# In This Edition >>>

- Graduate degrees awarded within agriculture.
- *Graduate degrees awarded by the largest programs.*
- Graduate degrees awarded by gender.
- Graduate degrees awarded by ethnicity.



Summer 2014

Issue 28

# FAEISNews

#### Graduate degrees at Land-grant institutions

For this edition of the FAEIS newsletter, we took a look at the trends in the number of masters' and doctorate degrees awarded in agriculture and natural resource colleges at 72 Land-grant institutions for the reporting years of 2004 through 2012. Data for the analyses of this newsletter was retrieved from the Food and Agricultural Education Information System.

#### Growth in graduate degrees awarded at Land-grant institutions — All disciplines

We determined the growth in the number of masters' and doctorate degrees awarded in colleges of agriculture and natural resources compared to all graduate degrees awarded at Land-grant institutions.

Overall, the number of graduate degrees awarded in all program areas at Land-grant colleges and universities reflects significant increases since 2004.

- The number of masters' degrees awarded for all program areas at Land-grant institutions rose by 11,318 degrees (18%).
- The number of doctorate degrees awarded for all program areas at Land-grant institutions rose by 6,835 degrees (29%).

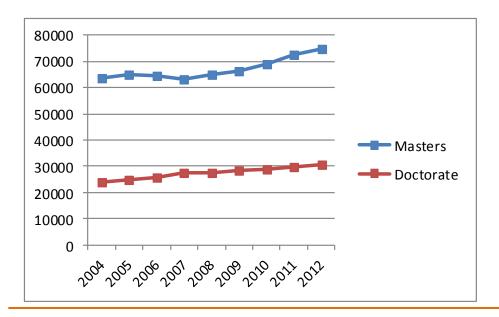


Figure 1. Total Graduate Degrees Awarded at Land-grant Institutions

# Graduate degrees awarded — Agriculture and Natural Resources

From 2004 to 2012, there has been a slow growth rate in the number of degrees awarded for doctoral programs in colleges of agriculture and natural resources compared to all degree programs at Land-grant institutions.

- The number of masters' degrees awarded for agriculture and natural resource colleges at Land-grant institutions rose by 538 degrees (18%).
- The number of **doctorate degrees awarded** for **agriculture and natural resource colleges** at Land-grant institutions rose by 265 degrees (15%).

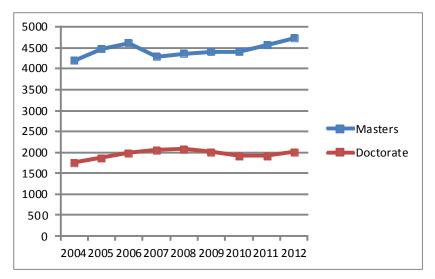


Figure 2. Total Graduate Degrees Awarded at Land-grant Institutions for Colleges of Agriculture and Natural Resources

# Masters' degrees awarded by largest academic programs

We went a step further and examined the trends among the number of graduate degrees awarded for the largest academic areas within Colleges of Agriculture and Natural Resources at Land-grant institutions for 2004 to 2012. The top academic areas include:

- 1) Animal Sciences, 2) Agricultural Economics, Business, and Management, 3) Agricultural Public Services,
- 4) Food Science and Technology and 5) Plant Sciences.
- The academic area of **Food Science and Technology** showed the most growth in masters' degrees awarded with an increase of 72 degrees awarded (28%).
- The academic area of Agricultural Economics, Business, and Management increased by 85 degrees awarded (20%).
- The academic area of **Plant Sciences** increased by 63 degrees awarded (14%).
- The academic areas of **Animal Sciences** and **Agricultural Public Services** did not show any growth in masters' degrees awarded. Specifically, the number of masters' degrees awarded in Animal Sciences decreased by 40 degrees (-7%), however it is the top major. The number of masters' degrees awarded in Agricultural Public Services decreased by 71 degrees (-28%).
- Though the academic area of Food Science and Technology showed the most growth in masters' degrees awarded, its number of degrees awarded only increased enough to move it up from 5th to 4th in ranking.

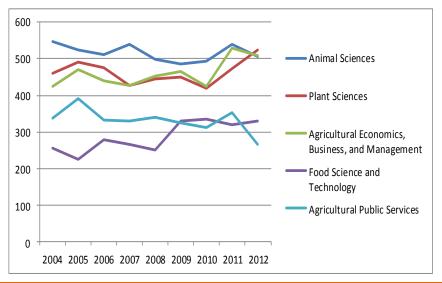


Figure 3. Masters' Degrees Awarded by Academic Areas for Colleges of Agriculture and Natural Resources at Land-grant Institutions

# Doctorate degrees awarded by largest academic areas

Based on our analysis of doctorate degrees, we found the following results:

- The academic area of **Agricultural Economics**, **Business**, and **Management** is the only area reflecting growth. Doctorate degrees awarded in this academic area increased by 61 degrees (52%).
- The number of doctorate degrees awarded for the academic area of **Animal Sciences** decreased by 5 degrees (-2%).
- The number of doctorate degrees awarded for the academic area of **Food Science and Technology** decreased by 5 degrees (-4%).
- The number of doctorate degrees awarded for the academic area of **Plant Sciences** decreased by 14 degrees (-5%).
- The number of doctorate degrees awarded for the academic area of **Agricultural Public Services** decreased by 16 degrees (-21%).

In recent years, doctorate degrees in Agricultural Economics, Business, and Management have become more sought-after. However, doctorate degrees in Plant Sciences, which currently has the most degrees awarded, have declined.

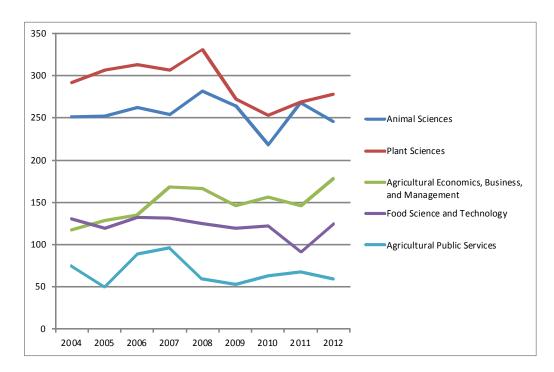


Figure 4. Doctorate Degrees Awarded by Academic Areas for Colleges of Agriculture and Natural Resources at Land-grant Institutions

# Graduate degrees awarded by gender — Agriculture and Natural Resources

We then investigated gender trends within graduate degrees awarded in agriculture and natural resource colleges at Land-grant institutions.

