service work of the department, and does not have a terminal degree, it would be an inappropriate application of this report to use its findings to justify an adjustment to the mean for that faculty member.

The committee also recommends that Armstrong continue to submit and subscribe to the CUPA-HR DataOnDemand tool so that progress toward increasing the salaries in the lowest tiers or rank-discipline groupings can be tracked and re-evaluated. The committee would also like to see this study replicated in three year intervals. The DataOnDemand tool is useful tool for administrators making salary decisions.

Appendix A

CUPA-HR Peer Institutions for ARMSTRONG

45 Institutions were used in the analysis

Appalachian State University (Boone, NC)
Armstrong Atlantic State University (Savannah, GA)
Auburn University at Montgomery (Montgomery, AL)
Augusta State University (Augusta, GA)
Austin Peay State University (Clarksville, TN)
College of Charleston (Charleston, SC)
Columbus State University (Columbus, GA)
Eastern Kentucky University (Richmond, KY)
Florida Gulf Coast University (Fort Myers, FL)
Francis Marion University (Florence, SC)
Georgia College & State University (Milledgeville, GA)
Georgia Southern University (Statesboro, GA)
Georgia Southwestern State University (Americus, GA)
Jacksonville State University (Jacksonville, AL)
James Madison University (Harrisonburg, VA)
Kennesaw State University (Kennesaw, GA)
Longwood University (Farmville, VA)
Marshall University (Huntington, WV)
McNeese State University (Lake Charles, LA)
Morehead State University (Morehead, KY)
Murray State University (Murray, KY)
Nicholls State University (Thibodaux, LA)
Northern Kentucky University (Highland Heights, KY)
North Georgia College & State University (Dahlonega, GA)
Northwestern State University (Natchitoches, LA)
Radford University (Radford, VA)
Southeastern Louisiana University (Hammond, LA)
Tennessee Technological University (Cookeville, TN)
The Citadel, The Military College of South Carolina (Charleston, SC)
The University of West Alabama (Livingston, AL)
University of Louisiana at Monroe (Monroe, LA)
University of Montevallo (Montevallo, AL)
University of North Alabama (Florence, AL)
University of North Carolina at Charlotte (Charlotte, NC)
University of North Carolina at Pembroke (Pembroke, NC)
University of North Carolina at Wilmington (Wilmington, NC)
University of North Florida (Jacksonville, FL)
University of Tennessee at Chattanooga (Chattanooga, TN)
University of Tennessee at Martin (Martin, TN)
University of West Florida (Pensacola, FL)
University of West Georgia (Carrollton, GA)
Valdosta State University (Valdosta, GA)
Western Carolina University (Cullowhee, NC)
Western Kentucky University (Bowling Green, KY)
Winthrop University (Rock Hill, SC)

Appendix B

Supplemental Salary Data for College of Health Professions

ALL FOUR-YEAR INSTITUTIONS

Figure 6: Median Salary for Chair, Professor, Associate Professor and Assistant Professor by Program, Excluding Those with Medical or Dental Degrees in 2010-11

| PROGRAM | Chair | Professor | Associate Professor | Assistant Professor |
|---|--------|-----------|---------------------|---------------------|
| Athletic Training | 107131 | - | 97469 | 65559 |
| Clinical Laboratory Sciences (Medical Technology) | 104511 | 101309 | 84088 | 67320 |
| Dental Hygiene | 80356 | 81469 | 71551 | 65393 |
| Diagnostic Medical Sonography | - | - | - | - |
| Dietetics | 93164 | - | 72231 | 63311 |
| Emergency Medical Sciences | 102015 | - | - | 68773 |
| Health Administration | 103612 | 110598 | 88835 | 71264 |
| Health Information Management | - | 117020 | 90222 | 73368 |
| Nuclear Medicine Technology | - | - | - | - |
| Nursing | 104373 | 99512 | 86778 | 75000 |
| Occupational Therapy | 108274 | 99575 | 88134 | 74983 |
| Physical Therapy | 114004 | 110517 | 91283 | 80070 |
| Physician Assistant | 103659 | 123414 | 93646 | 79207 |
| Radiation Therapy Technology | - | - | - | - |
| Radiography | 83556 | - | 66123 | 62830 |
| Rehabilitation Counseling | - | 99611 | - | - |
| Respiratory Therapist | 74988 | - | - | 60653 |
| Speech-Language Pathology & Audiology | 98521 | 117179 | 81480 | 73333 |
| Office of the Dean | - | - | - | - |
| Program(s) not listed above | 104526 | 99801 | 78512 | 65978 |

These data are derived from the 2010-2011 Institutional Profile Survey Report published by the Association of Schools in Allied Health Professions (ASAHP). This table provides median salary data by rank and discipline across many of the degree programs that are also housed in the College of Health Professions at Armstrong.

