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MARYLAND HIGHER EDUCATION COMMISSION

# FUNDING GUIDELINES ENROLLMENT DATA REPORT

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July 2002

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## Background

In 1999, the Maryland Higher Education Commission adopted a set of operating funding guidelines for four-year public institutions based on per-student funding at peer institutions. These guidelines are used to inform the budget process and to assess levels of State support for four-year public higher education institutions. In order to provide national comparisons consistent with statutory requirements, the funding guidelines use an adjusted full-time equivalent student (AFTES) enrollment to calculate the resources per FTES for current and aspirational peer institutions. The resources per FTES determine the level of State general fund support for Maryland's public four-year institutions (see Appendix A. *The Higher Education Funding Guidelines*).

To ensure that the enrollment data used to determine the level of funding are arrived at objectively, the Commission is responsible for publishing annual enrollment estimates. The following report summarizes the methodology used to determine the adjusted full-time equivalent student enrollment estimates. The report also provides actual and projected enrollment estimates for five fiscal years. These estimates are based on the Commission's annual enrollment projections report and are to be incorporated into the Governor's budget.

## Methodology

The funding guidelines use an adjusted full-time equivalent student enrollment (AFTES) to calculate the resources per FTES for peer institutions. The AFTES is based on fall headcount enrollment data, taken from the *Integrated Postsecondary Education Database Systems* (IPEDS), according to the following formula:

AFTES = full-time students + 1/3 part-time students

This enrollment calculation is used for all the institutions except for the University of Baltimore, the University of Maryland, Baltimore, the University of Maryland University College and the University of Maryland, College Park.

<u>The University of Baltimore</u>:

The University of Baltimore (UB) offers career-oriented education at the upper division bachelor's, master's and professional levels. Currently, the institution only admits undergraduate students who have earned at least 24 credit hours. The majority of institutions within UB's current peer candidate pool admit first-time freshman. Therefore, the enrollment for UB is adjusted to reflect the higher costs associated with educating upper division students.[1]

[1] In May, UB submitted a proposal to adjust their AFTES enrollment calculation. The Commission is reviewing this proposal and if any adjustments are made, the Commission will update the university's enrollment calculation.

The AFTES enrollment for UB and its peer institutions is weighted to reflect lower division undergraduates (1.0), upper division undergraduates (1.5), and graduate and professional students (1.8). The AFTES enrollment is then calculated by the following formula:

AFTES = weighted full-time students + 1/3 weighted part-time students

These weights are based on the full instructional cost ratios per credit hour by institutional type and level of instruction as reported in a national study published by the *Journal of Education Finance.*[2]

The University of Maryland, Baltimore

The enrollment for the University of Maryland, Baltimore and its funding peers are adjusted to reflect the higher cost of educating first professional students. The AFTES enrollment is weighted to reflect the full instructional cost ratios per full-time equivalent student. Each first professional student is equal to four full-time equivalent students, which is based on the study published by the *Journal of Education Finance*. The AFTES enrollment is then calculated by the following formula:

AFTES = (Full-time undergraduate and graduate students + Full-time first professional students x 4) + 1/3 (Part-time undergraduate and graduate students + part-time first professional students x 4)

The University of Maryland University College

The University of Maryland University College (UMUC) specializes in providing education programs and services to adult students who wish to study on a part-time basis while its peer institutions do not have the same concentration of part-time enrollment. Furthermore, UMUC's method of delivering education differs from many of its peer institutions in that UMUC has a greater focus on distance education. To adjust for these factors, out-of-state online enrollments are deducted from the total headcount enrollment. AFTES enrollment is then calculated by the following formula:

AFTES = full-time students + 1/3 part-time students

The University of Maryland, College Park:

The funding guidelines for the University of Maryland, College Park are designed to recognize the institution's unique status as the State's flagship. Three of the five of its peer institutions operate a medical program. Since College Park does not have a medical program, the AFTES enrollment for its peer institutions is weighted to reflect the higher costs associated with medical programs. One medical student is equal to four full-time equivalent students.