In 2004, 235 more females were awarded **doctorate degrees** than males in agriculture and natural resource colleges at Land-grant institutions. In 2012, females led by 379 degrees awarded. Comparing growth rates, females have experienced a growth of **19%**, while males experienced a growth of **14%**. Females are leading in masters' degrees awarded.

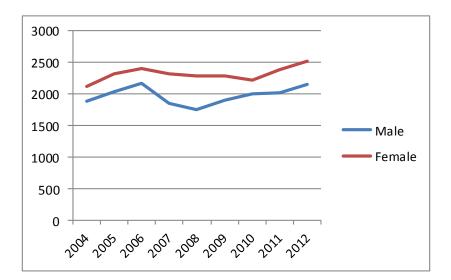


Figure 5. Masters' Degrees Awarded by Gender for Colleges of Agriculture and Natural Resources at Land-grant Institutions

In 2004, 374 more males were awarded **doctorate degrees** than females in agriculture and natural resource colleges at Landgrant institutions. In 2012, males only led by 65 degrees. Based on this, we predict in the near future females may surpass males in number of doctorate degrees awarded. Additionally, the growth rate of doctorate degrees awarded for males since 2004 is **-0.4%**. However, females have experienced a rapid growth of **46%**. Though males led in doctorate degrees awarded, the rapid growth for females has brought the difference between the two to just **65 degrees** awarded in 2012.

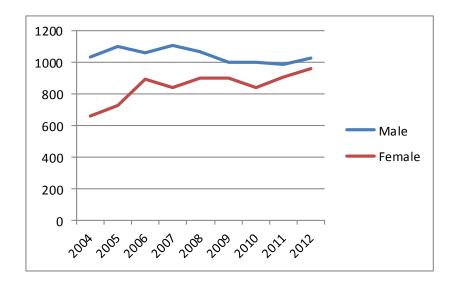


Figure 6. Doctorate Degrees Awarded by Gender for Colleges of Agriculture and Natural Resources at Land-grant Institutions

# Minority trends in graduate degrees — Agriculture and Natural Resources

From 2004 to 2012, the three **minorities** with the most growth were African-Americans, Hispanics, and Asians. For masters' degrees awarded, African-Americans grew the most with a total increase of **57%**. For doctorate degrees' awarded, Asians grew the most with a total increase of **66%**. Hispanics came in second for most growth in masters' degrees awarded with a growth of **56%**, and third in doctorate degrees awarded with a growth of **61%**.

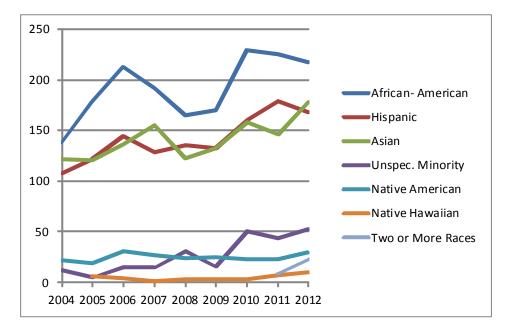


Figure 7. Masters' Degrees Awarded to Minorities for Colleges of Agriculture and Natural Resources at Land-grant Institutions

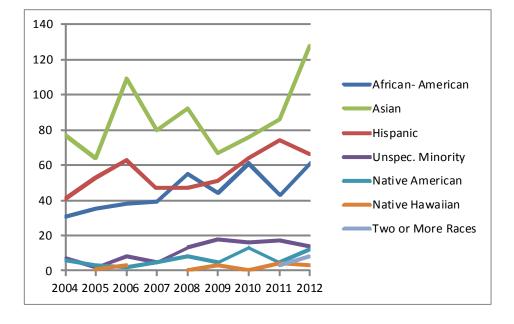


Figure 8. Doctorate Degrees Awarded to Minorities for Colleges of Agriculture and Natural Resources at Land-grant Institutions



## Contributors >>>

#### **Editors**

Dr. Mary A. Marchant William W. Richardson Teneisha Hodge-Wilson Demontre Purvis

#### Data Analysts

William W. Richardson Teneisha Hodge-Wilson Demontre Purvis

### Writers and Graphic Designer

Demontre Purvis Teneisha Hodge-Wilson Kyle Malec

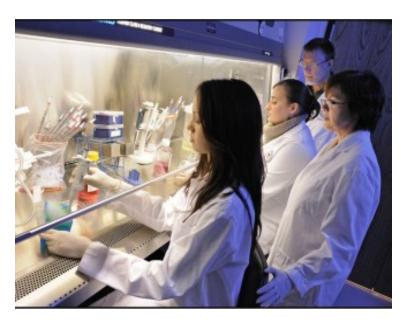
#### The FAEIS Team

Dr. Mary A. Marchant
William W. Richardson
Dr. Eric Smith
Dr. Eric A. Vance
Teneisha Hodge-Wilson
Claire Kelling
Kyle Malec
Demontre Purvis
Chaoping Xie

#### Photos provided by

Kelsey Kradel John McCormick





|                 | Masters' a | nd Docto | ate IPEDS | Total De | grees at L | and Grant | Institutio | ns     |        |
|-----------------|------------|----------|-----------|----------|------------|-----------|------------|--------|--------|
|                 | 2004       | 2005     | 2006      | 2007     | 2008       | 2009      | 2010       | 2011   | 2012   |
| Degrees Awarded |            |          |           |          |            |           |            |        |        |
| Masters         | 63509      | 64966    | 64477     | 63402    | 65117      | 66489     | 68883      | 72473  | 74827  |
| Doctorate       | 23746      | 24958    | 25901     | 27468    | 27616      | 28588     | 28866      | 29648  | 30581  |
| Total           | 87255      | 89924    | 90378     | 90870    | 92733      | 95077     | 97749      | 102121 | 105408 |

| Masters and Doo | torate Degr | ees Awar | ded at Lai | nd Grant  | Institutio | ns for Col | leges of A | gricultur | e and |
|-----------------|-------------|----------|------------|-----------|------------|------------|------------|-----------|-------|
|                 |             |          | Natura     | l Resourc | es         |            |            |           |       |
|                 | 2004        | 2005     | 2006       | 2007      | 2008       | 2009       | 2010       | 2011      | 2012  |
| Degrees Awarded |             |          |            |           |            |            |            |           |       |
| Masters         | 4193        | 4469     | 4612       | 4281      | 4348       | 4410       | 4400       | 4567      | 4731  |
| Doctorate       | 1756        | 1869     | 1999       | 2055      | 2097       | 2021       | 1926       | 1925      | 2025  |
| Total           | 5949        | 6338     | 6611       | 6336      | 6445       | 6431       | 6326       | 6492      | 6756  |