These data are included as an appendix to this report given the lack of comparator data for many of the rank and discipline fields in the CUPA-HR data. Out of a total of 35 rank and discipline categories where comparator data are missing in CUPA-HR, 18 (51%) are located in the College of Health Professions. Without some sort of comparative data to make use of, there was concern that many faculty in that College would be less likely considered for equity salary adjustments if and when such might be appropriate based on the availability of such data.

The institutions that submitted salary data for this survey are listed in the figure below.

Figure 1: Listing of Survey Participants for All Four-Year Institutions in 2010-11

| <i>Name of School</i> | <i>Name of School</i> | <i>Name of School</i> |
|-------------------------------------|-----------------------------------|------------------------------|
| Arkansas State University | Ithaca College | Nova Southeastern University |
| Armstrong Atlantic State University | Long Island University | Old Dominion University |
| Baptist College of Health Sciences | Long Island University - Brooklyn | Pacific University |
| Bowling Green State University | Marquette University | Quinnipiac University |
| Central Michigan University | Marshall University | Sacred Heart University |
| Duquesne University | Massachusetts College | Seton Hall University |
| Eastern Kentucky University | of Pharmacy and Health Sciences | |
| Eastern Michigan University | Mercy College | |
| Florida Gulf Coast University | Midwestern University | |
| Governors State University | New York Institute of Technology | |
| Idaho State University | Northeastern University | |
| Indiana State University | Northern Illinois University | |

An institution was listed in this report if it reported at least one faculty member or program for the 2010-11 survey year.

National Faculty Salary Survey: Multi-Discipline Report

Focus Institution Armstrong
 Comparison Group 44 institutions
 Year 2010-11

NP - Number of Persons. NI - Number of Institutions. Statistics will not display when the Number of Institutions is less than 5.

| Code/Title | A. Focus Salary | B. Comparison Group Statistics (Based on Reported Average Salaries*) | | | | | | A's Avg. as % of B's |
|--|-----------------|---|--------|---------|---------|-----|----|-------------------------|
| | Average | Average | Median | Minimum | Maximum | NP | NI | Average |
| [16.] FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS | | | | | | | | |
| 16.09 Romance | | | | | | | | |
| Professor | 67,674 | 72,378 | 71,669 | 64,118 | 80,250 | 20 | 7 | 93.5 |
| Associate Professor | 54,300 | 59,545 | 59,481 | 54,687 | 67,580 | 42 | 9 | 91.2 |
| Assistant Professor | 45,620 | 49,871 | 50,742 | 43,480 | 52,500 | 43 | 10 | 91.5 |
| Instructor | | | | | | | | |
| [23.] ENGLISH LANGUAGE AND LITERATURE/LETTERS | | | | | | | | |
| 23.01 General | | | | | | | | |
| Professor | 67,577 | 72,126 | 69,647 | 64,891 | 85,169 | 146 | 17 | 93.7 |
| Associate Professor | 54,477 | 57,226 | 55,136 | 47,431 | 67,721 | 131 | 19 | 95.2 |
| Assistant Professor | 46,555 | 48,770 | 48,755 | 40,532 | 54,832 | 125 | 19 | 95.5 |
| Instructor | 39,250 | 37,658 | 36,645 | 29,433 | 50,942 | 167 | 13 | 104.2 |
| 23.10 General | | | | | | | | |
| Professor | | | | | | | | |
| Associate Professor | | | | | | | | |
| Assistant Professor | 46,960 | | | | | | | |
| Instructor | | | | | | | | |
| [26.] BIOLOGICAL AND BIOMEDICAL SCIENCES | | | | | | | | |
| 26.01 General | | | | | | | | |
| Professor | 70,068 | 78,268 | 76,480 | 68,188 | 96,862 | 123 | 17 | 89.5 |
| Associate Professor | 51,876 | 59,495 | 59,724 | 51,367 | 66,111 | 125 | 19 | 87.2 |
| Assistant Professor | 47,262 | 51,014 | 50,845 | 42,429 | 57,387 | 113 | 17 | 92.6 |
| Instructor | 46,000 | 40,990 | 41,586 | 33,698 | 48,463 | 63 | 14 | 112.2 |
| 26.07 Zoology/Animal | | | | | | | | |
| Professor | | | | | | | | |
| Associate Professor | | | | | | | | |
| Assistant Professor | 45,501 | | | | | | | |
| Instructor | | | | | | | | |
| 26.09 Physiology, Pathology & Related | | | | | | | | |
| Professor | | | | | | | | |
| Associate Professor | | | | | | | | |
| Assistant Professor | 62,884 | | | | | | | |
| Instructor | | | | | | | | |
| [27.] MATHEMATICS AND STATISTICS | | | | | | | | |
| 27.01 Mathematics | | | | | | | | |
| Professor | 65,183 | 77,467 | 75,962 | 66,552 | 95,276 | 112 | 17 | 84.1 |
| Associate Professor | 59,503 | 60,548 | 59,667 | 50,465 | 69,034 | 121 | 17 | 98.3 |
| Assistant Professor | 47,010 | 52,702 | 52,239 | 46,050 | 59,458 | 84 | 18 | 89.2 |
| Instructor | 38,228 | 40,145 | 37,645 | 32,250 | 54,238 | 103 | 14 | 95.2 |
| 27.99 Other | | | | | | | | |
| Professor | 80,843 | | | | | | | |
| Associate Professor | | | | | | | | |
| Assistant Professor | | | | | | | | |
| Instructor | | | | | | | | |
| [31.] PARKS, RECREATION, LEISURE AND FITNESS STUDIES | | | | | | | | |
| 31.05 Health & Physical Education/Fitness | | | | | | | | |
| Professor | | | | | | | | |
| Associate Professor | 54,932 | 60,681 | 58,592 | 51,831 | 71,651 | 38 | 11 | 90.5 |
| Assistant Professor | | | | | | | | |
| Instructor | 42,000 | 43,282 | 45,511 | 36,351 | 46,764 | 31 | 7 | 97.0 |

