



## **Program Array Comparisons with Selected Peer Universities as a Context for Planning (Revisited)**

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Periodically, and especially at times of resource constraint, questions arise about the major and degree offerings how this University compares to peers. Is the program array “right”-sized? How are academic offerings distributed compared to peers? Have there been changes in discipline balance and distribution over time?

This analysis applies the methodology of a mid-1990’s study of the program array to current data to evaluate if the methodology is still useful, to ask how UW-Madison’s program array compares with a group of peer universities, to determine if there have been substantial changes from a decade ago, and to begin to ask if there are (new) policy implications of the findings.

The mid-1990’s study of the program array showed that UW-Madison, on average, awarded degrees in more degree programs and awarded fewer degrees per program than peer universities. In the mid-1990’s UW-Madison administrators and faculty increased scrutiny of programs that were not attracting many students. Since then, the number of major programs offered at UW-Madison has decreased by about 10%. One specific question asked in this analysis is what impact this change array has had on peer comparisons. Interestingly, peer comparisons are generally similar now to a decade ago.

### **A. Overview of Methodology and Data Sources**

This analysis makes use of the IPEDS Degree Completions information to compare the range of program areas in which a target university (UW-Madison) and a peer group of universities award degrees.

*Rank Order Comparisons:* The general approach is to compare the rank order and distance to the average value on a set of measures for the target and a group of peer universities. This approach allows comparisons to be made over time despite discontinuities in the IPEDS Degree Completions data.

*Peer Group:* The target university is UW-Madison. Thirteen peer universities are all public research universities. Eleven of the peers comprise UW-Madison's official peer group used for faculty salary peer comparisons. The peer universities have large enrollments at all levels; offer academic programs at the bachelors, masters, research doctorate, and first-professional levels; and have robust research missions.

*Data Sources:* Data are drawn from the federal IPEDS (Integrated Postsecondary Enrollment Data System) reports. Reports for all universities and colleges are publicly accessible through the IPEDS Peer Analysis System. For the UW-Madison peer group we can also access data through the AAU Data Exchange.

Degree information comes from the IPEDS Degree Completions Survey (2002-03 and 2003-04).

Enrollment comes from the IPEDS Fall Enrollment Survey (Fall 2003, Fall 2004, Fall 2005).

Faculty counts are taken from the IPEDS Fall Staff Survey (2003, 2004, 2005).

*CIP Codes:* For standardized federal reports, all universities assign each of their degree major programs to a classification code within the Classification of Instructional Programs (CIP)<sup>1</sup>. Reporting of degree major programs, degrees awarded, or other academic information by these CIP codes allows comparisons among peer universities. A number of factors can reduce the validity of comparisons. Because each program is reported in only one CIP code, some broad programs that cover multiple disciplines may not be represented in each relevant CIP code area. Or one CIP code may contain multiple closely related programs. If we keep these caveats in mind, the CIP code distributions provide a proxy for the range of programs and disciplines offered by a university. The IPEDS data are the most comprehensive of publicly available and comparable data sources.

The use of rank order comparisons allows for comparisons with the 1996 study even though there is a substantial discontinuity in the data. The CIP is revised periodically and a new taxonomy, CIP 2000, was implemented in 2002. There is no effort made in this study to analyze specific trends in distributions over the past decade because of the discontinuity created by the taxonomic changes.

*Program areas and categories:* An important feature of the CIP is that the taxonomy has a three-level nested hierarchy. The highest level consists of broad two-digit summary categories. There are four-digit intermediate groupings and six-digit individual program areas. Some parts of this study focus on the six-digit *program areas*. The number of program areas is a measure of the number of academic programs offered by a university and an indication of how finely divided the program array is. Other parts of the study aggregate data at the two-digit *categories*. The number of categories is a measure of the breadth of academic disciplines offered by a university.

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<sup>1</sup> US Department of Education

## B. Benchmark Comparison of UW-Madison and Peers on Program Array Indicators

We compared UW-Madison and 13 peer public research universities on a selected set of metrics: academic major programs, degrees awarded, degrees per program area, enrollment, and faculty numbers (Table 1, Appendix A to E). The data are based on two or three year averages to smooth out effects of a single year.

Table 1. Summary of Program Area Comparisons

| Metric                      | UW-Madison's Rank in Group<br>(n=14) |                  | Percentage change to reach<br>peer average |            |     |
|-----------------------------|--------------------------------------|------------------|--------------------------------------------|------------|-----|
|                             | 2006 Study                           | 1996 Study       | 2006 Study                                 | 1996 Study |     |
| Number of<br>Program Areas  | Total                                | 4 <sup>nd</sup>  | 2 <sup>nd</sup>                            | -21        | -33 |
|                             | Bachelor's                           | 4 <sup>rd</sup>  | 3 <sup>rd</sup>                            | -23        | -33 |
|                             | Master's                             | 2 <sup>nd</sup>  | 2 <sup>nd</sup>                            | -40        | -47 |
|                             | PhD                                  | 1 <sup>st</sup>  | 1 <sup>st</sup>                            | -26        | -36 |
|                             | 1 <sup>st</sup> Professional         | nr               | nr                                         | --         | --  |
| Degrees<br>Awarded          | Total                                | 10 <sup>th</sup> | 5 <sup>th</sup>                            | +2         | -8  |
|                             | Bachelor's                           | 8 <sup>th</sup>  | 4 <sup>th</sup>                            | +3         | -7  |
|                             | Master's                             | 8 <sup>th</sup>  | 7 <sup>th</sup>                            | +10        | -5  |
|                             | PhD                                  | 3 <sup>rd</sup>  | 3 <sup>rd</sup>                            | -20        | -27 |
|                             | 1 <sup>st</sup> Professional         | 5 <sup>th</sup>  | 6 <sup>th</sup>                            | -21        | -14 |
| Degrees per<br>Program Area | Total                                | 12 <sup>th</sup> | --                                         | +22        | --  |
|                             | Bachelor's                           | 12 <sup>th</sup> | 12 <sup>th</sup>                           | +23        | +24 |
|                             | Master's                             | 14 <sup>th</sup> | 12 <sup>th</sup>                           | +40        | +30 |
|                             | Doctoral                             | 9 <sup>th</sup>  | 8 <sup>th</sup>                            | +6         | +7  |
|                             | 1 <sup>st</sup> Professional         | 7 <sup>th</sup>  | --                                         | +4         | --  |
| Student<br>Enrollment       | Total                                | 5 <sup>th</sup>  | 4 <sup>th</sup>                            | -2         | -9  |
|                             | Undergraduate                        | 7 <sup>th</sup>  | --                                         | -2         | --  |
|                             | Graduate                             | 8 <sup>th</sup>  | --                                         | +5         | --  |
|                             | 1 <sup>st</sup> Professional         | 4 <sup>th</sup>  | --                                         | -20        | --  |
| Faculty                     |                                      | 4 <sup>th</sup>  | 5 <sup>th</sup>                            | -8         | -20 |

Number of program areas: Count of six-digit CIP codes under which degrees are reported in IPEDS Completions (averaged for 2002-03 and 2003-04). First professional programs are not ranked (nr) because fewer than 10 are offered at any university in the peer group.

Degrees Awarded: Total includes awards at the bachelor's, master's, doctoral and first-professional levels averaged for 2002-03 and 2003-04.

Enrollment: Total enrollment and enrollment at each degree level is reported on the IPEDS Fall Enrollment and is an average of Fall 2003, 2004 and 2005 counts.

Number of faculty: Headcount of full-time plus part-time tenured/tenure-track faculty reported in IPEDS Fall Staff (average for 2003, 2004, 2005). Rank order and percentage is similar if the analysis is based on headcount of full-time faculty only

See Appendix A to E for details.

In the mid-1990's, UW-Madison had more than the peer average of program areas, degrees awarded, enrollment, and faculty. The 1996 study found that the number of program areas was especially noteworthy. UW-Madison ranked 2<sup>nd</sup> highest among the 14 universities and would need to reduce the number of program areas by 33% to reach the peer average.

The status of this benchmark – the overall number of program areas – has shifted towards the peer average although the number of program areas is still greater than the peer average. Now we find that UW-Madison ranks 4<sup>th</sup> out of 14 in the peer group and needs a 21% decrease in the number of program areas to reach the peer group median.

At each degree level, UW-Madison still ranks at or near the top in the number of program areas. A substantial decrease in the number of program areas would be needed to reach the peer group average. At the bachelor's level, UW-Madison ranks 4<sup>th</sup> and the number of program areas exceeds the peer average by 23 percent. At the master's level, UW-Madison ranks 2<sup>nd</sup> and a decrease of 40% would be required to reach the peer group average. At the doctoral level, UW-Madison ranks 1<sup>st</sup> and a decrease of 26% would be needed to bring the number of programs to the peer group average.

Remember that the number of program areas is a representation of the number of academic programs offered and an indication of how finely divided a university reports its degrees. A university must report all the degrees in a given major in one CIP program area even if it is difficult to assign a major to a single CIP. Several related majors may be assigned to a single CIP program area if appropriate. A university that has a relatively high number of program areas probably offers a relatively high number of major degree programs.

A calculated indicator – degrees per program area – provides the average program size. UW-Madison programs have fewer degrees on average than the peer institutions. For example, for master's programs, UW-Madison now ranks lowest – 14<sup>th</sup> of 14 – for the average degrees per program area. An increase in average number of degrees per program area of 40% is needed to meet the peer group median.

In summary, UW-Madison's program array at all levels has more program areas and fewer degrees per program than the peer group average.

This observation is especially interesting given that over the past decade UW-Madison has reduced the number of major program offerings by level by about 10% (Appendix J). This decrease is a consequence of a concerted effort, especially in the 1990's, to consolidate small majors and discontinue majors that are no longer supported by faculty and students.

The character of the UW-Madison program array relative to the peers appears to have been preserved despite the elimination of many small programs. On the plus side, the large range of program areas may be a selling point. At such a large university the opportunity to study in small programs and to have an astonishing breadth of choice may appeal to students and faculty. Conversely, numerous small programs may be inefficient to administer.

### C. Category Comparisons

Examining comparisons at the level of two-digit CIP categories is a way to measure the breadth of disciplines in which a university offers degrees and allows for the identification of categories in which a university's degree production is similar or different from the peer averages (Table 2, Appendices F, G, H).

Across the peer group, degrees are offered in a total of 32 categories. Each university awards degrees in most but not all of the categories. For example, UW-Madison awards bachelor's degrees in 25 categories. One peer offers degrees in as few as 17 categories; another in as many as 27 categories. The 25 categories that UW-Madison covers account for 97.8% of the bachelor's degrees awarded by the peer universities. Thus, the seven categories in which other universities but not UW-Madison offer degrees accounts for only a small fraction - 2.2% - of all of the bachelor's degrees awarded by the peers.

Table 2. Category Coverage by UW-Madison and Peers

| Metric                                                                     | Bachelors | Masters | Doctoral (PhD) |
|----------------------------------------------------------------------------|-----------|---------|----------------|
| Number of UW-Madison categories                                            | 25        | 26      | 25             |
| Number of categories covered by peer group                                 | 32        | 30      | 28             |
| Number of categories – peer minimum                                        | 17        | 19      | 18             |
| Number of categories – peer maximum                                        | 27        | 27      | 25             |
| Percent of peer degrees awarded in discipline groups covered by UW-Madison | 97.8%     | 99.7%   | 99.5%          |

See Appendix F, G, H. Source: IPEDS Degree Completions, 2003-04

Tabulations of the number of program areas for each category and the percent of degrees in each category provide more detail on discipline coverage by the peer universities at each degree level (Appendix F, G, H). For this analysis, we focused on a single year.

*Bachelor's level* (Appendix F). The social sciences is the largest category and accounts for nearly 14% of degrees for both UW-Madison and the peer group. All of the peers award degrees in the social sciences category. Similarly, Engineering accounts for nearly 10% of the degrees at both UW-Madison and the peers.

Biological sciences is a category in which UW-Madison differs from the peer group: 10.7% of UW-Madison's bachelors degrees are awarded in biological sciences compared with 7.0% of peers. All of the peers report degrees in this category. However, UW-Madison has more program areas in this category (12) than any of the peers. Only UCLA awards a higher fraction of undergraduate degrees in the biological sciences category.

Another example is the business category. UW-Madison awards 9.5% of bachelors degrees in this category compared with 12.5% for peers. Nine of the 13 peers award a higher fraction of undergraduate degrees in the business category compared to UW-Madison.

*Master's level* (Appendix G). UW-Madison has large master's degree production in the engineering and business categories. The engineering category accounts for 20% of UW-Madison master's degrees compared with 13.4% for the peers. Twelve of the 13 peers award masters degrees in the engineering category. Only two peers award a higher fraction of master's degrees in the engineering category (Purdue, 33%; Michigan, 25%).

UW-Madison awards 15% of master's degrees in the business category compared with the higher peer average of 23%. All of the peer institutions have master's-level business programs and they all award a higher portion of master's degrees in business than UW-Madison. However, UW-Madison has the most program areas in the peer group for the business category. UW-Madison has 13 program areas in the business category compared with no more than three program areas for nine of the peers.

*Ph.D. level* (Appendix H). At the doctoral level, UW-Madison awards more than 5% of degrees in each of five categories: biological sciences (18.1%), engineering (16.8%), physical sciences (10.9%), education (9.9%), and social sciences (8.5%). The percentage of degrees awarded by peers is within one percentage point for all of these categories except biological sciences.

For the biological sciences the UW-Madison share of Ph.D. degrees (18.1%) is higher than the peer average (12.9%). Only University of North Carolina (23.8%) and UCLA (18.6%) award a higher fraction of their Ph.D. degrees in the biological sciences category.

*Probing for more detail.* These examples highlight a few key points for some of the categories that account for the most degrees. Any of the categories can be probed for detail: the number of program areas per category, degrees per category in total or as a fraction of an institution's degree production, an exploration of how the peer universities make the category and program area assignments.

Table 3. Size Distribution of Categories

| Metric                                                 | Bachelor's | Master's | Doctoral (PhD) |
|--------------------------------------------------------|------------|----------|----------------|
| Number of UW-Madison categories                        | 25         | 26       | 25             |
| Number of categories that account for 50% of degrees   | 5          | 4        | 4              |
| Percent of degrees accounted for by 50% of disciplines | 85 %       | 86 %     | 90 %           |
| Number of Peer Categories                              | 33         | 30       | 33             |
| Number of categories that account for 50% of degrees   | 5          | 3        | 5              |
| Percent of degrees accounted for by 50% of disciplines | 89 %       | 91 %     | 93%            |

Abstracted from appendix F, G, H.

*Size distribution* (Table 3). A handful of large categories account for most degrees at UW-Madison and this same overall distribution is also observed among the peer universities. For example, just five categories account for half of the bachelor's degrees awarded at the universities in the study. And half of the categories account for 85% of bachelor's degrees at UW-Madison and 89% of degrees among the peer group.