| Masters and Doctorate IPEDS Tota                            | l Degre | es at Lar  | d Grant |           |         |         |         |      |     |
|---|---------|------------|---------|-----------|---------|---------|---------|------|-----|
|   |         |            |         | N         | Masters |         |         |      |     |
| <u>Institution</u>  | 2004    | 2005       | 2006    | 2007      | 2008    | 2009    | 2010    | 2011 | 201 |
| Alabama Agricultural and Mechanical University              | 262     | 312        | 319     | 279       | 256     | 234     | 219     | 240  | 19  |
| Alcorn State University                                     | 168     | 169        | 147     | 127       | 143     | 162     | 138     | 195  | 16  |
| A. da como I loris o maitro                                 | 788     | 791        | 867     | 816       | 849     | 865     | 963     | 1049 | 10  |
| Auburn University   | 772     | 938        | 865     | 803       | 816     | 785     | 921     | 1007 | 10  |
| Clemson University  | 1011    | 1045       | 1090    | 965       | 1024    | 1225    | 1414    | 1390 | 15  |
| Colorado State University                                   |         |            |         |           |         |         |         |      |     |
|   | 1652    | 1544       | 1584    | 1701      | 1737    | 1800    | 1953    | 2163 | 21  |
| Cornell University  | 90      | 81         | 81      | 138       | 139     | 126     | 116     | 112  | 11  |
| Delaware State University                                   | 401     | 293        | 244     | 288       | 238     | 271     | 341     | 294  | 27  |
| Florida A and M University                                  | 69      | 293<br>37  | 69      | 288<br>32 | 238     | 39      | 53      | 42   | 5(  |
| Fort Valley State University                                |         |            |         |           |         |         |         |      | 92  |
| lowa State University                                       | 818     | 858<br>755 | 893     | 752       | 787     | 810     | 800     | 873  |     |
| Kansas State University                                     | 713     | 755        | 724     | 679       | 803     | 868     | 872     | 989  | 97  |
| Kentucky State University                                   | 42      | 52         | 31      | 47        | 47      | 40      | 54      | 44   | 6   |
| Langston University   | 32      | 39         | 29      | 27        | 41      | 72      | 89      | 73   | 9:  |
| Lincoln University of Missouri                              | 76      | 61         | 70      | 67        | 63      | 60      | 45      | 43   | 5.  |
| Louisiana State University                                  | 1072    | 1204       | 1094    | 998       | 977     | 973     | 1054    | 1100 | 12  |
| Michigan State University                                   | 2091    | 2004       | 1867    | 1910      | 1817    | 1942    | 1936    | 1975 | 20  |
| Mississippi State University                                | 841     | 843        | 778     | 778       | 789     | 835     | 789     | 853  | 85  |
| Montana State University                                    | 375     | 442        | 440     | 466       | 434     | 440     | 471     | 491  | 53  |
| New Mexico State University                                 | 750     | 799        | 834     | 770       | 836     | 836     | 935     | 920  | 87  |
|   | 299     | 306        | 339     | 324       | 437     | 377     | 356     | 351  | 35  |
| North Carolina Agricultural and Technical State University  |         |            |         |           |         |         |         |      |     |
| State Offiver sity  | 1403    | 1332       | 1485    | 1457      | 1507    | 1664    | 1795    | 2080 | 23  |
| North Carolina State University at Raleigh                  |         |            |         |           |         |         |         |      | 8   |
| North Dakota State University                               | 242     | 249        | 226     | 355       | 390     | 355     | 313     | 358  | 37  |
| North Dakota State Offiversity                              | 995     | 1073       | 904     | 802       | 872     | 992     | 1007    | 1074 | 12  |
| Oklahoma State University                                   |         |            |         |           |         |         |         |      |     |
| Oregon State University                                     | 760     | 778        | 659     | 621       | 674     | 648     | 727     | 745  | 77  |
| Prairie View A&M University                                 | 686     | 671        | 696     | 737       | 699     | 745     | 559     | 532  | 44  |
| Double Hellower   | 1583    | 1548       | 1420    | 1377      | 1326    | 1321    | 1342    | 1501 | 16  |
| Purdue University   | 1565    | 1576       | 1501    | 1441      | 1469    | 1545    | 1690    | 1793 | 19  |
| Rutgers University- New Brunswick                           | T 0 0 0 | T ) / 0    | TOOT    | T 4 4 T   | エヨリン    | T 0 # 0 | T 0 9 0 | 1193 | 13  |
| South Carolina State University                             | 142     | 144        | 115     | 125       | 98      | 115     | 123     | 116  | 13  |
| South Dakota State University                               | 283     | 293        | 251     | 287       | 275     | 272     | 279     | 282  | 31  |
| Southern University and Agricultural and Mechanical College | 263     | 303        | 342     | 307       | 305     | 312     | 283     | 294  | 29  |
| Tennessee State University                                  | 442     | 398        | 471     | 328       | 419     | 401     | 381     | 365  | 40  |
| Termessee State Offiversity                                 | 1825    | 1949       | 1761    | 1768      | 1930    | 2016    | 2051    | 2236 | 21  |
| Texas A&M University  |         | - 10       | . 3 -   | . 3 3     | 2 3 0   | 0       | - 3 -   |      |     |
| The Ohio State University                                   | 2606    | 2685       | 2718    | 2635      | 2576    | 2679    | 2695    | 2778 | 31  |
| ,   | 1252    | 1191       | 1150    | 1131      | 1267    | 1312    | 1419    | 1533 | 13  |
| The Pennsylvania State University                           |         |            |         |           |         |         |         |      |     |