National Faculty Salary Survey: Multi-Discipline Report

Focus Institution Armstrong
 Comparison Group 44 insitutions
 Year 2010-11

NP - Number of Persons. NI - Number of Institutions. Statistics will not display when the Number of Institutions is less than 5.

| Code/Title | A. Focus Salary | B. Comparison Group Statistics (Based on Reported Average Salaries*) | | | | | | A's Avg. as % of B's |
|---|-----------------|---|--------|---------|---------|-----|----|-------------------------|
| | Average | Average | Median | Minimum | Maximum | NP | NI | Average |
| 51.09 Allied Health Diag, Interv & Treat Profs | | | | | | | | |
| Professor | 73,620 | | | | | 1 | 1 | |
| Associate Professor | 61,617 | | | | | 13 | 4 | |
| Assistant Professor | 55,365 | | | | | 17 | 4 | |
| Instructor | 46,466 | | | | | 6 | 4 | |
| 51.10 Clinical/Med Lab Sci & Allied Profs | | | | | | | | |
| Professor | | | | | | | | |
| Associate Professor | 72,802 | | | | | | | |
| Assistant Professor | 54,250 | | | | | 1 | 1 | |
| Instructor | 42,500 | | | | | 1 | 1 | |
| 51.15 Mental & Social Health Srvc & Allied Profs | | | | | | | | |
| Professor | | | | | | | | |
| Associate Professor | | | | | | | | |
| Assistant Professor | 65,437 | | | | | | | |
| Instructor | | | | | | | | |
| 51.16 Nursing | | | | | | | | |
| Professor | 92,041 | 81,683 | 79,944 | 74,851 | 91,050 | 41 | 12 | 112.7 |
| Associate Professor | 78,480 | 69,078 | 66,670 | 58,786 | 93,332 | 64 | 13 | 113.6 |
| Assistant Professor | 58,024 | 58,804 | 58,287 | 50,223 | 71,416 | 138 | 14 | 98.7 |
| Instructor | 52,250 | 54,843 | 52,626 | 45,010 | 71,450 | 83 | 10 | 95.3 |
| 51.22 Public Health | | | | | | | | |
| Professor | | | | | | | | |
| Associate Professor | 66,119 | | | | | 14 | 3 | |
| Assistant Professor | 61,407 | | | | | 17 | 3 | |
| Instructor | | | | | | | | |
| 51.23 Rehabilitation & Therapeutic Professions | | | | | | | | |
| Professor | 85,919 | 84,067 | 79,493 | 75,950 | 98,710 | 10 | 5 | 102.2 |
| Associate Professor | | | | | | | | |
| Assistant Professor | 70,000 | 65,861 | 64,000 | 58,766 | 77,800 | 33 | 5 | 106.3 |
| Instructor | 55,000 | | | | | 10 | 4 | |
| 51.99 Other | | | | | | | | |
| Professor | 74,681 | | | | | 2 | 1 | |
| Associate Professor | | | | | | | | |
| Assistant Professor | 62,424 | | | | | 9 | 2 | |
| Instructor | 60,000 | | | | | 1 | 1 | |
| [54.] HISTORY GENERAL | | | | | | | | |
| 54.01 History | | | | | | | | |
| Professor | 69,380 | 77,263 | 74,350 | 66,903 | 119,542 | 98 | 19 | 89.8 |
| Associate Professor | 52,992 | 58,147 | 56,005 | 47,096 | 71,511 | 90 | 19 | 91.1 |
| Assistant Professor | 44,090 | 49,261 | 50,796 | 40,400 | 57,682 | 91 | 17 | 89.5 |
| Instructor | 40,000 | 38,179 | 39,664 | 29,067 | 50,000 | 34 | 11 | 104.8 |