**D. Policy Considerations: Low-Enrollment Programs**

UW-Madison has a governance policy that defines low-enrollment majors as those awarding five or fewer degrees in a five year period. That policy was implemented in 1994 and this study provides an opportunity to evaluate the impact of that policy.

By policy, a review of low-enrollment majors is incorporated into the annual program review process. An annual report on trends in degrees awarded is distributed to the deans and specifically points out low-enrollment majors. There has been a concerted effort to discontinue low-enrollment majors or explicitly justify their value. In general, low-enrollment majors at the master's or doctoral level are held harmless if there is a corresponding doctoral or master's program, respectively, that is not low-enrollment. In addition, some low-enrollment majors are maintained because they are essential to the mission of a large public university even though all recognize that some of these programs may never graduate many students.

The IPEDS Completions data are of limited utility for investigating the question of low-enrollment majors – many low-enrollment majors award no degrees in some years and consequently do not appear in the federal reports on which the analysis is based. Nulls and zeros are indistinguishable. Only programs for which at least one degree was awarded show up in the data file. With this caveat in mind, the number of program areas that award one degree annually is a proxy for low-enrollment programs (Table 4).

Table 4. Percent of Program Areas That Award One Degree

| Degree Level | Percent of UW-Madison Programs | Percent of Peers (Average) | UW-Madison Rank for Program Areas with One Degree | UW-Madison Rank for All Program Areas |
|--------------|--------------------------------|----------------------------|---------------------------------------------------|---------------------------------------|
| Bachelor's   | 3.1                            | 5.3                        | 12                                                | 4                                     |
| Master's     | 9.9                            | 10.2                       | 8                                                 | 2                                     |
| Doctoral     | 16.5                           | 14.8                       | 7                                                 | 1                                     |

Source: IPEDS Degree Completions, 2004. See Appendix I.

On average, more doctoral and master's program areas are award one degree in a given year than bachelor's programs. At the bachelor's level, UW-Madison ranks 12<sup>th</sup> for program areas with one degree compared with 4<sup>th</sup> for the count of program areas overall. So, UW-Madison has more than the average number of program areas but relatively fewer of them award only one degree in a given year compared to the peer average.

Only four of the peer universities (UT-Austin, Ohio State University, UNC-Chapel Hill, Purdue) have fewer than 10% of program areas at all levels that award only one degree per year (Appendix I).

The UW-Madison low-enrollment policy has been effective at streamlining the program array. The number of low-enrollment majors has decreased from nearly two dozen in the early 1990's to only a handful of such majors in the most recent analysis of degree trends (Appendix J). Justification for the remaining low-enrollment majors has been made by the program faculty and the relevant deans.

Over the past 20 years, and mostly within the past 12 years, UW-Madison has implemented 17 new major programs at various levels, deleted 44 major programs, and consolidated a number of small majors into larger majors for a net decrease of 41 major programs (Table 5). With only a few exceptions, all of the discontinued major programs were deemed low-enrollment prior to their demise. In most cases they had been informally abandoned by faculty and students long before they were formally discontinued.

**Table 5. Changes in UW-Madison Program Array, 1986 to 2006**

| Year              | Number of Bachelor's Majors | Number of Master's Majors | Number of Doctoral and First Professional Majors | Count of Distinct Majors |
|-------------------|-----------------------------|---------------------------|--------------------------------------------------|--------------------------|
| 1986              | 156                         | 184                       | 125                                              | 254                      |
| 1996              | 149                         | 172                       | 125                                              | 239                      |
| 2006              | 135                         | 153                       | 116                                              | 213                      |
| Change since 1986 | -21                         | -31                       | -9                                               | -41                      |

Source: UW-Madison Registrar's Official List of Majors, Options, and Degrees. See Appendix J.

### **E. Policy Considerations: Adding and Eliminating Programs**

The approach taken in this study has the advantages of both providing peer comparisons and of providing a perspective across the university that does not attend to the boundaries of schools, colleges, departments and other academic structures.

At UW-Madison changes in the program array are typically driven by faculty interests. New programs emerge from areas of faculty scholarship. Most often the academic resource base develops as a consequence of faculty hiring, the shifting emphases of scholarship, and the influence of a range of external influences (for example funding for training grants or the dictates of accreditation agencies). Inevitably, some programs at the trailing edge become underserved, fail to attract students, and are eventually discontinued.

This study identifies areas of strength relative to peers and provides an analytical basis for discussion of policies that might be considered to shape the program array. If there is interest in focusing the program array on areas of existing strength this analytical approach highlights where the disciplinary strength is and how those strengths compare to peers. If there is interest



in assuring even instructional activity across the spectrum of discipline categories and program areas, this analysis points to areas that may need encouragement for growth.

All academic programs require a certain minimum level of “care and feeding” aside from the direct delivery of instruction. The effort of record keeping and oversight at the department, school/college, in the Registrar’s Office, Graduate School and Provost’s Office is necessary for all programs. The Library must maintain a collection to support every major program. Faculty and staff time is devoted to assessing student learning, program review, curriculum (re)development, and evaluation of student progress. Advising and academic support services are essential to keep students moving through programs successfully. When planning a new academic major a realistic consideration of the full range of both direct and indirect costs, need, and expected enrollment, is necessary.

Discontinuing any one academic program that is inactive may not release many resources for reallocation or savings. For a major program that is substantially inactive, the savings may have been realized years before when much of the instructional effort was reallocated to the other activities those faculty decided to pursue. However, trimming moribund programs out of the program array may give savings in indirect costs when various functional offices no longer have to keep track of a defunct program that is still on the books. There is also a public policy value in taking neglected programs off the formal record in an era when resources are short and public scrutiny of public universities is intense.

#### **F. Policy Considerations: Is Having Many Small Programs “Good” or “Bad”?**

If we look at UW-Madison’s list of majors and degrees as we define them, then we find that the University offers 135 undergraduate majors, 153 master’s majors, and 116 doctoral plus professional programs (Appendix J). The median size of the graduating class is 18 students for bachelor’s majors, 7 students for master’s majors, and 5 students for doctoral programs. About half of the degrees are awarded in about 30% of the majors.

The peer comparisons illustrate that UW-Madison has more academic programs of smaller average size than peer universities. These features of the UW-Madison program array appear to be distinctive and preserved over the past decade despite a ten percent reduction in the program array.

Implicit in the peer group comparisons is the assumption that the peer group is, collectively, closer to the “right” answer for the optimum program area and category number and size. Of course, every university in the peer group has a distinctive context and variations on mission that will contribute to the “right” answer for that university. For example, for some of the peers the state higher education context will be an important consideration.

Is it an advantage or disadvantage to have more, smaller programs? A degree from a small program with few graduates, especially if it is new and without wide recognition, may not carry the cache of a big name academic program with a strong reputation based in a long history of many graduates going on to productive work. However, at such a large university the

opportunity to study in small programs and to have an astonishing breadth of choice may appeal to students and faculty.

## **G. Summary of Key Findings**

- This benchmark comparison of institutional program array indicators can be constructed from publicly available data collected by the Department of Education. Technological advances, for example the IPEDS Peer Analysis Tool, make this approach easier than it was a decade ago.
- The approach used in this study, which uses comparisons of rank order, is useful as a way to make comparisons over time despite changes in the IPEDS collection methodology and taxonomy.
- The number of program areas in which degrees are awarded by UW-Madison is greater than can be accounted for by overall enrollment or degrees awarded. This overall conclusion is the same as ten years ago.
- UW-Madison awards degrees in more program areas and awards fewer degrees per program area than the peer group average despite a decade of efforts to reduce the size of the program array by culling inactive programs. The program array has decreased in size by 10% but the rank order on number of programs relative to peers has changed little.
- The size distribution of categories, measured by degrees awarded, is similar at UW-Madison and at peer institutions; a few large categories account for most of the degree production.
- This analytical approach provides a quantitative overview of the disciplinary balance in comparison with a group of peer institutions and it provides a starting point for more detailed examination of specific discipline categories.
- This analytical approach may be useful in supporting or refuting judgments about academic policy and the direction that those policies may take in the future.

## **Acknowledgements**

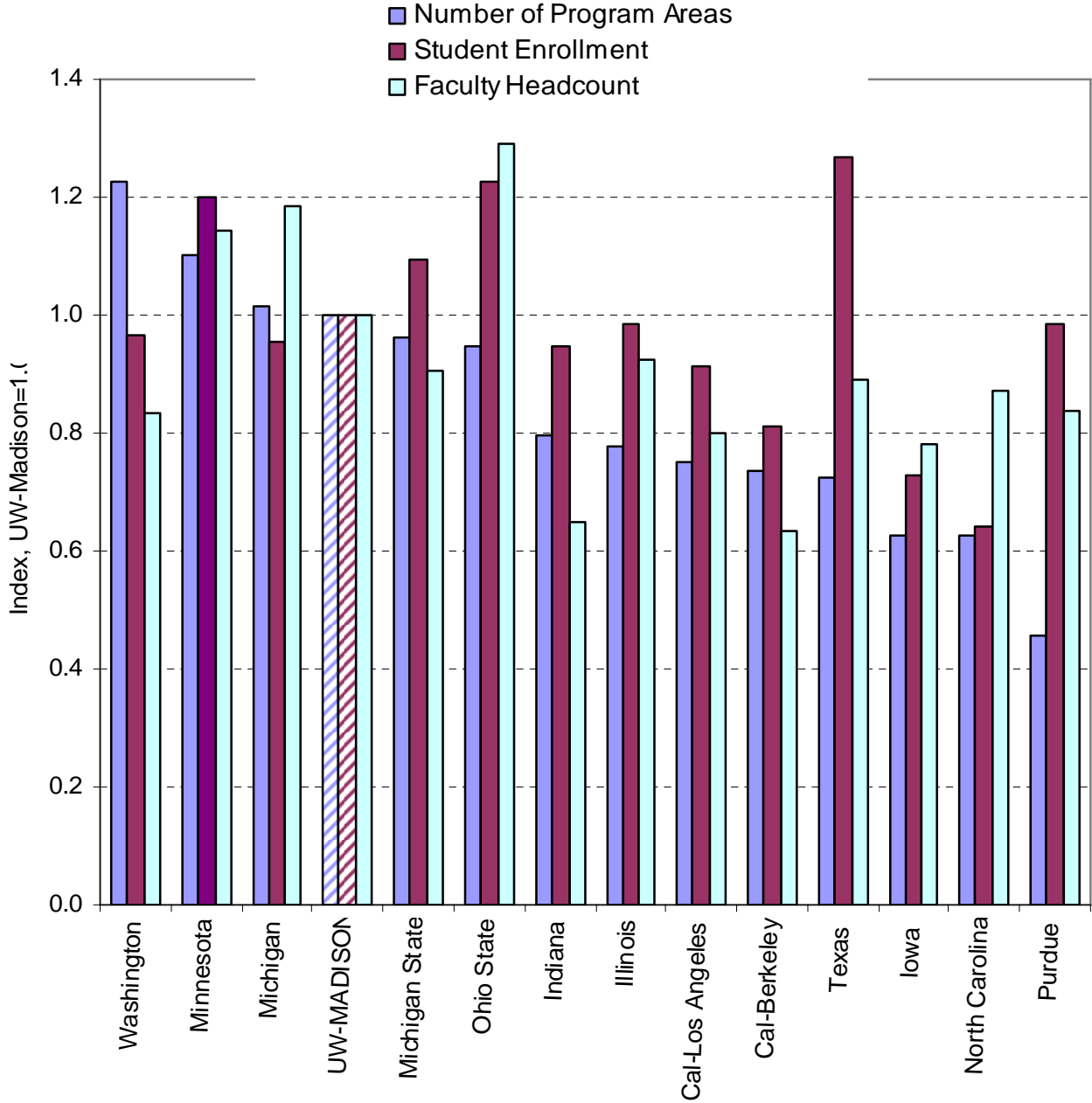
This analysis and the format of the paper is based on Martha Casey's 1996 analysis of the same topic that was presented at the annual meetings of the Association of Institutional Research and the Society of College and University Planners. Clare Huhn provided assistance with extracting data sets from IPEDS Peer Analysis System. Thanks to Bruce Beck and Clare Huhn for helpful comments.

## **Appendices**

- A. Peer Comparisons on Selected Measures
- B. Number of Degrees Awarded by Level

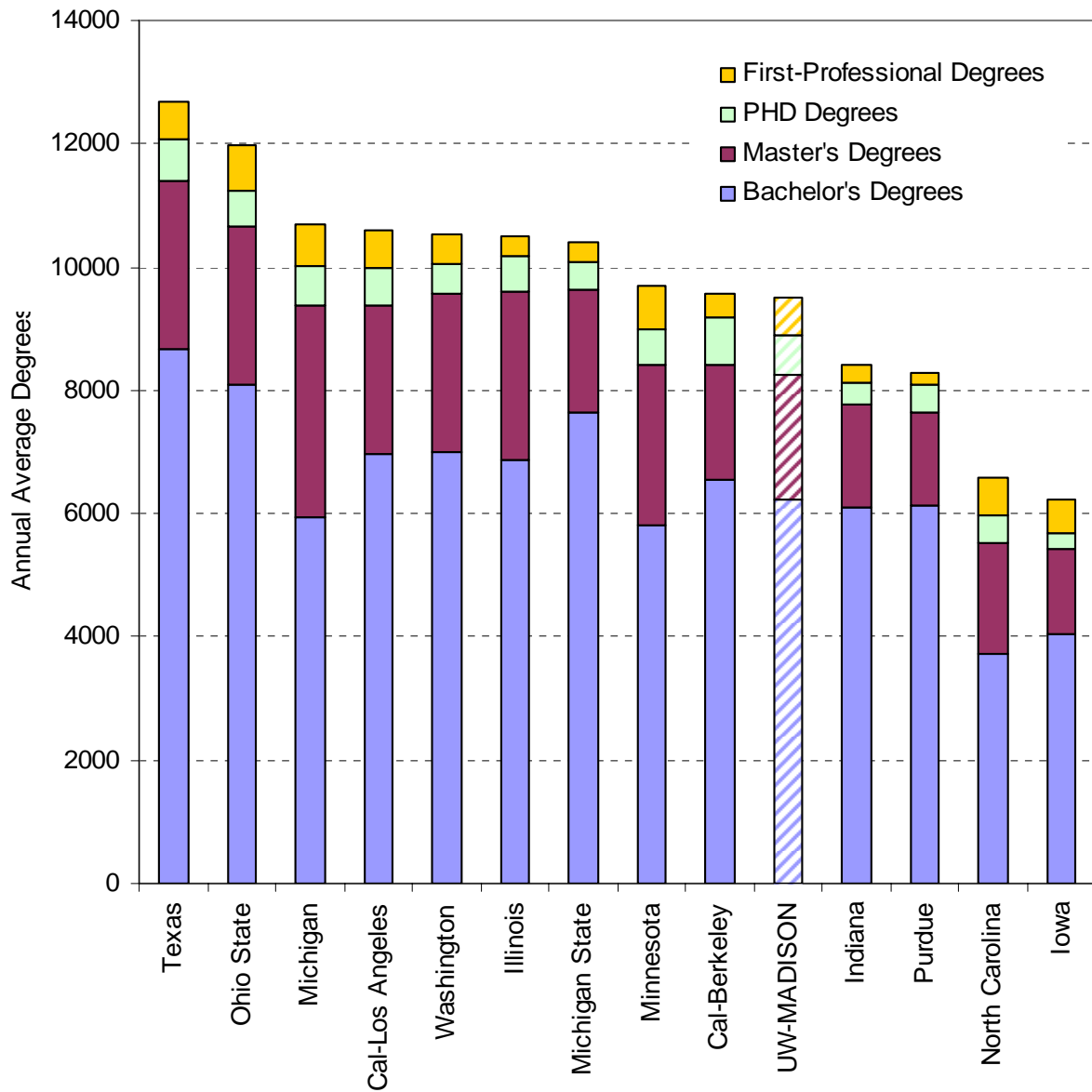
- C. 1. Number of Program Areas in Which Bachelor's Degrees were Awarded
- C. 2. Average Number of Bachelor's Degrees per Program Area
- D. 1. Number of Program Areas in Which Master's Degrees were Awarded
- D. 2. Average Number of Master's Degrees per Program Area
- E. 1. Number of Program Areas in Which Doctoral Degrees were Awarded
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- F. 1. Number of Program Areas in which Degrees were Awarded in 2004 by Category – Bachelor's Degrees
- F. 2. Number of Degrees by Category, 2004 – Bachelor's Degrees
- F. 3. Percent of Bachelor's degrees Awarded by Category, 2004
- G. 1. Number of Program Areas in which Degrees were Awarded in 2004 by Category – Master's Degrees
- G. 2. Number of Degrees by Category, 2004 – Master's Degrees
- G. 3. Percent of Master's Degrees Awarded by Category, 2004
- H. 1. Number of Program Areas in which Degrees were Awarded in 2004 by Category – Doctoral and First Professional Degrees
- H. 2. Number of Degrees by Category, 2004 – Doctoral and First Professional Degrees
- H. 3. Percent of Doctoral Degrees Awarded by Category, 2004
- I. Percent of Program Areas with One Degree, 2004
- J. Features of the Program Array at University of Wisconsin-Madison