| University of California- Davis                     | 810   | 873   | 854   | 882   | 873   | 824   | 865   | 912   | 989       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| University of California- Riverside                 | 360   | 393   | 388   | 378   | 372   | 406   | 438   | 457   | 467       |
| University of Connecticut                           | 1129  | 1470  | 1398  | 1444  | 1437  | 1532  | 1465  | 1504  | 1603      |
| University of Delaware                              | 664   | 697   | 696   | 773   | 695   | 727   | 652   | 813   | 785       |
| University of Florida                               | 2961  | 2877  | 2985  | 3062  | 3337  | 3544  | 3751  | 3878  | 3924      |
| University of Georgia                               | 1528  | 1592  | 1564  | 1528  | 1554  | 1676  | 1571  | 1764  | 1689      |
| University of Guam                                  | 100   | 48    | 69    | 60    | 67    | 92    | 121   | 134   | 129       |
| University of Hawaii at Manoa                       | 1040  | 1140  | 1163  | 1094  | 1141  | 1155  | 1169  | 1232  | 1223      |
| University of Idaho                                 | 458   | 690   | 736   | 546   | 560   | 485   | 492   | 573   | 636       |
| Sinversity of Idams                                 | 2756  | 2622  | 2545  | 2582  | 2655  | 2677  | 3074  | 3100  | 3218      |
| University of Illinois at Urbana-Champaign          |       |       |       |       |       |       |       |       |           |
| University of Kentucky                              | 1242  | 1337  | 1350  | 1371  | 1311  | 1334  | 1211  | 1307  | 1231      |
| University of Maine                                 | 454   | 475   | 506   | 475   | 465   | 398   | 451   | 424   | 442       |
| University of Maryland                              | 1990  | 1929  | 2001  | 1968  | 2059  | 2157  | 2303  | 2336  | 2451      |
| University of Maryland Eastern Shore                | 77    | 62    | 75    | 58    | 74    | 76    | 49    | 79    | 78        |
| University of Massachusetts                         | 1058  | 1144  | 1149  | 1155  | 1215  | 1123  | 1189  | 1322  | 1305      |
| University of Minnesota- St. Paul                   | 2677  | 2798  | 2962  | 3019  | 3188  | 3115  | 3419  | 3379  | 3413      |
| University of Missouri                              | 1222  | 1195  | 1314  | 1350  | 1421  | 1506  | 1515  | 1513  | 1631      |
| University of Nebraska- Lincoln                     | 831   | 794   | 801   | 802   | 802   | 835   | 853   | 874   | 1017      |
| University of Nevada- Reno                          | 464   | 667   | 558   | 490   | 606   | 586   | 640   | 642   | 663       |
| University of New Hampshire                         | 714   | 703   | 806   | 816   | 807   | 843   | 790   | 800   | 772       |
| University of Puerto Rico - Mayaguez                | 207   | 172   | 208   | 190   | 179   | 187   | 224   | 145   | 179       |
| University of Tennessee                             | 1737  | 1649  | 1656  | 1643  | 1556  | 1770  | 1714  | 1689  | 1773      |
| University of Vermont                               | 384   | 430   | 352   | 399   | 360   | 317   | 373   | 390   | 425       |
| University of Wisconsin- Madison                    | 2022  | 1996  | 1789  | 1944  | 1910  | 1811  | 1919  | 2156  | 2069      |
| University of Wyoming                               | 420   | 455   | 437   | 406   | 417   | 423   | 388   | 482   | 489       |
| University of the District of Columbia              | 67    | 37    | 40    | 55    | 52    | 75    | 62    | 40    | 63        |
| University of the Virgin Islands                    | 42    | 57    | 51    | 48    | 53    | 40    | 55    | 34    | 53        |
| Utah State University                               | 905   | 811   | 847   | 738   | 852   | 696   | 831   | 862   | 990       |
| Virginia Polytechnic Institute and State University | 1444  | 1452  | 1456  | 1367  | 1525  | 1419  | 1548  | 1546  | 1603      |
| Virginia State University                           | 119   | 156   | 138   | 137   | 99    | 95    | 102   | 148   | 135       |
| Washington State University                         | 752   | 730   | 741   | 702   | 724   | 711   | 748   | 763   | 802       |
| West Virginia State University                      |       |       | 6     | 7     | 9     | 5     | 11    | 12    | 11        |
| West Virginia University                            | 1533  | 1499  | 1619  | 1459  | 1527  | 1481  | 1487  | 1631  | 1642      |
| Total   | 63509 | 64966 | 64477 | 63402 | 65117 | 66489 | 68883 | 72473 | 7482<br>7 |