[2] Brinkman, Paul T. 1989. "Instructional Costs per Student Credit Hour: Differences by Level of Instruction." *Journal of Education Finance* 15 (Summer): 34-52.

**Projected Enrollment Data**

The table below shows the adjusted FTES enrollment estimates for FY 2004 to FY 2008.

**TABLE 1. Adjusted Full-Time Equivalent Student Enrollment Estimates For Maryland's Public Colleges and Universities: FY 2004 to FY 2008**

| | Projected | | | | |
|---|---|---|---|---|---|
| Institution | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
| Bowie State University | 4,087 | 4,424 | 4,664 | 4,807 | 4,914 |
| Coppin State College | 2,971 | 3,025 | 3,081 | 3,159 | 3,239 |
| Frostburg State University | 4,674 | 4,721 | 4,768 | 4,816 | 4,865 |
| Salisbury State University | 6,240 | 6,386 | 6,510 | 6,619 | 6,708 |
| Towson University | 14,173 | 14,192 | 14,220 | 14,318 | 14,375 |
| University of Baltimore | 5,524 | 5,642 | 5,775 | 5,922 | 6,053 |
| University of Maryland, Baltimore | 12,253 | 12,433 | 12,564 | 12,604 | 12,656 |
| University of Maryland Baltimore County | 9,669 | 9,722 | 9,779 | 9,822 | 9,846 |
| University of Maryland, College Park | 30,130 | 30,367 | 30,543 | 30,623 | 30,683 |
| University of Maryland Eastern Shore | 2,913 | 2,966 | 3,020 | 3,076 | 3,130 |
| University of Maryland University College | 8,290 | 8,761 | 9,215 | 9,815 | 10,550 |
| Morgan State University | 6,505 | 6,671 | 6,909 | 7,062 | 7,186 |
| **Total** | **107,429** | **109,310** | **111,048** | **112,643** | **114,205** |

Source: Maryland Higher Education Commission, Enrollment Information System

# Appendix A: Higher Education Operating Funding Guidelines

## APPENDIX A. HIGHER EDUCATION FUNDING GUIDELINES

### I. Authority

Chapter 515 of the Acts of 1999 and Section 11-105 (g) (4) of the Education Article of the Maryland Annotated Code require the Maryland Higher Education Commission to develop operating funding guidelines based on current and aspirational peer comparisons and other appropriate factors. These guidelines must be developed in consultation with all segments of higher education, including the presidents of home institutions.

### II. Definitions

A. "Adjusted full-time equivalent student enrollment" means a proportionate number of students used to determine the appropriate level of State support for each home institution, as determined in Section IV.

B. "Aspirational peers" means a set of at least five institutions selected by each home institution to determine the adequacy of funding and performance. Aspirational peers are those institutions that the home institution aspires to emulate in performance and reputation.

C. "Cluster analysis," means the mathematical process of determining, on the basis of data, those institutions that are closest to the home institution on key variables taken collectively. The variables include program offerings, size, location, student mix, and diversity.

D. "Current funding peers" means a set of institutions identified through a series of cluster analyses that closely resemble the home institution on a series of variables such as program offerings, size, location, student mix, and diversity.

E. "Eligible home institution" means a home institution that meets or exceeds the performance of its ten current accountability peers based on selected accountability factors.

F. "Historically Black Institutions" means the following public senior higher education institutions:

1. Bowie State University;
2. Coppin State College;
3. University of Maryland Eastern Shore; and
4. Morgan State University

G. "Home institution" means one or more of the following public senior higher education institutions under the jurisdiction of the Board of Regents of the University System of Maryland and the Board of Regents of Morgan State University:

1. University of Maryland, Baltimore;
2. University of Maryland, College Park;
3. Bowie State University;
4. Towson University;
5. University of Maryland Eastern Shore;
6. Coppin State College;
7. University of Baltimore;
8. Frostburg State University;
9. Salisbury State University;
10. University of Maryland University College;
11. University of Maryland Baltimore County; and
12. Morgan State University.