**Appendix A. Peer Comparisons on Selected Measures.  
Indexed to UW-Madison as 1.00.  
Sorted on index of Number of Program Areas**



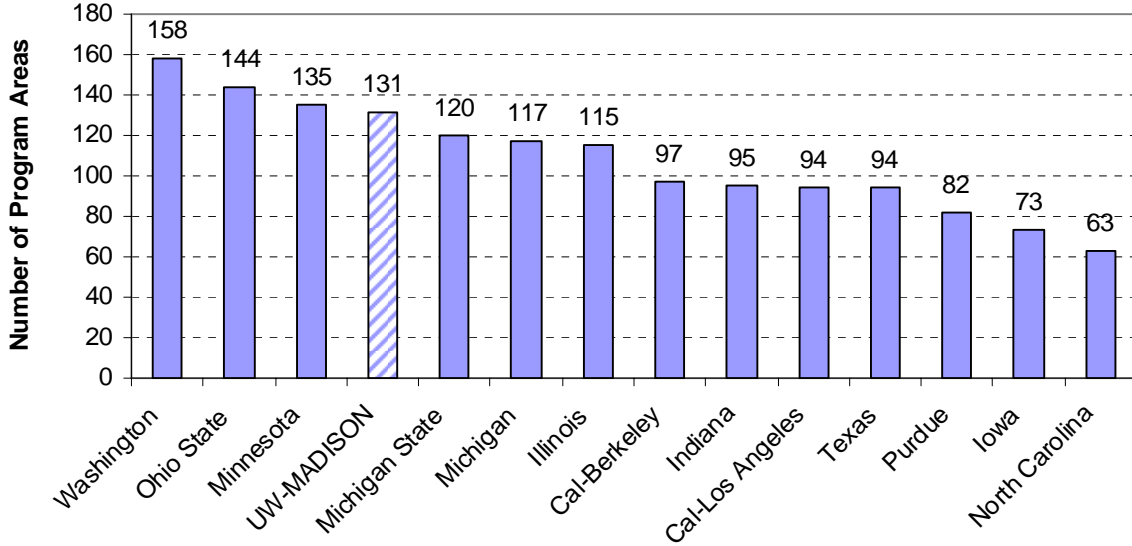
Degrees counts are from the IPEDS Degree Completions Survey (average of 2003 and 2004). Number of program areas is count of total program areas in which any degrees are awarded at the bachelors, masters, doctoral or first-professional levels in 2003 and 2004. Enrollments are from IPEDS Fall Enrollment Survey and averaged for 2003 and 2004. Faculty counts are taken from the IPEDS Fall Staff Survey and averaged over 2003, 2004, 2005.

## Appendix B. Number of Degrees Awarded by Level

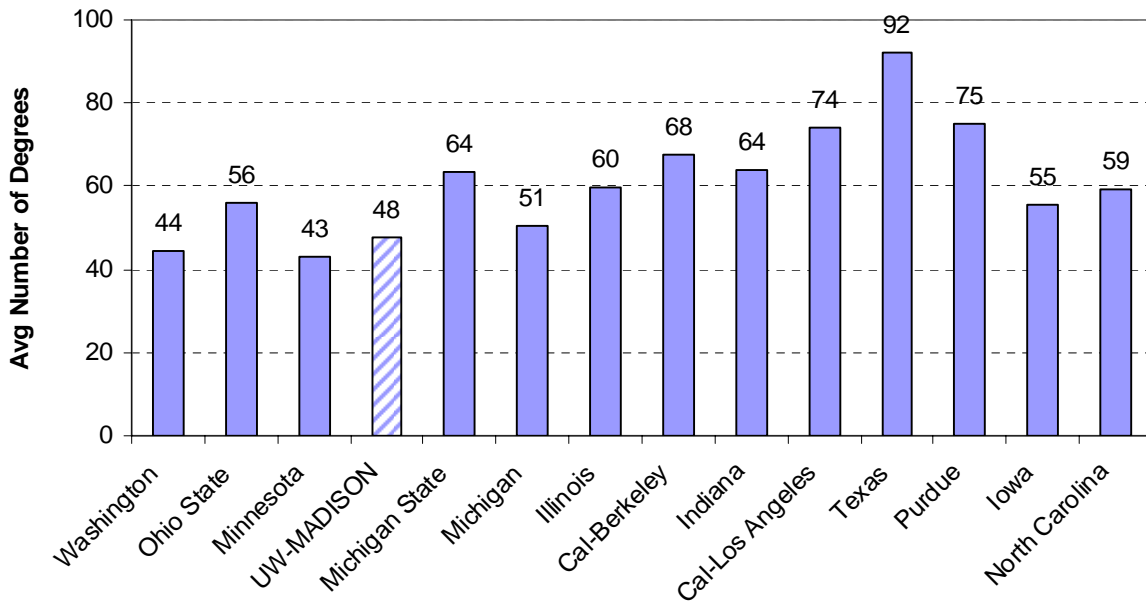


Source: IPEDS Degree Completions Survey. Degrees by level are averaged for 2003 and 2004.

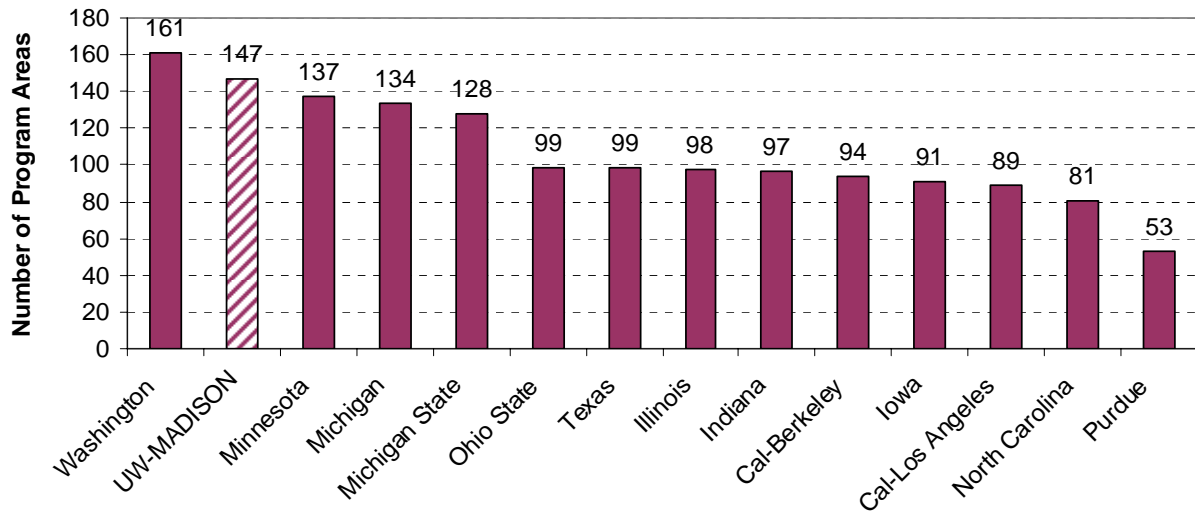
**Appendix C1. Number of Program Areas In Which BACHELORS Degrees Were Awarded (2003 or 2004)**



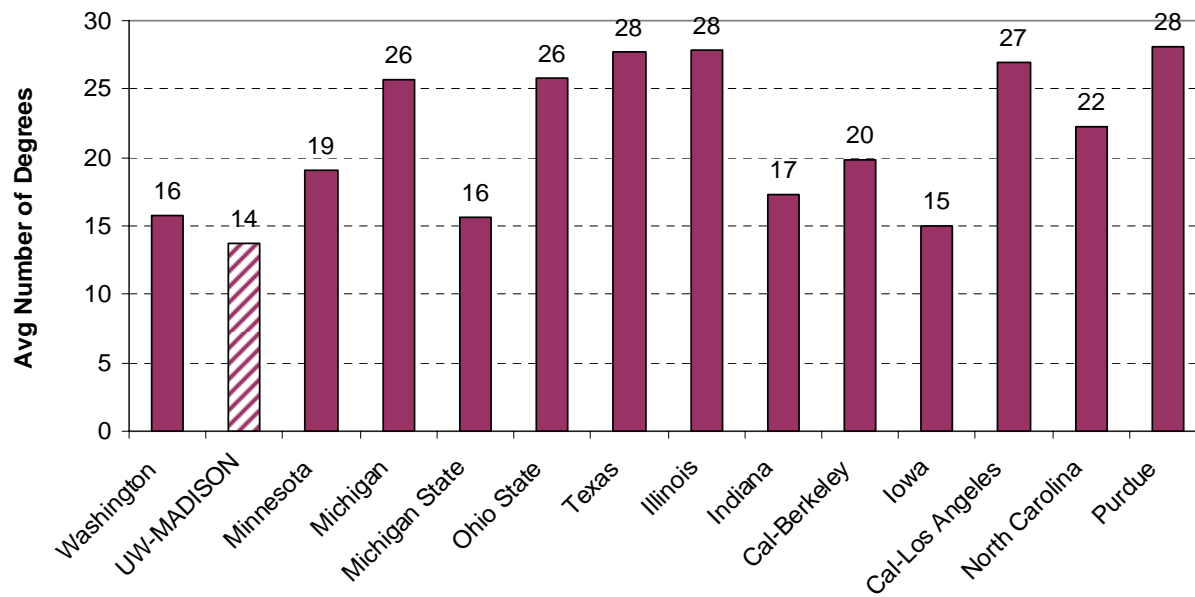
**Appendix C2. Average Number of BACHELORS Degrees Per Program Area**



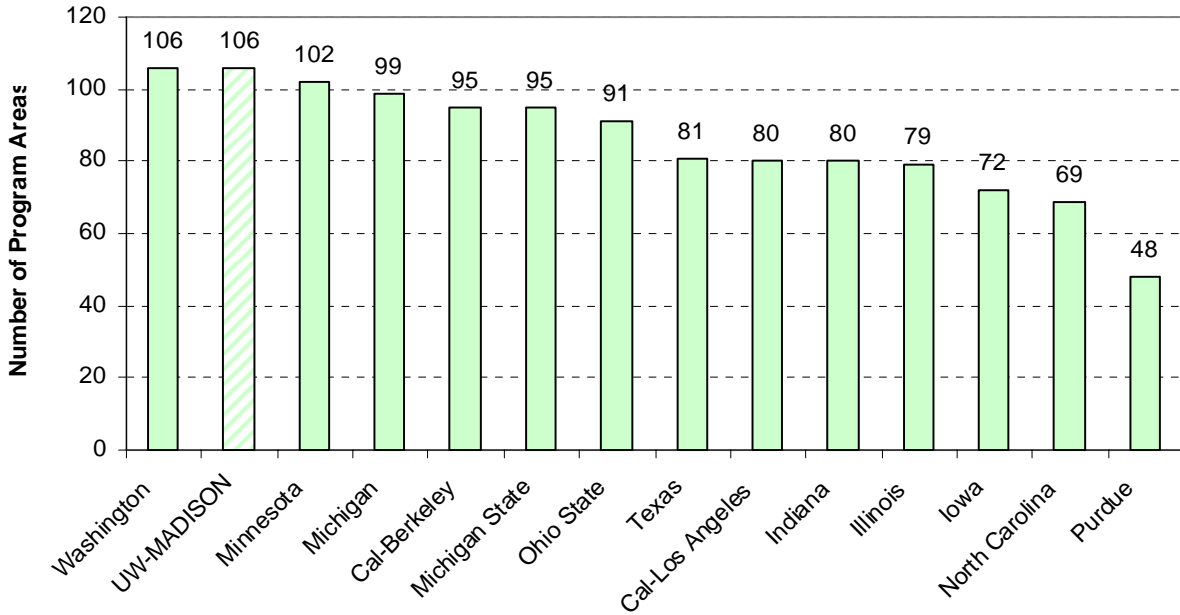
**Appendix D1. Number of Program Areas In Which MASTERS Degrees Were Awarded (2003 or 2004)**