| Masters and Doctorate IPEDS Total De                             |      |      |      |      | ctorate |      |      |      |     |
|--|------|------|------|------|---------|------|------|------|-----|
| <u>Institution</u>   | 2004 | 2005 | 2006 | 2007 | 2008    | 2009 | 2010 | 2011 | 201 |
|  | 5    | 8    | 7    | 11   | 25      | 16   | 17   | 9    | 11  |
| Alabama Agricultural and Mechanical University                   |      |      |      |      |         |      |      |      |     |
| Alcorn State University  |      |      |      |      |         |      |      |      |     |
| Auburn University  | 309  | 363  | 361  | 411  | 420     | 437  | 430  | 433  | 47  |
| Clemson University   | 113  | 131  | 136  | 138  | 145     | 162  | 178  | 192  | 22  |
| Colorado State University  | 286  | 325  | 321  | 340  | 342     | 352  | 334  | 340  | 36  |
| Cornell University   | 678  | 740  | 754  | 752  | 752     | 785  | 779  | 782  | 77  |
| Delaware State University  |      |      |      | 2    | 4       | 14   | 7    | 5    | 15  |
| Florida A and M University                                       | 133  | 190  | 225  | 224  | 276     | 306  | 313  | 332  | 33  |
| Fort Valley State University                                     |      |      |      |      |         |      |      |      |     |
| Iowa State University  | 228  | 339  | 387  | 393  | 413     | 429  | 421  | 502  | 52  |
| Kansas State University  | 253  | 245  | 266  | 258  | 265     | 255  | 245  | 269  | 26  |
| Kentucky State University  |      |      | _    |      | _       |      |      |      |     |
| Langston University  |      |      | 3    | 2    | 7       | 11   | 15   | 14   | 13  |
| Lincoln University of Missouri                                   |      |      |      |      |         |      |      |      |     |
| Louisiana State University                                       | 539  | 498  | 578  | 535  | 505     | 500  | 563  | 504  | 62  |
| Michigan State University  | 774  | 774  | 768  | 855  | 770     | 876  | 921  | 951  | 96  |
| Mississippi State University                                     | 136  | 159  | 170  | 161  | 182     | 190  | 216  | 212  | 21  |
| Montana State University   | 42   | 40   | 40   | 56   | 52      | 45   | 45   | 56   | 53  |
| New Mexico State University                                      | 78   | 96   | 79   | 85   | 72      | 71   | 91   | 105  | 10: |
| North Carolina Agricultural and Technical State University       | 21   | 7    | 12   | 6    | 32      | 33   | 21   | 20   | 29  |
|  | 414  | 416  | 444  | 486  | 402     | 530  | 501  | 470  | 52  |
| North Carolina State University at Raleigh                       |      |      |      |      |         |      |      |      |     |
| North Dakota State University                                    | 97   | 90   | 130  | 151  | 179     | 154  | 168  | 183  | 18  |
| Oklahoma State University  | 277  | 242  | 245  | 262  | 220     | 250  | 285  | 270  | 29  |
| Oregon State University  | 275  | 258  | 284  | 307  | 291     | 306  | 310  | 315  | 34  |
| Prairie View A&M University                                      |      | 2    | 1    | 10   | 10      | 19   | 13   | 15   | 17  |
| Purdue University  | 662  | 763  | 785  | 837  | 840     | 882  | 845  | 924  | 88  |
| Rutgers University- New Brunswick                                | 553  | 522  | 559  | 605  | 679     | 667  | 642  | 637  | 63. |
| South Carolina State University                                  | 30   | 27   | 19   | 39   | 13      | 29   | 21   | 17   | 10  |
| South Dakota State University                                    | 80   | 75   | 73   | 76   | 83      | 84   | 100  | 90   | 10  |
| Southern University and Agricultural and Me-<br>chanical College | 11   | 14   | 11   | 8    | 9       | 18   | 20   | 23   | 43  |
| Tennessee State University                                       | 26   | 58   | 44   | 46   |         | 59   | 79   | 67   | 72  |
| ,<br>Texas A&M University  | 633  | 651  | 660  | 727  | 723     | 717  | 703  | 739  | 79  |
| Γhe Ohio State University  | 1342 | 1432 | 1549 | 1501 | 1611    | 1617 | 1596 | 1658 | 16  |
| The Pennsylvania State University                                | 539  | 571  | 646  | 664  | 643     | 703  | 718  | 736  | 75  |
| The University of Rhode Island                                   | 157  | 154  | 154  | 170  | 155     | 183  | 205  | 196  | 22  |
| uskegee University   | 52   | 54   | 52   | 64   | 52      | 60   | 64   | 64   | 7:  |
| Jniversity of Alaska- Fairbanks                                  | 20   | 25   | 21   | 33   | 29      | 37   | 45   | 46   | 5   |
| Jniversity of Arizona  | 702  | 696  | 698  | 814  | 778     | 824  | 824  | 813  | 85  |
| Jniversity of Arkansas   | 228  | 305  | 280  | 254  | 274     | 282  | 286  | 288  | 29  |
| Jniversity of Arkansas at Pine Bluff                             | 220  | 303  | 40U  | 404  | 4/4     | 202  | 200  | 200  | 49  |
| ,<br>University of California- Berkeley                          | 1169 | 1151 | 1110 | 1280 | 1218    | 1216 | 1245 | 1292 | 12  |

| University of California David                      | 770   | 791   | 812   | 876   | 900      | 894   | 891   | 927                | 1002 |
|---|-------|-------|-------|-------|----------|-------|-------|--------------------|------|
| University of California- Davis                     | 141   | 159   | 165   | 177   | 224      | 188   | 195   | 235                | 263  |
| University of California- Riverside                 | 510   | 554   | 629   | 609   | 576      | 687   | 746   | 720                | 773  |
| University of Connecticut                           | 177   | 189   | 222   | 224   | 208      | 251   | 230   | 252                | 262  |
| University of Delaware                              | 1658  | 1665  | 1732  | 1957  | 2107     | 2028  | 2127  | 2127               | 1954 |
| University of Florida                               | 833   | 818   | 828   | 858   | 832      | 897   | 854   | 889                | 903  |
| University of Georgia                               |       |       |       |       |          |       |       |                    |      |
| University of Guam                                  | 259   | 310   | 321   | 320   | 369      | 353   | 351   | 411                | 406  |
| University of Hawaii at Manoa                       | 173   | 194   | 194   | 210   | 190      | 184   | 168   | 165                | 164  |
| University of Idaho                                 | 882   | 971   | 998   | 1018  | 1067     | 1081  | 1066  |                    | 1210 |
|   | 002   | 971   | 990   | 1010  | 1007     | 1001  | 1000  | 1100               | 1210 |
| University of Illinois at Urbana-Champaign          | 605   | 65.0  | 62.1  | 650   | E 1 E    | D4.0  |       | 7.00               | 000  |
| University of Kentucky                              | 605   | 670   | 634   | 653   | 717      | 719   | 734   | 783                | 888  |
| University of Maine                                 | 40    | 40    | 38    | 50    | 50       | 58    | 52    | 55                 | 65   |
| University of Maryland                              | 513   | 541   | 631   | 679   | 683      | 617   | 643   | 614                | 657  |
| University of Maryland Eastern Shore                |       | 5     | 18    | 13    | 13       | 28    | 30    | 46                 | 53   |
| University of Massachusetts                         | 274   | 267   | 253   | 293   | 291      | 255   | 281   | 282                | 305  |
| University of Minnesota- St. Paul                   | 1307  | 1455  | 1536  | 1667  | 1563     | 1594  | 1618  | 1692               | 1680 |
| University of Missouri                              | 582   | 562   | 569   | 582   | 629      | 613   | 626   | 671                | 666  |
| University of Nebraska- Lincoln                     | 367   | 372   | 373   | 398   | 382      | 399   | 417   | 426                | 391  |
| University of Nevada- Reno                          | 127   | 142   | 151   | 128   | 131      | 177   | 150   | 161                | 176  |
| University of New Hampshire                         | 46    | 63    | 55    | 59    | 48       | 56    | 64    | 60                 | 58   |
| University of Puerto Rico - Mayaguez                | 6     | 7     | 12    | 8     | 19       | 26    | 26    | 15                 | 18   |
| University of Tennessee                             | 813   | 790   | 873   | 895   | 912      | 994   | 1024  | 1002               | 1110 |
| University of Vermont                               | 143   | 147   | 158   | 154   | 165      | 185   | 213   | 208                | 207  |
| University of Wisconsin- Madison                    | 1213  | 1314  | 1261  | 1425  | 1407     | 1430  | 1355  | 1417               | 1514 |
| ,   | 173   | 177   | 175   | 179   | 191      | 200   | 179   | 188                | 197  |
| University of Wyoming                               |       |       |       |       |          |       |       |                    |      |
| University of the District of Columbia              |       |       |       |       |          |       |       |                    |      |
| University of the Virgin Islands                    | 64    | 69    | 81    | 85    | 97       | 88    | 93    | 117                | 99   |
| Utah State University                               | 383   | 415   | 452   | 445   | 429      | 521   | 490   | 499                | 560  |
|   |       |       |       |       |          |       |       |                    |      |
| Virginia Polytechnic Institute and State University |       |       |       | 5     | 9        | 7     | 6     | 6                  | 3    |
| Virginia State University                           | 327   | 354   | 339   | 394   | 377      | 386   | 373   | 407                | 380  |
| Washington State University                         | J _ , | 551   |       |       | <u> </u> |       | 5,5   | 201                | 200  |
| West Virginia State University                      | 498   | 496   | 519   | 544   | 559      | 553   | 598   | 598                | 601  |
| West Virginia University                            |       |       |       | 27468 |          |       |       |                    |      |
| Total   | 3/40  | Z4938 | 239UI | 2/408 | 2/010    | 20088 | 20000 | ۷ ۶ ۵ 4 ۵ <u> </u> | 2028 |