H. "Performance indicators" means a set of performance indicators selected by the presidents of each home institution and approved by the Maryland Higher Education Commission for the purpose of comparing performance against current and aspirational peers.

I. "Performance peers" means a list of at least ten current funding peers selected by each home institution's president and validated by the Maryland Higher Education Commission.

J. "Projected tuition and mandatory fees" means the revenue projections for each home institution as approved by the institution's governing board and based on estimated tuition revenue and mandatory fees such as application fees, graduation fees, laboratory fees, students fees, and other mandatory fees as determined by the Maryland Higher Education Commission.

K. "Resources per full-time equivalent student" means unrestricted state appropriations and tuition and fee revenues (as reported annually by the Integrated Postsecondary Data Systems Finance Survey) divided by the number of adjusted full-time equivalent students.

L. "Variation" means a single cluster analysis using specified variables. The variables used in each variation are provided in Section V paragraph C.

## III. Scope and Applicability

These funding guidelines shall apply to:

A. All public senior higher education institutions and research centers under the jurisdiction of the University System of Maryland Board of Regents:

1. University of Maryland, Baltimore;
2. University of Maryland, College Park;
3. Bowie State University;
4. Towson University;
5. University of Maryland Eastern Shore;
6. Coppin State College;
7. University of Baltimore;
8. Frostburg State University;
9. Salisbury State University;
10. University of Maryland University College;
11. University of Maryland Baltimore County;
12. University of Maryland Center for Environmental Science; and
13. University of Maryland Biotechnology Institute.

B. Morgan State University

## IV. Adjusted Full-Time Equivalent Student Enrollment

A. The adjusted full-time equivalent student enrollment shall be used to calculate the resources per full-time equivalent student for current funding peers and aspirational peers. The resources per full-time equivalent student shall, in turn, be used to calculate the level of State general fund support for home institutions.

B. Except as otherwise provided in this section, the adjusted full-time equivalent student enrollment shall be based on fall headcount enrollment data, taken from the Integrated Postsecondary Data Systems national database, according to the following formula:

adjusted FTE students = full-time students + 1/3 part-time students.

C. The adjusted full-time equivalent student enrollment for the University of Baltimore and its peer institutions shall be weighted to reflect lower division undergraduates (1.0), upper division undergraduates (1.5), and professional students (1.8).

D. The adjusted full-time equivalent student enrollment for the University of Maryland, College Park and its aspirational peers shall be weighted to reflect the higher cost of medical programs. One medical student shall equal four full-time equivalent students.

E. The adjusted full-time equivalent student enrollment for the University of Maryland, Baltimore and its composite peers shall be weighted to reflect the full instructional cost ratios per full-time equivalent student. Each first professional student shall be equal to four full-time equivalent students.

F. The adjusted full-time equivalent student enrollment for the University of Maryland University College and its peer institutions shall be based on fall headcount enrollment data, taken from the Integrated Postsecondary Data Systems national database, reduced by out-of-state online enrollments as reported by the institution, according to the following formula:

adjusted FTE students = (full-time students + 1/3 part-time students)

G. The Maryland Higher Education Commission shall annually project future enrollment for each home institution based on its annual enrollment projections in accordance with this section.

## V. Selection of Current Peers

A. Current peers shall be identified for each home institution except for the University of Maryland, College Park, the University of Maryland, Baltimore, the University of Maryland Center for Environmental Science, and the University of Maryland Biotechnology Institute.

B. Current peers institutions shall be selected from:

1. public senior higher education institutions; and
2. within the same Carnegie Classification as the home institution.