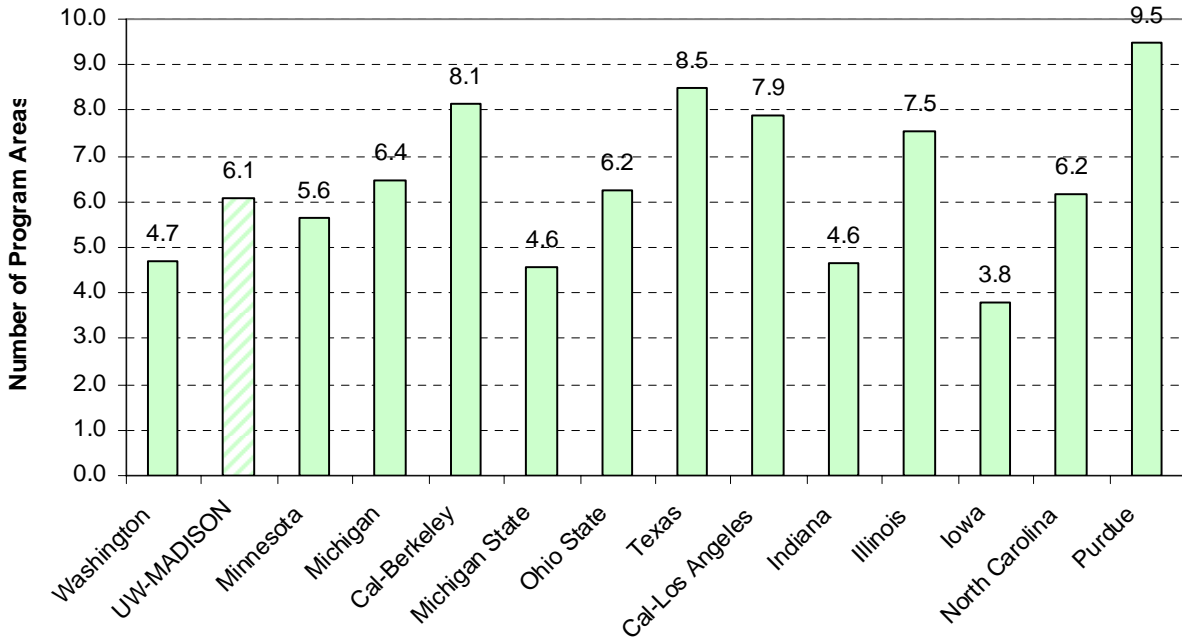
**Appendix D2. Average Number of MASTERS Degrees per Program Area**



**Appendix E1. Number of Program Areas In Which PHD Degrees Were Awarded (2003 or 2004)**



**Appendix E2. Number of PHD Degrees per Program Area**





Appendix F.1. Number of Program Areas in Which Degrees were Awarded in 2004 by Category - BACHELOR'S DEGREES

| CIP | Category Title (2 digit CIP)                    | Institution  |                 |          |         |      |          |                |           |                |            |        |       |              |            | Peers With Category |
|-----|-------------------------------------------------|--------------|-----------------|----------|---------|------|----------|----------------|-----------|----------------|------------|--------|-------|--------------|------------|---------------------|
|     |                                                 | Cal-Berkeley | Cal-Los Angeles | Illinois | Indiana | Iowa | Michigan | Michigan State | Minnesota | North Carolina | Ohio State | Purdue | Texas | U-Washington | UW-MADISON |                     |
| 01  | AGRICULTURE, AG OPERATIONS, AND RELATED         |              |                 | 8        |         |      |          | 8              | 8         |                | 7          | 7      |       |              | 10         | 5                   |
| 03  | NATURAL RESOURCES AND CONSERVATION              | 6            |                 | 2        | 1       | 1    | 3        | 5              | 3         | 2              | 6          | 3      |       | 8            | 2          | 11                  |
| 04  | ARCHITECTURE AND RELATED SERVICES               | 2            |                 | 3        |         |      | 1        | 2              | 2         |                | 2          | 1      | 1     | 3            | 1          | 9                   |
| 05  | AREA, ETHNIC, CULTURAL, AND GENDER STUDIES      | 10           | 13              | 3        | 3       | 5    | 8        | 2              | 6         | 7              | 2          | 1      | 6     | 9            | 6          | 13                  |
| 09  | COMMUNICATION, JOURNALISM, AND RELATED          | 1            |                 | 4        | 3       | 2    | 1        | 4              | 2         | 2              | 3          | 1      | 5     | 3            | 2          | 12                  |
| 10  | COMMUNICATIONS TECH AND SUPPORT SERVICES        |              |                 |          |         | 1    |          |                |           |                |            |        |       |              |            | 1                   |
| 11  | COMPUTER AND INFO SCI AND SUPPORT SERVICES      | 1            | 1               | 1        | 1       | 1    | 1        | 1              | 2         | 2              | 1          | 2      | 1     | 2            | 1          | 13                  |
| 12  | PERSONAL AND CULINARY SERVICES                  |              |                 | 1        |         |      |          |                | 1         |                |            |        |       |              |            | 2                   |
| 13  | EDUCATION                                       | 1            |                 | 7        | 20      | 3    | 4        | 5              | 7         | 4              | 11         | 6      |       | 3            | 7          | 11                  |
| 14  | ENGINEERING                                     | 11           | 9               | 14       |         | 6    | 13       | 10             | 10        |                | 12         | 12     | 7     | 11           | 13         | 11                  |
| 15  | ENGINEERING TECHNOLOGIES/TECHNICIANS            |              |                 |          |         |      |          |                |           |                | 1          | 6      |       |              |            | 2                   |
| 16  | FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS | 13           | 16              | 9        | 9       | 9    | 11       | 7              | 14        | 6              | 12         | 1      | 13    | 19           | 14         | 13                  |
| 19  | FAMILY AND CONSUMER /HUMAN SCIENCES             |              |                 | 2        | 1       |      |          | 3              | 5         | 1              | 5          | 4      | 4     | 1            | 6          | 9                   |
| 22  | LEGAL PROFESSIONS AND STUDIES                   | 1            |                 |          |         |      |          | 1              |           |                |            |        |       |              | 1          | 2                   |
| 23  | ENGLISH LANGUAGE AND LITERATURE/LETTERS         | 2            | 2               | 3        | 1       | 1    | 3        | 1              | 2         | 1              | 1          | 1      | 1     | 2            | 1          | 13                  |
| 24  | LIBERAL ARTS AND SCI, GEN STUDIES, HUMANITIES   |              | 1               | 2        | 1       | 1    | 2        | 1              |           | 1              | 1          | 1      | 2     | 2            |            | 11                  |
| 26  | BIOLOGICAL AND BIOMEDICAL SCIENCES              | 5            | 9               | 10       | 3       | 3    | 5        | 9              | 8         | 2              | 8          | 4      | 7     | 10           | 12         | 13                  |
| 27  | MATHEMATICS AND STATISTICS                      | 3            | 4               | 3        | 1       | 2    | 2        | 2              | 2         | 2              | 1          | 2      | 1     | 5            | 3          | 13                  |
| 30  | MULTI/INTERDISCIPLINARY STUDIES                 | 5            | 4               | 1        | 2       | 3    | 3        | 5              | 3         | 1              | 1          | 2      | 2     |              | 3          | 12                  |
| 31  | PARKS, REC, LEISURE AND FITNESS STUDIES         |              |                 | 2        | 1       | 3    | 2        | 2              | 4         | 2              | 1          |        | 2     |              | 2          | 9                   |
| 38  | PHILOSOPHY AND RELIGIOUS STUDIES                | 2            | 3               | 2        | 3       | 2    | 2        | 2              | 3         | 2              | 3          | 1      | 2     | 3            | 3          | 13                  |
| 40  | PHYSICAL SCIENCES                               | 6            | 6               | 4        | 4       | 4    | 7        | 5              | 5         | 4              | 4          | 3      | 7     | 7            | 6          | 13                  |
| 42  | PSYCHOLOGY                                      | 1            | 2               | 2        | 1       | 1    | 2        | 1              | 2         | 1              | 1          | 1      | 1     | 1            | 1          | 13                  |
| 43  | SECURITY AND PROTECTIVE SERVICES                |              |                 |          | 1       |      |          | 1              |           |                |            |        |       | 1            |            | 3                   |
| 44  | PUBLIC ADMIN AND SOCIAL SERVICE PROFESSIONS     | 1            |                 |          | 1       | 1    |          | 2              |           | 1              | 1          |        | 1     | 1            | 1          | 8                   |
| 45  | SOCIAL SCIENCES                                 | 7            | 8               | 6        | 7       | 5    | 6        | 8              | 10        | 5              | 7          | 4      | 7     | 7            | 6          | 13                  |
| 46  | CONSTRUCTION TRADES                             |              |                 |          |         |      |          |                | 1         |                |            |        |       |              |            | 1                   |
| 49  | TRANSPORTATION AND MATERIALS MOVING             |              |                 |          |         |      |          |                |           |                | 1          | 2      |       |              |            | 2                   |
| 50  | VISUAL AND PERFORMING ARTS                      | 6            | 10              | 14       | 9       | 6    | 23       | 9              | 10        | 5              | 11         | 3      | 11    | 19           | 7          | 13                  |
| 51  | HEALTH PROF AND RELATED CLINICAL SCI            | 1            | 1               | 3        | 3       | 6    | 4        | 7              | 7         | 6              | 12         | 6      | 4     | 8            | 7          | 13                  |
| 52  | BUSINESS, MANAGEMENT, AND RELATED               | 1            | 1               | 5        | 2       | 7    | 2        | 9              | 11        | 2              | 15         | 4      | 6     | 7            | 10         | 13                  |
| 54  | HISTORY                                         | 1            | 1               | 1        | 1       | 1    | 1        | 1              | 1         | 1              | 2          | 1      | 1     | 3            | 2          | 13                  |
|     | Count of Categories at Each Institution         | 22           | 17              | 25       | 24      | 22   | 22       | 27             | 25        | 22             | 27         | 25     | 22    | 23           | 25         |                     |
|     | Total Number of Program Areas                   | 87           | 91              | 112      | 80      | 73   | 106      | 113            | 129       | 60             | 132        | 79     | 92    | 135          | 127        |                     |

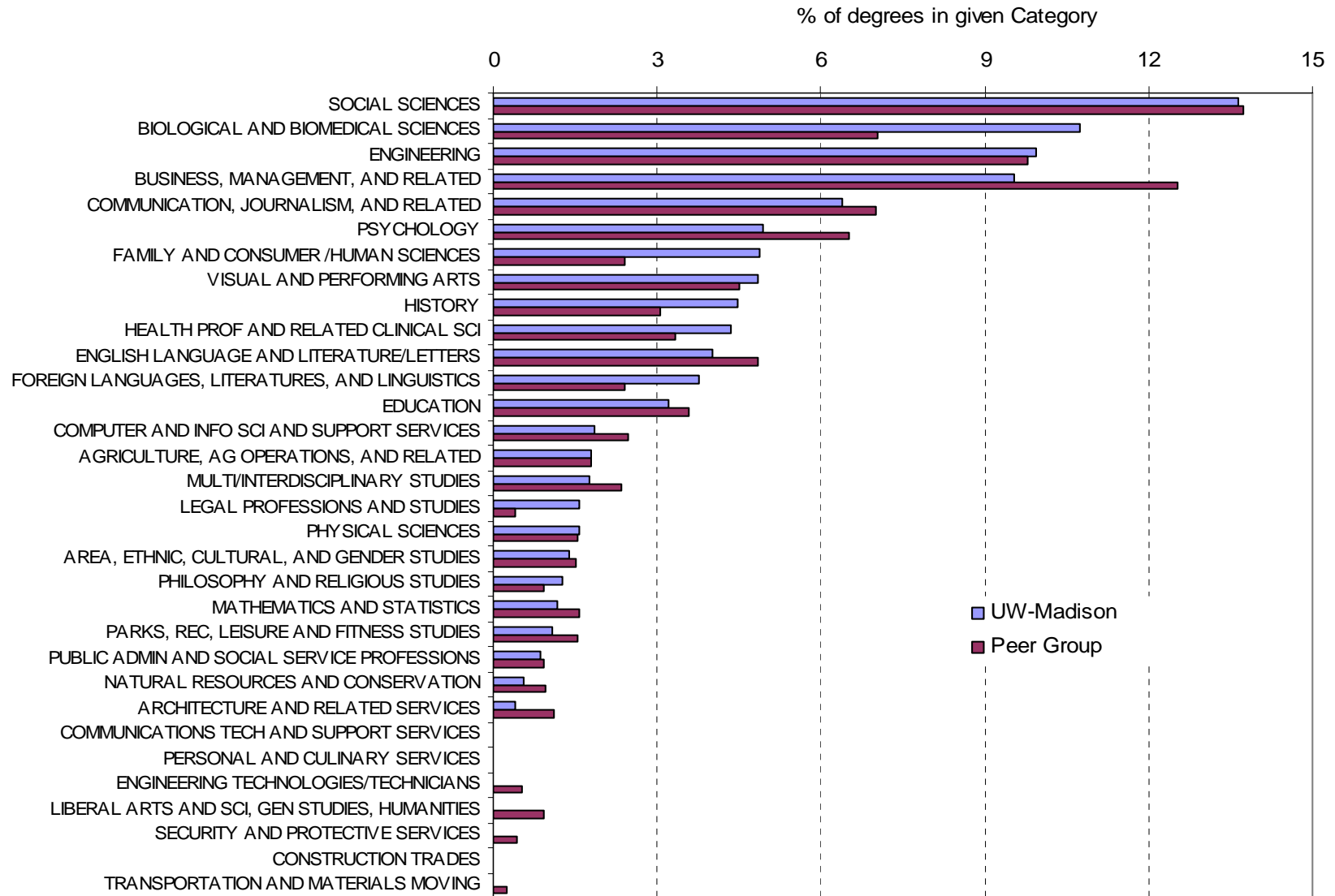
Source: IPEDS Degree Completions, 2004. Counts are number of program areas (6 digit CIP areas) within each category.