|   |      |      |      |      | Masters |      |      |      |     |
|---|------|------|------|------|---------|------|------|------|-----|
| Institution   | 2004 | 2005 | 2006 | 2007 | 2008    | 2009 | 2010 | 2011 | 201 |
| Alabama Agricultural and Mechanical University              | 32   | 21   | 40   | 39   | 33      | 31   | 33   | 40   | 21  |
| Alcorn State University                                     | 3    | 3    | 2    | 5    | 1       | 2    | 7    | 10   | 6   |
| Auburn University   | 50   | 57   | 56   | 52   | 57      | 52   | 74   | 71   | 63  |
| Clemson University  | 74   | 68   | 70   | 67   | 51      | 73   | 85   | 68   | 8 ( |
| Colorado State University                                   | 109  | 118  | 121  | 106  | 145     | 111  | 91   | 120  | 11  |
| Cornell University  | 104  | 123  | 393  | 158  | 147     | 131  | 132  | 100  | 8   |
| Delaware State University                                   |      | 1    | 4    | 6    | 6       | 16   | 6    | 4    | 1   |
| Florida A and M University                                  | 12   | 9    | 4    | 12   | 6       | 5    | 14   | 6    | 9   |
| Fort Valley State University                                | 3    | 1    |      | 1    | 3       | 4    | 4    | 3    | 1   |
| Iowa State University                                       | 79   | 96   | 116  | 71   | 93      | 100  | 90   | 98   | 7   |
| Kansas State University                                     | 118  | 92   | 69   | 67   | 93      | 94   | 106  | 103  | 10  |
| Kentucky State University                                   | 3    | 0    | 2    | 2    | 6       | 5    | 3    | 6    | 1   |
| Louisiana State University                                  | 100  | 107  | 117  | 115  | 120     | 88   | 55   | 71   | 8   |
| Michigan State University                                   | 163  | 166  | 119  | 143  | 71      | 113  | 252  | 125  | 17  |
| Mississippi State University                                | 86   | 60   | 80   | 61   | 79      | 105  | 90   | 108  | 10  |
| Montana State University                                    | 65   | 76   | 66   | 81   | 60      | 40   | 55   | 64   | 3   |
| New Mexico State University                                 | 73   | 67   | 75   | 67   | 71      | 69   | 70   | 84   | 5   |
| North Carolina Agricultural and Technical State University  | 34   | 33   | 33   | 33   | 53      | 38   | 39   | 41   | 6   |
| North Carolina State University at Raleigh                  | 167  | 249  | 203  | 207  | 166     | 211  | 194  | 246  | 25  |
| North Dakota State University                               | 49   | 48   | 28   | 44   | 49      | 33   | 20   | 43   | 6   |
| Oklahoma State University                                   | 61   | 86   | 56   | 52   | 95      | 92   | 105  | 111  | 11  |
| Oregon State University                                     | 90   | 126  | 100  | 92   | 94      | 80   | 86   | 90   | 10  |
| Prairie View A&M University                                 | 29   | 30   | 52   | 25   | 16      | 11   | 56   | 18   | 2   |
| Purdue University   | 120  | 111  | 101  | 100  | 127     | 115  | 96   | 132  | 13  |
| Rutgers University- New Brunswick                           | 64   | 45   | 63   | 70   | 48      | 55   | 37   | 47   | 6   |
| South Carolina State University                             |      |      | 1    | 0    | 0       | 0    |      |      | 9   |
| South Dakota State University                               | 48   | 56   | 53   | 55   | 45      | 47   | 44   | 41   | 4   |
| Southern University and Agricultural and Mechanical College | 6    | 8    | 6    | 2    | 1       | 3    | 10   | 12   | 2   |
| Γennessee State University                                  | 4    | 2    | 8    | 9    | 3       | 3    | 3    | 6    | 1   |
| Гехаs A&M University  | 207  | 217  | 206  | 200  | 216     | 239  | 233  | 219  | 22  |
| Γhe Ohio State University                                   | 28   | 30   | 8    | 11   | 21      | 11   | 18   | 24   | 5   |
| Γhe Pennsylvania State University                           | 69   | 68   | 117  | 39   | 69      | 60   | 61   | 72   | 5   |
| Γhe University of Rhode Island                              | 45   | 60   | 74   | 51   | 51      | 46   | 40   | 61   | 6   |
| Γuskegee University   | 12   | 24   | 30   | 17   | 26      | 26   | 19   | 21   | 1   |
| University of Alaska- Fairbanks                             | 6    | 29   | 24   | 14   | 19      | 19   | 9    | 21   | 1   |
| University of Arizona                                       | 69   | 81   | 44   | 102  | 99      | 96   | 65   | 73   | 6   |
| University of Arkansas                                      | 97   | 80   | 88   | 72   | 84      | 101  | 79   | 75   | 8   |
| University of Arkansas at Pine Bluff                        | 12   | 12   | 5    | 8    | 9       | 7    | 4    | 6    | 2   |
| University of California- Berkeley                          | 18   | 19   | 15   | 19   | 20      | 13   | 21   | 12   | 2   |