Appendix F.2. Number of Degrees by Category, 2004 - BACHELOR'S DEGREES

| CIP                 | Category Title (2 digit CIP)                  | Institution  |                 |          |         |      |          |                |           |                |            |        |       |               |            | Percent of Total |        |       |
|---------------------|-----------------------------------------------|--------------|-----------------|----------|---------|------|----------|----------------|-----------|----------------|------------|--------|-------|---------------|------------|------------------|--------|-------|
|                     |                                               | Cal-Berkeley | Cal-Los Angeles | Illinois | Indiana | Iowa | Michigan | Michigan State | Minnesota | North Carolina | Ohio State | Purdue | Texas | U-Wash ington | UW-MADISON | Peer Total       | UW-MSN | Peers |
| 01                  | AGRICULTURE, AG OPERATIONS, AND RELATED       |              |                 | 328      |         |      |          | 482            | 97        |                | 274        | 334    |       | 113           | 1628       | 1.8              | 1.8    |       |
| 03                  | NATURAL RESOURCES AND CONSERVATION            | 113          |                 | 52       | 9       | 16   | 76       | 90             | 129       | 37             | 100        | 73     |       | 144           | 36         | 875              | 0.6    | 1.0   |
| 04                  | ARCHITECTURE AND RELATED SERVICES             | 204          |                 | 181      |         |      | 89       | 45             | 182       |                | 116        | 25     | 52    | 89            | 25         | 1008             | 0.4    | 1.1   |
| 05                  | AREA, ETHNIC, CULTURAL, AND GENDER STUDIES    | 268          | 183             | 25       | 24      | 41   | 71       | 9              | 54        | 161            | 49         | 3      | 124   | 287           | 88         | 1387             | 1.4    | 1.5   |
| 09                  | COMMUNICATION, JOURNALISM, AND RELATED        | 180          |                 | 247      | 661     | 437  | 192      | 1039           | 306       | 614            | 454        | 270    | 1187  | 400           | 404        | 6391             | 6.4    | 7.0   |
| 10                  | COMMUNICATIONS TECH AND SUPPORT SERVICES      |              |                 |          | 4       |      |          |                |           |                |            |        |       |               |            | 4                |        | 0.0   |
| 11                  | COMPUTER AND INFO SCI AND SUPPORT SERVICE     | 123          | 122             | 204      | 58      | 71   | 200      | 89             | 204       | 55             | 175        | 321    | 367   | 136           | 118        | 2243             | 1.9    | 2.5   |
| 12                  | PERSONAL AND CULINARY SERVICES                |              |                 | 1        |         |      |          |                | 36        |                |            |        |       |               |            | 37               |        | 0.0   |
| 13                  | EDUCATION                                     | 1            |                 | 241      | 1006    | 201  | 122      | 287            | 219       | 83             | 380        | 487    |       | 33            | 203        | 3263             | 3.2    | 3.6   |
| 14                  | ENGINEERING                                   | 812          | 572             | 978      |         | 248  | 1046     | 591            | 587       |                | 752        | 1183   | 912   | 589           | 630        | 8900             | 9.9    | 9.8   |
| 15                  | ENGINEERING TECHNOLOGIES/TECHNICIANS          |              |                 |          |         |      |          |                |           |                | 1          | 486    |       |               |            | 487              |        | 0.5   |
| 16                  | FOREIGN LANGUAGES, LITERATURES, AND LINGUI    | 179          | 170             | 106      | 111     | 86   | 145      | 126            | 170       | 60             | 204        | 35     | 245   | 315           | 239        | 2191             | 3.8    | 2.4   |
| 19                  | FAMILY AND CONSUMER /HUMAN SCIENCES           |              |                 | 62       | 134     |      |          | 186            | 122       | 15             | 801        | 379    | 190   | 1             | 308        | 2198             | 4.9    | 2.4   |
| 22                  | LEGAL PROFESSIONS AND STUDIES                 | 187          |                 |          |         |      |          | 76             |           |                |            |        |       |               | 100        | 363              | 1.6    | 0.4   |
| 23                  | ENGLISH LANGUAGE AND LITERATURE/LETTERS       | 455          | 445             | 453      | 149     | 238  | 347      | 216            | 425       | 180            | 352        | 146    | 342   | 397           | 255        | 4400             | 4.0    | 4.8   |
| 24                  | LIBERAL ARTS AND SCI, GEN STUDIES, HUMANITIES |              | 4               | 16       | 248     | 29   | 190      | 64             |           | 6              | 25         | 8      | 181   | 62            |            | 833              |        | 0.9   |
| 26                  | BIOLOGICAL AND BIOMEDICAL SCIENCES            | 710          | 822             | 490      | 348     | 117  | 325      | 548            | 316       | 299            | 398        | 145    | 623   | 585           | 681        | 6407             | 10.7   | 7.0   |
| 27                  | MATHEMATICS AND STATISTICS                    | 221          | 218             | 98       | 41      | 29   | 86       | 60             | 80        | 45             | 64         | 86     | 190   | 146           | 75         | 1439             | 1.2    | 1.6   |
| 30                  | MULTI/INTERDISCIPLINARY STUDIES               | 447          | 354             | 37       | 180     | 40   | 76       | 100            | 345       | 26             | 76         | 7      | 340   |               | 112        | 2140             | 1.8    | 2.3   |
| 31                  | PARKS, REC, LEISURE AND FITNESS STUDIES       |              |                 | 184      | 111     | 177  | 136      | 190            | 173       | 120            | 86         |        | 147   |               | 68         | 1392             | 1.1    | 1.5   |
| 38                  | PHILOSOPHY AND RELIGIOUS STUDIES              | 108          | 109             | 34       | 61      | 39   | 59       | 26             | 35        | 39             | 39         | 20     | 82    | 118           | 80         | 849              | 1.3    | 0.9   |
| 40                  | PHYSICAL SCIENCES                             | 139          | 83              | 111      | 57      | 39   | 72       | 97             | 115       | 114            | 80         | 83     | 132   | 193           | 100        | 1415             | 1.6    | 1.6   |
| 42                  | PSYCHOLOGY                                    | 278          | 917             | 495      | 307     | 283  | 632      | 363            | 427       | 353            | 432        | 210    | 391   | 516           | 313        | 5917             | 4.9    | 6.5   |
| 43                  | SECURITY AND PROTECTIVE SERVICES              |              |                 |          | 158     |      |          | 171            |           |                |            |        |       | 76            |            | 405              |        | 0.4   |
| 44                  | PUBLIC ADMIN AND SOCIAL SERVICE PROFESSION    | 74           |                 |          | 421     | 44   |          | 58             |           | 31             | 70         |        | 46    | 34            | 54         | 832              | 0.9    | 0.9   |
| 45                  | SOCIAL SCIENCES                               | 1384         | 1799            | 631      | 344     | 474  | 929      | 775            | 748       | 556            | 1082       | 307    | 1310  | 1313          | 864        | 12516            | 13.6   | 13.7  |
| 46                  | CONSTRUCTION TRADES                           |              |                 |          |         |      |          |                | 11        |                |            |        |       |               |            | 11               |        | 0.0   |
| 49                  | TRANSPORTATION AND MATERIALS MOVING           |              |                 |          |         |      |          |                |           |                | 56         | 156    |       |               |            | 212              |        | 0.2   |
| 50                  | VISUAL AND PERFORMING ARTS                    | 219          | 427             | 164      | 322     | 271  | 381      | 247            | 363       | 102            | 293        | 140    | 349   | 528           | 307        | 4113             | 4.8    | 4.5   |
| 51                  | HEALTH PROF AND RELATED CLINICAL SCI          | 1            | 22              | 254      | 96      | 278  | 130      | 290            | 225       | 253            | 427        | 317    | 220   | 245           | 275        | 3033             | 4.3    | 3.3   |
| 52                  | BUSINESS, MANAGEMENT, AND RELATED             | 319          | 317             | 1206     | 1221    | 768  | 385      | 1452           | 541       | 391            | 1293       | 953    | 1210  | 745           | 604        | 11405            | 9.5    | 12.5  |
| 54                  | HISTORY                                       | 228          | 462             | 165      | 101     | 89   | 234      | 106            | 139       | 175            | 209        | 68     | 277   | 242           | 284        | 2779             | 4.5    | 3.1   |
| Institutional Total |                                               | 6650         | 7026            | 6763     | 6172    | 4015 | 5923     | 7783           | 6049      | 3715           | 8288       | 6242   | 8917  | 7194          | 6336       | 91073            | 100.0  | 100.0 |

Source: IPEDS Degree Completions, 2004. Counts are number of program areas (6 digit CIP areas) within each category.

### Appendix F.3. Percent of Bachelor's Degrees Awarded by Category, 2004



Appendix G.1. Number of Program Areas in Which Degrees were Awarded in 2004 by Category - MASTER'S DEGREES

| CIP Category Title (2 digit CIP)                   | Institution  |                 |          |         |      |          |                |           |                |            |        |       |              |            | Peers With Category |
|----------------------------------------------------|--------------|-----------------|----------|---------|------|----------|----------------|-----------|----------------|------------|--------|-------|--------------|------------|---------------------|
|                                                    | Cal-Berkeley | Cal-Los Angeles | Illinois | Indiana | Iowa | Michigan | Michigan State | Minnesota | North Carolina | Ohio State | Purdue | Texas | U-Washington | UW-MADISON |                     |
| 01 AGRICULTURE, AG OPERATIONS, AND RELATED SCI     | 2            |                 | 4        |         |      |          | 8              | 7         |                | 5          | 6      |       | 1            | 8          | 7                   |
| 03 NATURAL RESOURCES AND CONSERVATION              | 3            |                 | 1        | 1       |      | 1        | 3              | 5         | 1              | 1          | 1      |       | 8            | 5          | 10                  |
| 04 ARCHITECTURE AND RELATED SERVICES               | 3            | 2               | 3        |         | 1    | 3        | 1              | 3         | 1              | 3          |        |       | 3            | 2          | 11                  |
| 05 AREA, ETHNIC, CULTURAL, AND GENDER STUDIES      | 5            | 7               | 4        | 5       | 3    | 5        | 1              | 2         | 1              | 2          |        | 6     | 10           | 6          | 12                  |
| 09 COMMUNICATION, JOURNALISM, AND RELATED          | 1            |                 | 2        | 3       | 2    |          | 6              | 2         | 2              | 3          | 1      | 3     | 2            | 2          | 11                  |
| 11 COMPUTER AND INFO SCI AND SUPPORT SERVICES      | 2            | 2               | 1        | 1       | 1    | 1        | 1              | 1         | 2              | 1          | 1      | 1     | 1            | 1          | 13                  |
| 13 EDUCATION                                       | 1            | 1               | 15       | 17      | 2    | 1        | 15             | 15        | 6              | 4          | 3      | 10    | 7            | 9          | 13                  |
| 14 ENGINEERING                                     | 9            | 9               | 13       |         | 6    | 17       | 8              | 13        | 3              | 11         | 11     | 14    | 10           | 15         | 12                  |
| 15 ENGINEERING TECHNOLOGIES/TECHNICIANS            |              |                 |          |         |      |          |                |           |                | 1          |        |       |              |            | 1                   |
| 16 FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS | 10           | 12              | 6        | 10      | 7    | 9        | 5              | 7         | 6              | 7          | 2      | 10    | 9            | 12         | 13                  |
| 19 FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES     |              |                 |          | 1       |      |          | 4              | 2         |                | 4          | 3      | 2     |              | 2          | 6                   |
| 22 LEGAL PROFESSIONS AND STUDIES                   | 2            | 1               | 1        | 2       | 1    | 2        |                | 1         |                |            |        | 1     | 2            | 1          | 9                   |
| 23 ENGLISH LANGUAGE AND LITERATURE/LETTERS         | 2            | 1               | 3        | 2       | 1    | 2        | 1              | 3         | 1              | 1          | 1      | 3     | 3            | 2          | 13                  |
| 24 LIBERAL ARTS AND SCI, GEN STUDIES, HUMANITIES   |              |                 |          |         |      |          | 1              | 1         |                | 1          |        |       |              |            | 3                   |
| 25 LIBRARY SCIENCE                                 |              | 1               | 1        | 1       | 1    | 1        |                |           | 1              |            |        | 1     | 2            | 1          | 8                   |
| 26 BIOLOGICAL AND BIOMEDICAL SCIENCES              | 6            | 13              | 7        | 6       | 6    | 12       | 11             | 10        | 7              | 13         | 4      | 5     | 8            | 19         | 13                  |
| 27 MATHEMATICS AND STATISTICS                      | 2            | 2               | 3        | 1       | 2    | 3        | 3              | 2         | 2              | 2          | 2      | 3     | 3            | 2          | 13                  |
| 30 MULTI/INTERDISCIPLINARY STUDIES                 | 4            | 1               | 1        | 1       | 1    | 3        | 1              | 2         | 2              | 1          |        | 4     | 2            | 3          | 12                  |
| 31 PARKS, REC, LEISURE AND FITNESS STUDIES         |              |                 | 2        | 1       | 3    | 1        | 2              | 2         | 2              |            |        | 1     |              | 1          | 8                   |
| 38 PHILOSOPHY AND RELIGIOUS STUDIES                | 1            | 2               | 1        | 2       | 2    | 1        | 1              | 2         | 2              | 1          | 1      | 1     | 2            | 1          | 13                  |
| 40 PHYSICAL SCIENCES                               | 5            | 6               | 5        | 4       | 4    | 8        | 4              | 4         | 3              | 5          | 3      | 5     | 6            | 6          | 13                  |
| 41 SCIENCE TECHNOLOGIES/TECHNICIANS                |              |                 |          |         |      |          |                | 1         |                |            |        |       |              |            | 1                   |
| 42 PSYCHOLOGY                                      | 1            | 1               | 2        | 2       | 1    | 1        | 1              | 3         | 3              | 1          | 1      | 2     | 2            | 2          | 13                  |
| 43 SECURITY AND PROTECTIVE SERVICES                |              |                 |          | 1       |      |          | 2              |           |                |            |        |       |              |            | 2                   |
| 44 PUBLIC ADMIN AND SOCIAL SERVICE PROFESSIONS     | 2            | 2               | 2        | 1       | 1    | 4        | 2              | 3         | 2              | 2          |        | 2     | 4            | 2          | 12                  |
| 45 SOCIAL SCIENCES                                 | 7            | 6               | 5        | 7       | 7    | 6        | 6              | 5         | 5              | 5          | 3      | 5     | 5            | 7          | 13                  |
| 50 VISUAL AND PERFORMING ARTS                      | 4            | 8               | 5        | 8       | 7    | 10       | 10             | 4         | 4              | 7          | 2      | 5     | 20           | 7          | 13                  |
| 51 HEALTH PROF AND RELATED CLINICAL SCIENCES       | 2            | 7               | 4        | 2       | 14   | 16       | 9              | 20        | 13             | 10         | 3      | 4     | 18           | 10         | 13                  |
| 52 BUSINESS, MANAGEMENT, AND RELATED               | 2            | 1               | 4        | 3       | 2    | 2        | 9              | 5         | 2              | 3          | 2      | 3     | 5            | 13         | 13                  |
| 54 HISTORY                                         | 1            | 1               | 1        | 2       | 1    | 1        | 1              | 2         | 1              | 1          | 1      | 1     | 2            | 2          | 13                  |
| Count of Categories at Each Institution            | 23           | 21              | 25       | 24      | 23   | 23       | 26             | 27        | 23             | 25         | 19     | 24    | 24           | 26         |                     |
| Total Number of Program Areas                      | 77           | 86              | 96       | 84      | 76   | 110      | 116            | 127       | 72             | 95         | 51     | 94    | 135          | 141        |                     |