| University of California- Davis                     | 203  | 148  | 162  | 166  | 208  | 145  | 174  | 129  | 199  |
|---|------|------|------|------|------|------|------|------|------|
| University of California- Riverside                 | 31   | 34   | 27   | 21   | 27   | 37   | 52   | 19   | 12   |
| University of Connecticut                           | 31   | 34   | 27   | 46   | 42   | 38   | 31   | 39   | 47   |
| University of Delaware                              | 16   | 20   | 12   | 30   | 32   | 22   | 31   | 31   | 49   |
| University of Florida                               | 153  | 279  | 237  | 208  | 243  | 249  | 247  | 243  | 167  |
| University of Georgia                               | 106  | 118  | 119  | 110  | 103  | 119  | 107  | 159  | 96   |
| University of Guam                                  | 6    | 4    | 4    | 5    | 5    | 10   | 4    | 9    | 3    |
| University of Hawaii at Manoa                       | 27   | 35   | 35   | 50   | 40   | 36   | 20   | 39   | 56   |
| University of Idaho                                 | 57   | 99   | 93   | 98   | 92   | 114  | 87   | 89   | 142  |
| University of Illinois at Urbana-Champaign          | 103  | 105  | 106  | 111  | 102  | 97   | 123  | 142  | 145  |
| University of Kentucky                              | 68   | 110  | 58   | 77   | 55   | 70   | 52   | 59   | 67   |
| University of Maine                                 | 52   | 48   | 87   | 87   | 64   | 43   | 67   | 72   | 69   |
| University of Maryland                              | 39   | 27   | 41   | 33   | 21   | 31   | 27   | 29   | 26   |
| University of Maryland Eastern Shore                | 10   | 14   | 14   | 16   | 5    | 14   | 16   | 11   | 8    |
| University of Massachusetts                         | 40   | 38   | 55   | 38   | 28   | 66   | 33   | 76   | 55   |
| University of Minnesota- St. Paul                   | 129  | 123  | 89   | 76   | 104  | 121  | 82   | 84   | 103  |
| University of Missouri                              | 70   | 54   | 68   | 80   | 60   | 62   | 88   | 70   | 69   |
| University of Nebraska- Lincoln                     | 102  | 81   | 89   | 101  | 116  | 111  | 98   | 135  | 112  |
| University of Nevada- Reno                          | 28   | 27   | 33   | 32   | 23   | 23   | 39   | 31   | 8    |
| University of New Hampshire                         | 42   | 44   | 40   | 42   | 39   | 49   | 44   | 40   | 32   |
| University of Puerto Rico - Mayaguez                | 30   | 33   | 36   | 34   | 34   | 32   | 27   | 24   | 18   |
| University of Tennessee                             | 62   | 50   | 57   | 57   | 95   | 99   | 63   | 58   | 82   |
| University of Vermont                               | 37   | 32   | 46   | 42   | 44   | 37   | 42   | 44   | 44   |
| University of Wisconsin- Madison                    | 99   | 122  | 97   | 84   | 75   | 75   | 73   | 84   | 82   |
| University of Wyoming                               | 19   | 25   | 25   | 28   | 23   | 25   | 23   | 36   | 37   |
| University of the District of Columbia              |      |      |      |      |      |      | 2    |      | 1    |
| University of the Virgin Islands                    | 7    | 12   | 14   | 12   | 3    | 14   | 18   | 12   | 14   |
| Utah State University                               | 61   | 52   | 64   | 83   | 67   | 108  | 57   | 68   | 87   |
| Virginia Polytechnic Institute and State University | 107  | 87   | 106  | 87   | 95   | 91   | 118  | 120  | 152  |
| Virginia State University                           |      |      | 3    | 13   | 10   | 12   | 8    | 13   |      |
| Washington State University                         | 78   | 69   | 55   | 86   | 68   | 58   | 74   | 70   | 81   |
| West Virginia University                            | 71   | 66   | 64   | 53   | 72   | 57   | 67   | 80   | 92   |
| Total   | 4193 | 4469 | 4612 | 4281 | 4348 | 4410 | 4400 | 4567 | 4731 |