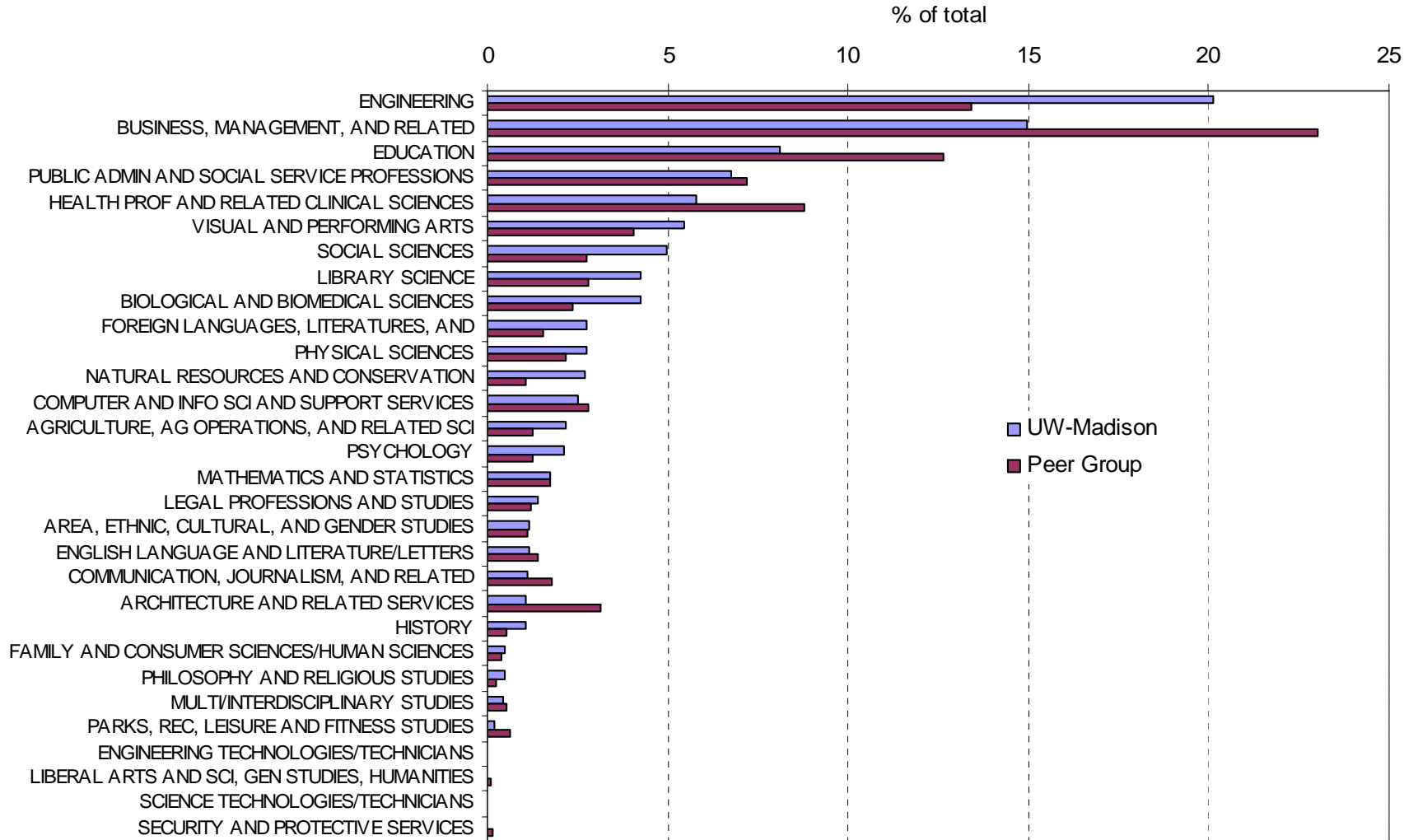
Source: IPEDS Degree Completions, 2004. Counts are number of program areas (6 digit CIP areas) within each category.

Appendix G.2. Number of Degrees by Category, 2004 - MASTER'S DEGREES

| CIP | Category Title (2 digit CIP)                  | Institution  |                 |          |         |      |          |                |           |                |            |        |       |              | Peer Total | Percent of Total |        |       |
|-----|-----------------------------------------------|--------------|-----------------|----------|---------|------|----------|----------------|-----------|----------------|------------|--------|-------|--------------|------------|------------------|--------|-------|
|     |                                               | Cal-Berkeley | Cal-Los Angeles | Illinois | Indiana | Iowa | Michigan | Michigan State | Minnesota | North Carolina | Ohio State | Purdue | Texas | U-Washington |            | UW-MADISON       | UW-MSN | Peers |
| 01  | AGRICULTURE, AG OPERATIONS, AND RELATED SC    | 9            |                 | 77       |         |      |          | 97             | 35        |                | 52         | 78     |       | 2            | 44         | 394              | 2.2    | 1.2   |
| 03  | NATURAL RESOURCES AND CONSERVATION            | 6            |                 | 30       | 23      |      | 59       | 23             | 32        | 27             | 14         | 9      |       | 60           | 55         | 338              | 2.7    | 1.1   |
| 04  | ARCHITECTURE AND RELATED SERVICES             | 124          | 135             | 150      |         | 20   | 187      | 8              | 62        | 36             | 67         |        | 63    | 125          | 21         | 998              | 1.0    | 3.1   |
| 05  | AREA, ETHNIC, CULTURAL, AND GENDER STUDIES    | 35           | 56              | 17       | 28      | 13   | 20       | 5              | 5         | 7              | 18         |        | 68    | 66           | 23         | 361              | 1.1    | 1.1   |
| 09  | COMMUNICATION, JOURNALISM, AND RELATED        | 60           |                 | 38       | 51      | 19   |          | 112            | 19        | 28             | 31         | 22     | 131   | 36           | 22         | 569              | 1.1    | 1.8   |
| 11  | COMPUTER AND INFO SCI AND SUPPORT SERVICE     | 68           | 95              | 129      | 62      | 32   | 66       | 41             | 66        | 82             | 37         | 64     | 36    | 63           | 51         | 892              | 2.5    | 2.8   |
| 13  | EDUCATION                                     | 145          | 298             | 251      | 310     | 150  | 152      | 556            | 508       | 222            | 681        | 163    | 180   | 249          | 164        | 4029             | 8.1    | 12.6  |
| 14  | ENGINEERING                                   | 341          | 236             | 453      |         | 76   | 859      | 121            | 278       | 19             | 265        | 517    | 484   | 218          | 407        | 4274             | 20.1   | 13.4  |
| 15  | ENGINEERING TECHNOLOGIES/TECHNICIANS          |              |                 |          |         |      |          |                |           |                | 6          |        |       |              |            | 6                |        | 0.0   |
| 16  | FOREIGN LANGUAGES, LITERATURES, AND LINGUI:   | 36           | 46              | 33       | 43      | 28   | 16       | 22             | 20        | 40             | 39         | 19     | 53    | 38           | 56         | 489              | 2.8    | 1.5   |
| 19  | FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES   |              |                 |          | 2       |      |          | 53             | 21        |                | 17         | 11     | 9     |              | 10         | 123              | 0.5    | 0.4   |
| 22  | LEGAL PROFESSIONS AND STUDIES                 | 36           | 22              | 29       | 62      | 16   | 38       |                | 28        |                |            |        | 18    | 112          | 28         | 389              | 1.4    | 1.2   |
| 23  | ENGLISH LANGUAGE AND LITERATURE/LETTERS       | 13           | 7               | 37       | 31      | 75   | 36       | 5              | 20        | 25             | 29         | 29     | 52    | 57           | 23         | 439              | 1.1    | 1.4   |
| 24  | LIBERAL ARTS AND SCI, GEN STUDIES, HUMANITIES |              |                 |          |         |      |          | 3              | 25        |                | 3          |        |       |              |            | 31               |        | 0.1   |
| 25  | LIBRARY SCIENCE                               |              | 55              | 234      | 153     | 31   | 40       |                |           | 62             |            |        | 112   | 116          | 86         | 889              | 4.3    | 2.8   |
| 26  | BIOLOGICAL AND BIOMEDICAL SCIENCES            | 26           | 62              | 56       | 18      | 33   | 115      | 52             | 82        | 56             | 65         | 29     | 7     | 71           | 86         | 758              | 4.3    | 2.4   |
| 27  | MATHEMATICS AND STATISTICS                    | 24           | 65              | 49       | 21      | 47   | 51       | 39             | 30        | 17             | 65         | 46     | 32    | 26           | 35         | 547              | 1.7    | 1.7   |
| 30  | MULTI/INTERDISCIPLINARY STUDIES               | 22           | 2               | 5        | 11      | 3    | 15       | 15             | 20        | 25             | 4          |        | 11    | 21           | 9          | 163              | 0.4    | 0.5   |
| 31  | PARKS, REC, LEISURE AND FITNESS STUDIES       |              |                 | 38       | 22      | 24   | 12       | 30             | 18        | 36             |            |        | 9     |              | 4          | 193              | 0.2    | 0.6   |
| 38  | PHILOSOPHY AND RELIGIOUS STUDIES              | 2            | 6               | 8        | 3       | 12   | 2        | 2              | 3         | 16             | 3          | 3      | 6     | 5            | 10         | 81               | 0.5    | 0.3   |
| 40  | PHYSICAL SCIENCES                             | 35           | 67              | 67       | 33      | 20   | 82       | 54             | 22        | 35             | 52         | 29     | 74    | 73           | 56         | 699              | 2.8    | 2.2   |
| 41  | SCIENCE TECHNOLOGIES/TECHNICIANS              |              |                 |          |         |      |          |                | 5         |                |            |        |       |              |            | 5                |        | 0.0   |
| 42  | PSYCHOLOGY                                    | 8            | 23              | 62       | 16      | 7    | 29       | 25             | 52        | 17             | 33         | 9      | 55    | 27           | 43         | 406              | 2.1    | 1.3   |
| 43  | SECURITY AND PROTECTIVE SERVICES              |              |                 |          | 8       |      |          | 32             |           |                |            |        |       |              |            | 40               |        | 0.1   |
| 44  | PUBLIC ADMIN AND SOCIAL SERVICE PROFESSION    | 174          | 130             | 131      | 122     | 94   | 410      | 28             | 201       | 150            | 195        |        | 253   | 265          | 137        | 2290             | 6.8    | 7.2   |
| 45  | SOCIAL SCIENCES                               | 66           | 76              | 69       | 55      | 27   | 93       | 61             | 31        | 41             | 89         | 44     | 68    | 60           | 101        | 881              | 5.0    | 2.8   |
| 50  | VISUAL AND PERFORMING ARTS                    | 16           | 192             | 70       | 189     | 108  | 90       | 72             | 74        | 28             | 109        | 34     | 121   | 74           | 110        | 1287             | 5.4    | 4.0   |
| 51  | HEALTH PROF AND RELATED CLINICAL SCIENCES     | 170          | 321             | 53       | 56      | 188  | 273      | 179            | 305       | 389            | 302        | 47     | 90    | 304          | 117        | 2794             | 5.8    | 8.8   |
| 52  | BUSINESS, MANAGEMENT, AND RELATED             | 459          | 564             | 664      | 353     | 330  | 792      | 455            | 705       | 495            | 419        | 423    | 896   | 476          | 303        | 7334             | 15.0   | 23.0  |
| 54  | HISTORY                                       | 21           | 30              | 6        | 8       | 5    | 9        | 1              | 10        | 15             | 11         | 7      | 13    | 12           | 21         | 169              | 1.0    | 0.5   |
|     | Institutional Total                           | 1896         | 2488            | 2756     | 1680    | 1358 | 3446     | 2091           | 2677      | 1868           | 2606       | 1583   | 2841  | 2556         | 2022       | 31868            | 100.0  | 100.0 |

Source: IPEDS Degree Completions, 2004. Counts are number of program areas (6 digit CIP areas) within each category.

**Appendix G.3. Percent of Master's Degrees Awarded by Category, 2004**



Appendix H.1. Number of Program Areas in Which Degrees were Awarded in 2004 by Category - DOCTORAL AND FIRST PROFESSIONAL DEGREES

| CIP Category Title (2 digit CIP)                   | Institution  |                 |          |         |      |          |                |           |                |            |        |       |               |            | Peers With Category |
|----------------------------------------------------|--------------|-----------------|----------|---------|------|----------|----------------|-----------|----------------|------------|--------|-------|---------------|------------|---------------------|
|                                                    | Cal-Berkeley | Cal-Los Angeles | Illinois | Indiana | Iowa | Michigan | Michigan State | Minnesota | North Carolina | Ohio State | Purdue | Texas | U-Wash ington | UW-MADISON |                     |
| DOCTORAL (PhD) DEGREES                             |              |                 |          |         |      |          |                |           |                |            |        |       |               |            |                     |
| 01 AGRICULTURE, AG OPERATIONS, AND RELATED SCI     | 2            |                 | 4        |         |      |          | 7              | 6         |                | 5          | 5      |       |               | 7          | 6                   |
| 03 NATURAL RESOURCES AND CONSERVATION              | 2            | 1               | 1        | 1       |      | 1        | 3              | 3         | 1              | 1          | 1      |       | 4             | 2          | 11                  |
| 04 ARCHITECTURE AND RELATED SERVICES               | 3            | 2               | 1        |         |      | 3        |                |           | 1              | 1          |        | 1     | 1             | 1          | 8                   |
| 05 AREA, ETHNIC, CULTURAL, AND GENDER STUDIES      | 5            |                 |          |         | 1    | 1        | 2              | 1         |                |            |        | 1     | 2             | 1          | 7                   |
| 09 COMMUNICATION, JOURNALISM, AND RELATED          |              |                 | 1        | 2       | 2    | 1        | 2              | 2         | 2              | 1          | 1      | 3     | 1             | 2          | 11                  |
| 11 COMPUTER AND INFO SCI AND SUPPORT SERVICES      | 1            | 1               | 1        | 1       | 1    | 1        | 1              | 1         | 1              | 1          | 1      | 1     | 1             | 1          | 13                  |
| 13 EDUCATION                                       | 3            | 3               | 8        | 9       | 2    | 2        | 7              | 4         | 5              | 4          | 2      | 6     | 4             | 6          | 13                  |
| 14 ENGINEERING                                     | 10           | 7               | 10       |         | 6    | 15       | 8              | 11        | 3              | 11         | 10     | 10    | 10            | 13         | 12                  |
| 15 ENGINEERING TECHNOLOGIES/TECHNICIANS            |              |                 |          |         |      |          |                |           |                | 1          |        |       |               |            | 1                   |
| 16 FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS | 12           | 11              | 6        | 10      | 4    | 8        | 4              | 6         | 6              | 5          | 2      | 9     | 7             | 13         | 13                  |
| 19 FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES     |              |                 |          |         |      |          | 3              | 2         |                | 4          | 3      | 1     |               | 1          | 5                   |
| 22 LEGAL PROFESSIONS AND STUDIES                   | 2            |                 |          | 1       |      | 1        |                |           |                |            |        |       |               |            | 3                   |
| 23 ENGLISH LANGUAGE AND LITERATURE/LETTERS         | 2            | 2               | 2        | 2       | 1    | 2        | 1              | 2         | 1              | 1          | 1      | 2     | 1             | 1          | 13                  |
| 25 LIBRARY SCIENCE                                 |              | 1               | 1        | 1       |      |          |                |           | 1              |            |        | 1     |               | 1          | 5                   |
| 26 BIOLOGICAL AND BIOMEDICAL SCIENCES              | 13           | 17              | 8        | 7       | 13   | 16       | 11             | 13        | 11             | 12         | 4      | 7     | 16            | 18         | 13                  |
| 27 MATHEMATICS AND STATISTICS                      | 2            | 2               | 2        | 1       | 3    | 3        | 2              | 2         | 2              | 2          | 2      | 2     | 3             | 2          | 13                  |
| 30 MULTI/INTERDISCIPLINARY STUDIES                 | 2            | 1               | 2        | 1       | 1    | 3        | 1              | 4         | 1              | 2          |        | 3     | 1             | 3          | 12                  |
| 31 PARKS, REC, LEISURE AND FITNESS STUDIES         |              |                 | 2        | 2       | 2    | 1        | 2              | 1         |                |            |        | 1     |               | 1          | 7                   |
| 38 PHILOSOPHY AND RELIGIOUS STUDIES                | 3            | 1               | 1        | 2       | 2    | 1        | 1              |           | 2              | 1          | 1      | 1     | 1             | 1          | 12                  |
| 40 PHYSICAL SCIENCES                               | 5            | 5               | 5        | 4       | 3    | 7        | 5              | 5         | 4              | 6          | 3      | 4     | 8             | 7          | 13                  |
| 42 PSYCHOLOGY                                      | 1            | 1               | 2        | 2       | 1    | 2        | 3              | 3         | 3              | 1          | 1      | 2     | 2             | 2          | 13                  |
| 43 SECURITY AND PROTECTIVE SERVICES                |              |                 |          | 1       |      |          | 2              |           |                |            |        |       |               |            | 2                   |
| 44 PUBLIC ADMIN AND SOCIAL SERVICE PROFESSIONS     | 2            | 1               | 2        | 2       | 1    | 2        |                | 1         | 2              | 2          |        | 2     | 1             | 1          | 11                  |
| 45 SOCIAL SCIENCES                                 | 8            | 6               | 5        | 6       | 5    | 4        | 6              | 6         | 5              | 5          | 3      | 5     | 5             | 6          | 13                  |
| 50 VISUAL AND PERFORMING ARTS                      | 3            | 6               | 3        | 5       | 3    | 5        | 4              | 3         | 2              | 3          |        | 3     | 11            | 3          | 12                  |
| 51 HEALTH PROF AND RELATED CLINICAL SCI            | 3            | 5               | 3        | 2       | 7    | 7        | 4              | 12        | 7              | 7          | 3      | 4     | 9             | 7          | 13                  |
| 52 BUSINESS, MANAGEMENT, AND RELATED               | 1            | 1               | 3        | 1       | 1    | 1        | 4              | 1         | 1              | 3          | 2      | 5     | 1             | 1          | 13                  |
| 54 HISTORY                                         | 1            | 1               | 1        | 2       | 1    | 1        | 1              | 2         | 1              | 1          | 1      | 1     | 1             | 2          | 13                  |
| Count of Categories at Each Institution            | 22           | 20              | 23       | 22      | 20   | 23       | 23             | 22        | 21             | 23         | 18     | 23    | 21            | 25         |                     |
| Total Number of Program Areas                      | 86           | 75              | 74       | 65      | 60   | 88       | 84             | 91        | 62             | 80         | 46     | 75    | 90            | 103        |                     |
| FIRST PROFESSIONAL DEGREES                         |              |                 |          |         |      |          |                |           |                |            |        |       |               |            |                     |
| 22 LEGAL PROFESSIONS AND STUDIES                   | 1            | 1               | 1        | 1       | 1    | 1        |                | 1         | 1              | 1          |        | 1     | 1             | 1          | 11                  |
| 51 HEALTH PROF AND RELATED CLINICAL SCI            | 1            | 2               | 1        | 1       | 3    | 3        | 3              | 4         | 3              | 5          | 2      | 1     | 3             | 3          | 13                  |
| Count of Categories at Each Institution            | 2            | 2               | 2        | 2       | 2    | 2        | 1              | 2         | 2              | 2          | 1      | 2     | 2             | 2          |                     |
| Total Number of Program Areas                      | 2            | 3               | 2        | 2       | 4    | 4        | 3              | 5         | 4              | 6          | 2      | 2     | 4             | 4          |                     |

Source: IPEDS Degree Completions, 2004. Counts are number of program areas (6 digit CIP areas) within each category.

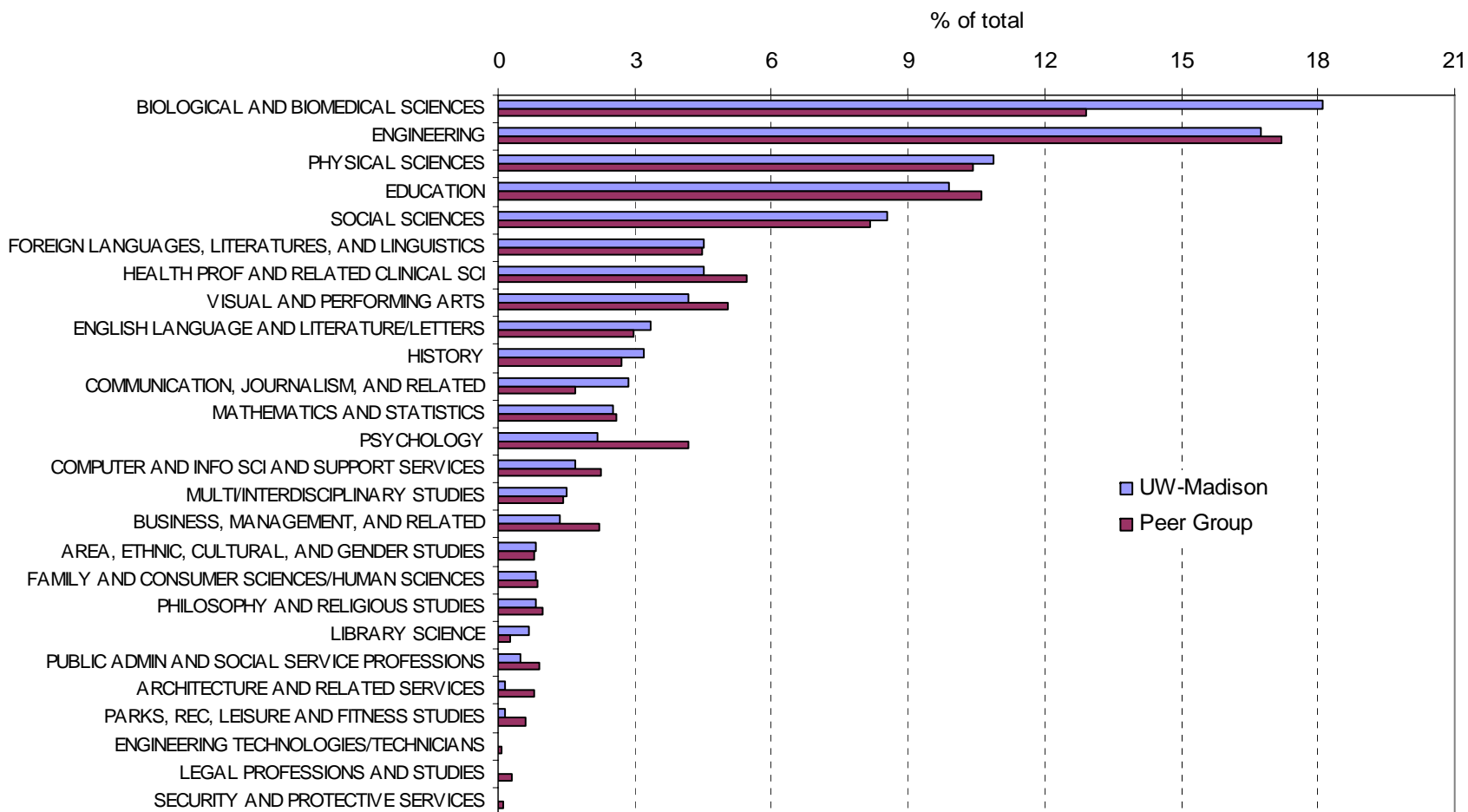
Appendix H.2. Number of Degrees by Category, 2004 - DOCTORAL AND FIRST-PROFESSIONAL DEGREES

| CIP | Category Title (2 digit CIP)                    | Institution  |                 |          |         |      |          |                |           |                |            |        |       |              | Percent of Total |            |        |       |
|-----|-------------------------------------------------|--------------|-----------------|----------|---------|------|----------|----------------|-----------|----------------|------------|--------|-------|--------------|------------------|------------|--------|-------|
|     |                                                 | Cal-Berkeley | Cal-Los Angeles | Illinois | Indiana | Iowa | Michigan | Michigan State | Minnesota | North Carolina | Ohio State | Purdue | Texas | U-Washington | UW-MADISON       | Peer Total | UW-MSN | Peers |
| 04  | ARCHITECTURE AND RELATED SERVICES               | 17           | 14              | 6        |         |      | 8        |                | 4         | 6              |            | 1      | 2     | 1            | 59               | 0.2        | 0.8    |       |
| 05  | AREA, ETHNIC, CULTURAL, AND GENDER STUDIES      | 19           |                 |          |         | 3    | 4        | 11             | 9         |                |            | 5      | 2     | 5            | 58               | 0.8        | 0.8    |       |
| 09  | COMMUNICATION, JOURNALISM, AND RELATED          |              |                 | 5        | 13      | 13   | 1        | 11             | 8         | 19             | 5          | 12     | 18    | 3            | 125              | 2.8        | 1.7    |       |
| 11  | COMPUTER AND INFO SCI AND SUPPORT SERVICE       | 19           | 28              | 25       | 4       | 1    | 2        | 7              | 18        | 12             | 7          | 4      | 15    | 13           | 165              | 1.7        | 2.2    |       |
| 13  | EDUCATION                                       | 48           | 64              | 53       | 85      | 65   | 32       | 47             | 58        | 26             | 78         | 40     | 97    | 30           | 59               | 782        | 9.9    | 10.6  |
| 14  | ENGINEERING                                     | 144          | 90              | 129      |         | 36   | 180      | 37             | 86        | 8              | 75         | 136    | 160   | 87           | 100              | 1268       | 16.8   | 17.2  |
| 15  | ENGINEERING TECHNOLOGIES/TECHNICIANS            |              |                 |          |         |      |          |                |           |                | 6          |        |       |              | 6                |            | 0.1    |       |
| 16  | FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS | 42           | 53              | 24       | 25      | 6    | 21       | 13             | 10        | 29             | 22         | 6      | 35    | 16           | 27               | 329        | 4.5    | 4.5   |
| 19  | FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES     |              |                 |          |         |      |          | 12             | 10        |                | 12         | 19     | 5     |              | 5                | 63         | 0.8    | 0.9   |
| 22  | LEGAL PROFESSIONS AND STUDIES                   | 11           |                 |          | 9       |      | 1        |                |           |                |            |        |       |              | 21               |            | 0.3    |       |
| 23  | ENGLISH LANGUAGE AND LITERATURE/LETTERS         | 33           | 13              | 20       | 15      | 7    | 8        | 13             | 13        | 10             | 11         | 23     | 21    | 12           | 20               | 219        | 3.4    | 3.0   |
| 25  | LIBRARY SCIENCE                                 |              | 5               | 1        | 1       |      |          |                |           | 5              |            |        | 4     |              | 4                | 20         | 0.7    | 0.3   |
| 26  | BIOLOGICAL AND BIOMEDICAL SCIENCES              | 99           | 123             | 52       | 15      | 37   | 89       | 53             | 44        | 103            | 82         | 28     | 31    | 86           | 108              | 950        | 18.1   | 12.9  |
| 27  | MATHEMATICS AND STATISTICS                      | 28           | 18              | 17       | 5       | 16   | 21       | 9              | 10        | 9              | 14         | 12     | 7     | 11           | 15               | 192        | 2.5    | 2.6   |
| 30  | MULTI/INTERDISCIPLINARY STUDIES                 | 10           | 15              | 5        | 1       | 1    | 29       | 1              | 16        | 3              | 6          |        | 9     | 1            | 9                | 106        | 1.5    | 1.4   |
| 31  | PARKS, REC, LEISURE AND FITNESS STUDIES         |              |                 | 10       | 9       | 3    | 3        | 13             | 5         |                |            |        | 1     |              | 1                | 45         | 0.2    | 0.6   |
| 38  | PHILOSOPHY AND RELIGIOUS STUDIES                | 11           | 3               | 5        | 5       | 3    | 3        | 5              |           | 10             | 3          | 8      | 7     | 4            | 5                | 72         | 0.8    | 1.0   |
| 40  | PHYSICAL SCIENCES                               | 92           | 47              | 58       | 34      | 17   | 64       | 36             | 52        | 56             | 42         | 55     | 78    | 71           | 65               | 767        | 10.9   | 10.4  |
| 42  | PSYCHOLOGY                                      | 17           | 16              | 25       | 21      | 10   | 29       | 22             | 43        | 24             | 16         | 11     | 47    | 13           | 13               | 307        | 2.2    | 4.2   |
| 43  | SECURITY AND PROTECTIVE SERVICES                |              |                 |          | 2       |      |          | 6              |           |                |            |        |       |              |                  | 8          |        | 0.1   |
| 44  | PUBLIC ADMIN AND SOCIAL SERVICE PROFESSION      | 5            | 4               | 8        | 6       | 1    | 10       |                | 5         | 7              | 5          |        | 9     | 4            | 3                | 67         | 0.5    | 0.9   |
| 45  | SOCIAL SCIENCES                                 | 84           | 61              | 28       | 53      | 22   | 52       | 35             | 31        | 36             | 36         | 16     | 52    | 45           | 51               | 602        | 8.5    | 8.2   |
| 50  | VISUAL AND PERFORMING ARTS                      | 19           | 36              | 34       | 35      | 28   | 28       | 29             | 26        | 6              | 27         |        | 49    | 29           | 25               | 371        | 4.2    | 5.0   |
| 51  | HEALTH PROF AND RELATED CLINICAL SCI            | 15           | 25              | 10       | 5       | 21   | 37       | 9              | 91        | 39             | 44         | 26     | 21    | 33           | 27               | 403        | 4.5    | 5.5   |
| 52  | BUSINESS, MANAGEMENT, AND RELATED               | 12           | 10              | 12       | 8       | 6    | 18       | 8              | 7         | 6              | 19         | 16     | 21    | 13           | 8                | 164        | 1.3    | 2.2   |
| 54  | HISTORY                                         | 18           | 35              | 11       | 20      | 4    | 11       | 4              | 17        | 21             | 14         | 3      | 9     | 13           | 19               | 199        | 3.2    | 2.7   |
|     | Doctoral degrees                                | 743          | 660             | 538      | 371     | 300  | 651      | 381            | 559       | 433            | 530        | 415    | 702   | 488          | 597              | 7368       | 100.0  | 100.0 |
| 22  | LEGAL PROFESSIONS AND STUDIES                   | 328          | 320             | 213      | 208     | 233  | 383      |                | 227       | 228            | 210        |        | 471   | 176          | 232              | 3229       | 39.7   | 45.3  |
| 51  | HEALTH PROFESSIONS AND RELATED CLINICAL SC      | 66           | 265             | 95       | 64      | 314  | 322      | 344            | 488       | 359            | 572        | 216    | 126   | 312          | 353              | 3896       | 60.3   | 54.7  |
|     | 1st Prof degrees                                | 394          | 585             | 308      | 272     | 547  | 705      | 344            | 715       | 587            | 782        | 216    | 597   | 488          | 585              | 7125       | 100.0  | 100.0 |