| <u>Institution</u>  |         |      |          | D    | octorate |          |          |          |         |
|---|---------|------|----------|------|----------|----------|----------|----------|---------|
| Alabama Agricultural and Mechanical University              | 2004    | 2005 | 2006     | 2007 | 2008     | 2009     | 2010     | 2011     | 2012    |
| Alcorn State University                                     | 3       | 2    | 5        | 6    | 8        | 11       | 11       | 4        | 4       |
| Auburn University   |         |      |          |      |          |          |          |          |         |
| Clemson University  | 23      | 18   | 19       | 25   | 24       | 20       | 27       | 26       | 26      |
| Colorado State University                                   | 40      | 30   | 38       | 41   | 50       | 41       | 21       | 28       | 26      |
| Cornell University  | 30      | 27   | 20       | 23   | 22       | 20       | 24       | 18       | 12      |
| Delaware State University                                   | 102     | 101  | 174      | 119  | 123      | 70       | 85       | 55       | 84      |
| Florida A and M University                                  |         |      |          |      |          |          |          |          |         |
| Fort Valley State University                                | 5       | 4    | 7        | 4    | 1        | 1        | 1        | 4        | 4       |
| Iowa State University                                       |         |      |          |      |          |          |          |          |         |
| Kansas State University                                     | 28      | 51   | 45       | 47   | 59       | 55       | 54       | 51       | 32      |
| Kentucky State University                                   | 26      | 29   | 42       | 33   | 34       | 16       | 14       | 28       | 26      |
| Louisiana State University                                  |         |      |          |      |          |          |          |          |         |
| Michigan State University                                   | 37      | 39   | 37       | 41   | 30       | 23       | 29       | 16       | 33      |
| Mississippi State University                                | 97      | 98   | 83       | 82   | 70       | 74       | 81       | 67       | 58      |
| Montana State University                                    | 23      | 22   | 20       | 21   | 23       | 19       | 32       | 34       | 24      |
| New Mexico State University                                 | 8       | 14   | 14       | 7    | 19       | 24       | 14       | 15       | 13      |
| North Carolina Agricultural and Technical State University  | 8       | 5    | 8        | 10   | 8        | 3        | 4        | 10       | 9       |
| North Carolina State University at Raleigh                  | 79      | 77   | 75       | 113  | 64       | 105      | 0        | 98       | 8<br>91 |
| North Dakota State University                               | 79      | 7 7  | 73       | 113  | 04       | 103      | 101      | 90       | 91      |
| Oklahoma State University                                   | 8       | 11   | 16       | 20   | 18       | 11       | 8        | 13       | 17      |
| Oregon State University                                     | 21      | 40   | 36       | 30   | 30       | 27       | 29       | 33       | 29      |
| Prairie View A&M University                                 | 41      | 37   | 51       | 56   | 36       | 46       | 39       | 45       | 38      |
| Purdue University   |         |      |          |      |          |          | 0.0      |          |         |
| Rutgers University- New Brunswick                           | 50      | 54   | 66       | 57   | 58       | 75       | 80       | 66       | 57      |
| South Carolina State University                             | 65      | 47   | 54       | 46   | 48       | 71       | 60       | 48       | 55      |
| South Dakota State University                               | 17      | 15   | 15       | 17   | 18       | 16       | 19       | 9        | 18      |
| Southern University and Agricultural and Mechanical College | Ι,      | 10   | 0        | Ι,   | 10       | 10       | 1        | 1        | 5       |
| Tennessee State University                                  |         |      | Ū        |      | 0        |          | _        | -        |         |
| Texas A&M University  | 110     | 115  | 95       | 122  | 120      | 99       | 102      | 89       | 116     |
| The Ohio State University                                   | 7       | 7    | 7        | 0    | 1.0      | _        | 1.0      |          | 0.7     |
| The Pennsylvania State University                           | 7<br>63 | 7    | 7        | 9 45 | 10       | 5<br>65  | 12       | 6        | 27      |
| The University of Rhode Island                              | 10      | 43   | 57<br>18 | 7    | 61<br>6  | 9        | 53<br>16 | 43<br>13 | 86<br>7 |
| Tuskegee University   | Τ.Ο     | 0    | Τ.Ο      | /    | U        | <i>9</i> | 10       | 10       | /       |
| University of Alaska- Fairbanks                             | 3       | 3    | 0        | 3    | 3        | 1        | 4        | 0        | 5       |
| University of Arizona  University of Arizona                | 20      | 33   | 42       | 64   | 51       | 54       | 31       | 41       | 35      |
| University of Arkansas                                      | 29      | 23   | 13       | 25   | 22       | 18       | 22       | 22       | 13      |
| University of Arkansas at Pine Bluff                        |         |      |          |      |          |          |          |          |         |
| University of California- Berkeley                          | 42      | 47   | 43       | 64   | 59       | 50       | 50       | 46       | 54      |

| University of California- Davis                     | 69   | 123  | 129  | 117  | 133  | 130  | 110  | 119  | 159  |
|---|------|------|------|------|------|------|------|------|------|
| University of California- Riverside                 | 38   | 41   | 38   | 43   | 55   | 31   | 28   | 23   | 26   |
| University of Connecticut                           | 16   | 15   | 21   | 31   | 19   | 16   | 19   | 21   | 13   |
| University of Delaware                              | 7    | 5    | 9    | 3    | 9    | 9    | 1    | 12   | 7    |
| University of Florida                               | 86   | 85   | 83   | 93   | 114  | 88   | 129  | 137  | 97   |
| University of Georgia                               | 43   | 37   | 30   | 52   | 40   | 45   | 45   | 52   | 36   |
| University of Guam                                  |      |      |      |      |      |      |      |      |      |
| University of Hawaii at Manoa                       | 6    | 5    | 11   | 12   | 21   | 9    | 10   | 15   | 17   |
| University of Idaho                                 | 4    | 9    | 29   | 33   | 28   | 26   | 27   | 18   | 24   |
| University of Illinois at Urbana-Champaign          | 29   | 57   | 41   | 48   | 51   | 46   | 44   | 52   | 64   |
| University of Kentucky                              | 32   | 30   | 21   | 29   | 19   | 23   | 29   | 27   | 39   |
| University of Maine                                 | 11   | 10   | 13   | 13   | 29   | 22   | 14   | 20   | 24   |
| University of Maryland                              | 26   | 18   | 25   | 25   | 27   | 27   | 23   | 18   | 20   |
| University of Maryland Eastern Shore                |      | 1    | 5    | 3    | 6    | 3    | 9    | 6    | 2    |
| University of Massachusetts                         | 10   | 21   | 16   | 16   | 18   | 29   | 16   | 34   | 11   |
| University of Minnesota- St. Paul                   | 70   | 65   | 61   | 39   | 49   | 64   | 54   | 63   | 67   |
| University of Missouri                              | 30   | 29   | 37   | 37   | 35   | 37   | 34   | 33   | 25   |
| University of Nebraska- Lincoln                     | 43   | 47   | 44   | 27   | 36   | 41   | 28   | 54   | 48   |
| University of Nevada- Reno                          | 3    | 10   | 19   | 9    | 15   | 28   | 14   | 23   | 3    |
| University of New Hampshire                         | 10   | 10   | 5    | 18   | 13   | 18   | 14   | 8    | 19   |
| University of Puerto Rico - Mayaguez                |      |      |      |      |      |      |      |      |      |
| University of Tennessee                             | 11   | 13   | 11   | 11   | 31   | 20   | 9    | 13   | 14   |
| University of Vermont                               | 6    | 3    | 10   | 11   | 9    | 8    | 12   | 8    | 8    |
| University of Wisconsin- Madison                    | 98   | 127  | 136  | 117  | 148  | 155  | 132  | 107  | 110  |
| University of Wyoming                               | 6    | 4    | 6    | 10   | 6    | 11   | 4    | 7    | 17   |
| University of the District of Columbia              |      |      |      |      |      |      |      |      |      |
| University of the Virgin Islands                    |      |      |      |      |      |      |      |      |      |
| Utah State University                               | 10   | 12   | 16   | 16   | 16   | 17   | 12   | 8    | 20   |
| Virginia Polytechnic Institute and State University | 51   | 30   | 39   | 44   | 43   | 51   | 41   | 61   | 66   |
| Virginia State University                           |      |      |      |      |      |      |      |      |      |
| Washington State University                         | 30   | 50   | 30   | 49   | 27   | 25   | 27   | 31   | 50   |
| West Virginia University                            | 16   | 12   | 14   | 12   | 25   | 13   | 17   | 26   | 27   |
| Total   | 1756 | 1869 | 1999 | 2055 | 2097 | 2021 | 1926 | 1925 | 2025 |