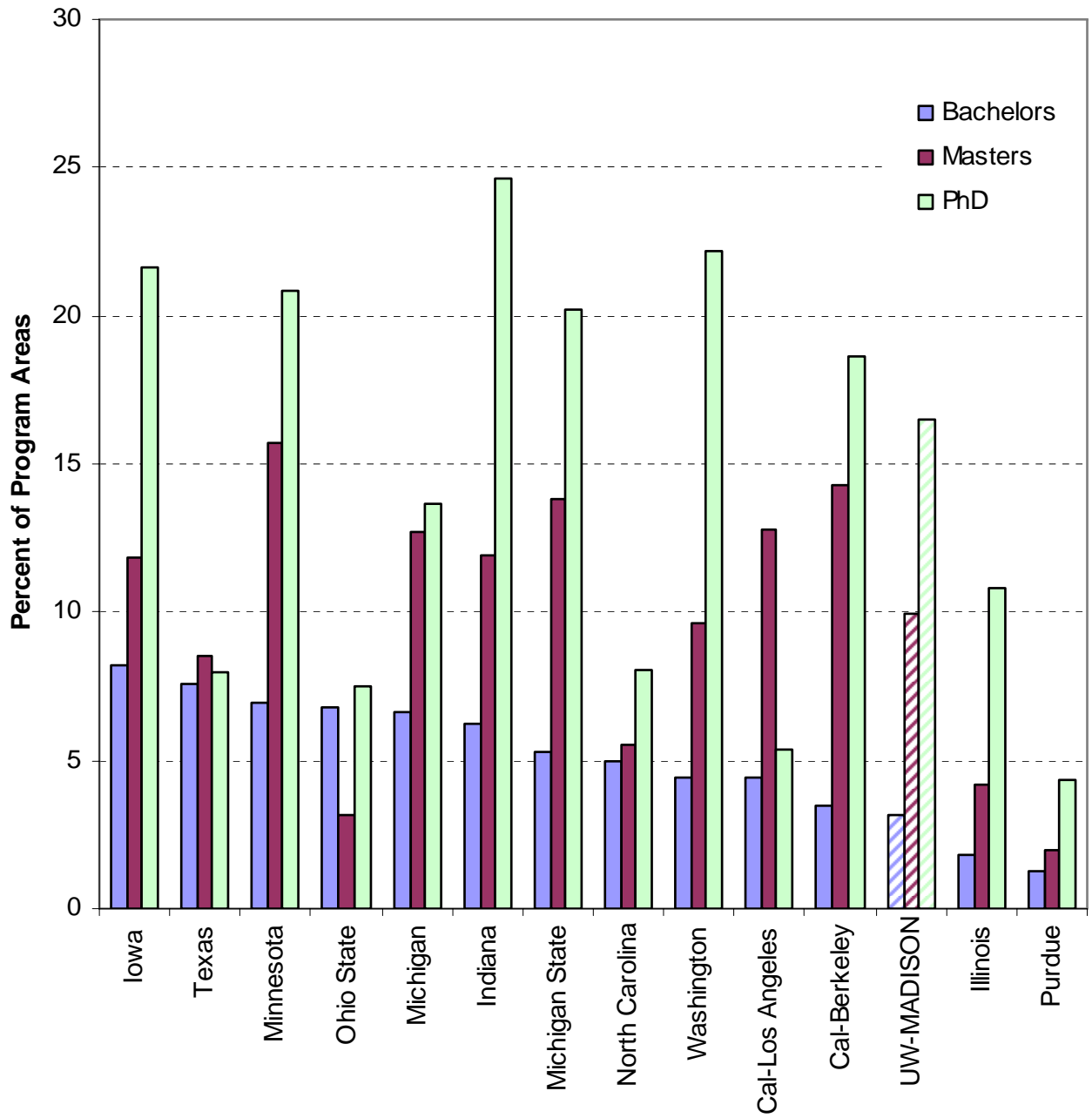
Source: IPEDS Degree Completions, 2004. Counts are number of program areas (6 digit CIP areas) within each category.



### Appendix H.3. Percent of PHD Degrees Awarded by Category, 2004



**Appendix I. Percent of Program Areas with One Degree, 2004**



Source: IPEDS Degree Completions, 2004.

## Appendix J. Features of the Program Array at University of Wisconsin-Madison

### Program Array in Context

A hallmark of large public research universities, especially those that are also land-grant universities, is that they offer a broad array of academic programs. At UW-Madison, the program array spans mature disciplines with a long history to the emerging disciplines that are associated with new areas of scholarship. Some programs are large and offer broad coverage of a discipline. Other programs serve small numbers of students in highly specialized academic niches.

In addition to academic degree-major programs, UW-Madison makes substantial use of certificate programs and sub-major options as a way to experiment with changes in the program array short of offering a new degree/major program. The use of certificate offerings has increased from 24 programs in 1996 to 55 programs in 2005 and a new class of certificate programs – capstone certificates – was developed in the mid-1990's.<sup>1</sup>

### Trends in Major Programs at UW-Madison

At UW-Madison the number of academic major programs was fairly stable in the 1970's and 1980's. Starting in the early 1990's there has been a stepped-up effort to eliminate defunct majors and consolidate related small majors. Since 1996 the net number of academic majors has decreased by 26 programs from 239 to 213 for a reduction of more than 10 percent (Table 1). Over the past 20 years (mostly within the past 12 years) UW-Madison has implemented 17 new major programs at various levels, deleted 44 major programs, and consolidated a number of small majors into larger majors for a net decrease of 41 major programs.

### Size of Major Programs

Counts of degrees awarded are a convenient measure of the size of a degree major program because this measure does not depend on issues like timing of major declaration that confound enrollment counts, especially for undergraduate programs. The size distribution of major programs is illustrated in Table 2 and Figure 1.

The largest 10% of major programs account for a substantial portion of the degrees: 44% of bachelor's degrees, 44% of master's degrees, and 30% of doctoral degrees. For undergraduate majors, the mean size was 46 degrees and 71% of the major programs awarded fewer than 46 degrees. The median major program size was 18 degrees compared with 372 degrees in the largest major. For 22 of the 136 undergraduate majors fewer than 5 degrees were awarded in each of those majors. The numbers cited are for 2004-05, and the same pattern can be observed for any year in the past few decades – a few large major programs and lots of small ones at each level.

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<sup>1</sup> Trends in certificate numbers and certificate awards are available at [http://apa.wisc.edu/degrees/degrees\\_current.htm](http://apa.wisc.edu/degrees/degrees_current.htm)

**Table 1. UW-Madison Trend in Number of Major Programs**

| Year              | Number of Major Programs |                |                                        |                                      | Count of Majors, Sum of all Levels |
|-------------------|--------------------------|----------------|----------------------------------------|--------------------------------------|------------------------------------|
|                   | Bachelor's level         | Master's level | Doctoral and First-Professional levels | Unduplicated Count of Major Programs |                                    |
| 1986              | 156                      | 184            | 125                                    | 254                                  | 465                                |
| 1996              | 149                      | 172            | 125                                    | 239                                  | 446                                |
| 1997              | 148                      | 172            | 125                                    | 239                                  | 445                                |
| 1998              | 147                      | 161            | 116                                    | 223                                  | 424                                |
| 1999              | 147                      | 161            | 116                                    | 223                                  | 424                                |
| 2000              | 137                      | 157            | 113                                    | 216                                  | 407                                |
| 2001              | 139                      | 157            | 113                                    | 219                                  | 409                                |
| 2002              | 138                      | 157            | 114                                    | 220                                  | 409                                |
| 2003              | 139                      | 156            | 114                                    | 219                                  | 409                                |
| 2004              | 136                      | 155            | 116                                    | 216                                  | 407                                |
| 2005              | 136                      | 155            | 115                                    | 214                                  | 406                                |
| 2006              | 135                      | 153            | 116                                    | 213                                  | 404                                |
| Five year change  | -4                       | -4             | 3                                      | -6                                   | -5                                 |
| Ten year change   | -13                      | -19            | -9                                     | -26                                  | -41                                |
| Change since 1986 | -21                      | -31            | -9                                     | -41                                  | -61                                |

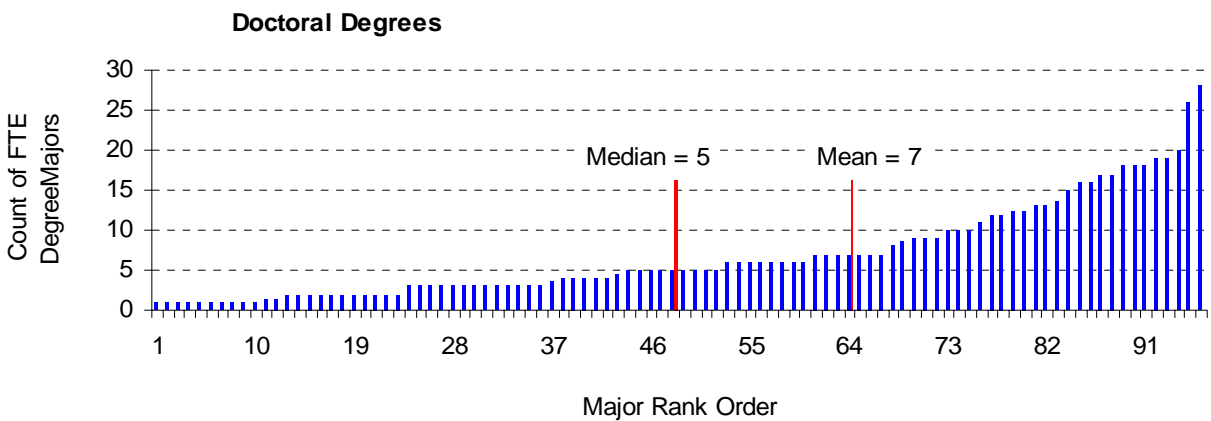
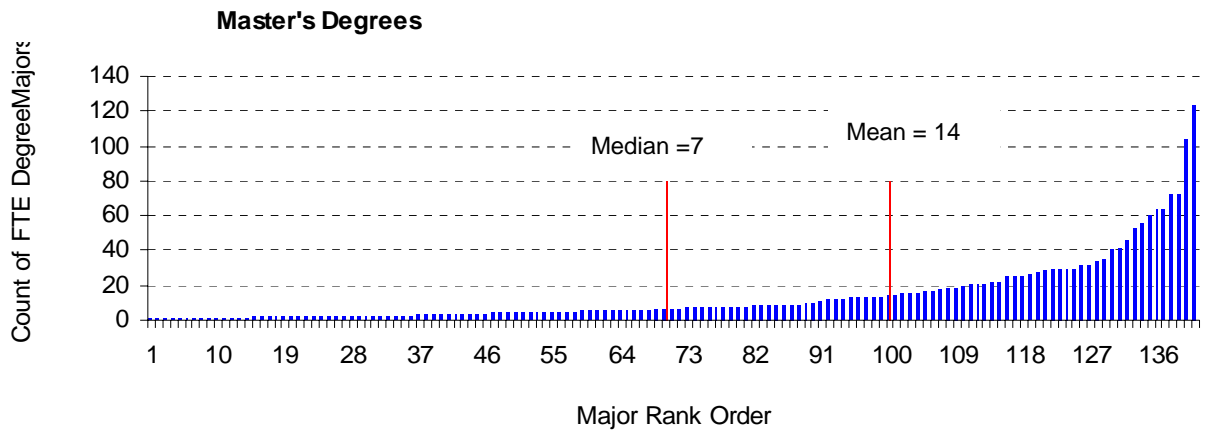
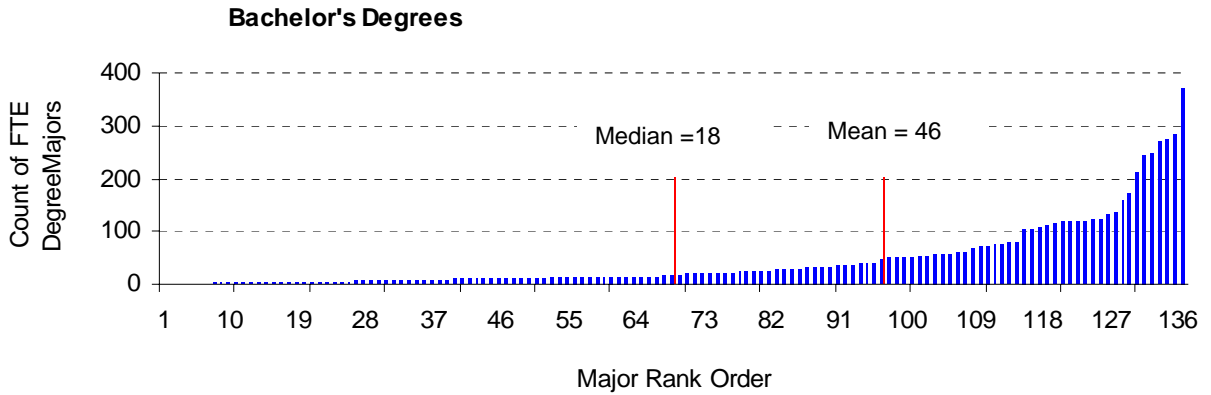
Source: Registrar's Official List of Majors, Options, and Degrees.

**Table 2. Size Distribution of Academic Majors**

|                                                                       | Bachelor's | Master's | Doctoral (PhD) |
|-----------------------------------------------------------------------|------------|----------|----------------|
| Median Size (FTE Degrees Conferred)                                   | 18         | 7        | 5              |
| Mean Size (FTE Degrees Conferred)                                     | 46         | 14       | 7              |
| Number of Degrees Conferred in Largest Major                          | 372        | 124      | 28             |
| Percent of Major Programs Larger than the Mean Size                   | 30%        | 26%      | 32%            |
| Percent of Degrees Accounted for by the Largest 10% of Major Programs | 44%        | 44%      | 30%            |

Source: APA Degrees Report, 2005

**Figure 1. Size Distribution of Academic Major Programs**



Source: APA Degrees Report, 2005