C. Current peers shall be identified using the following six cluster variations:

1. Variation I shall contain the following nine variables:

    a. Total unrestricted revenues minus state appropriations per full- time equivalent student;
    b. Total headcount enrollment;
    c. Total FTE enrollment;
    d. Graduate and first professional students as % of total headcount enrollment;
    e. Number of baccalaureate degrees;
    f. Number of master's degrees;

g. Number of doctoral degrees;
h. Number of first professional degrees; and
i. African-American, Hispanic, Native American students as % of total headcount enrollment.

2. Variation II shall contain the following eight variables:

a. Total headcount enrollment;
b. Total FTE enrollment;
c. Graduate and first professional students as % of total headcount enrollment;
d. Number of baccalaureate degrees;
e. Number of master's degrees;
f. Number of doctoral degrees;
g. Number of first professional degrees; and
h. African-American, Hispanic, Native American students as % of total headcount enrollment.

3. Variation III shall contain the following five variables:

a. Total headcount enrollment;
b. Part-time students as % of total enrollment;
c. Baccalaureate degrees as % of total degrees;
d. African-American Hispanic, Native American students as % of total headcount enrollment; and
e. Total unrestricted revenues minus state appropriations per full- time equivalent student.

4. Variation IV shall contain the following four variables:

a. Total headcount enrollment;
b. Part-time students as % of total enrollment;
c. Baccalaureate degrees as % of total degrees; and
d. African-American Hispanic, Native American students as % of total headcount enrollment.

5. Variation IVA shall apply to historically black institutions and shall contain the following three variables:

a. Total headcount enrollment;
b. Part-time students as % of total enrollment; and
c. Baccalaureate degrees as % of total degrees.

6. Variation V shall contain the following eighteen variables:

a. Total FTE enrollment;
b. Engineering degrees as % of total degrees awarded;

c. Physical science degrees as % of total degrees awarded;
d. Math and computer science degrees as % of total degrees awarded;
e. Life science degrees as % of total degrees awarded;
f. Agricultural sciences degrees as % of total degrees awarded;
g. Biological sciences degrees as % of total degrees awarded;
h. Medical sciences degrees as % of total degrees awarded;
i. Other life sciences degrees as % of total degrees awarded;
j. Psychology degrees as % of total degrees awarded;
k. Social science degrees as % of total degrees awarded;
l. Humanities degrees as % of total degrees awarded;
m. Art and music degrees as % of total degrees awarded;
n. Architecture degrees as % of total degrees awarded;
o. Education degrees as % of total degrees awarded;
p. Business degrees as % of total degrees awarded;
q. Law degrees as % of total degrees awarded; and
r. Distance in miles to closest Metropolitan Statistical Area of at least 250,000.

D. The twenty institutions closest to the home institution based on each variation shall be identified as the home institution's current funding peers.

**E. Exceptions**

**University of Maryland College Park**
UMCP shall use five aspirational peers for funding guidelines. Funding will be based on the average of the aspirational peers.

**University of Maryland, Baltimore**
UMB will use a group of five composite peers, selected by the university in consultation with the University System of Maryland and the Maryland Higher Education Commission. Funding will be based on the average of the composite peers.

**University of Maryland Biotechnology Institute and Center for Environmental Science**
The funding guidelines for the UMBI and UMCES shall be equal to the institution's prior year appropriation multiplied by the lower of (a.) the percentage increase in the funding guideline computed for the University of Maryland College Park, or (b.) the average percentage increase in the funding guidelines for all University System of Maryland institutions.

**Morgan State University**
Current peers for Morgan State University shall be selected from the public senior universities and within the same Carnegie classification or one classification higher than the university. Current peers shall be identified using the six cluster variations listed in Section V.C. The institutions will be ranked according to their average variation from the six variations.

A group of institutions will be chosen based on agreement between Morgan State University and the Maryland Higher Education Commission. They are:

1. Alabama University, Huntsville;
2. Florida A&M University;
3. University of Massachusetts, Dartmouth;
4. University of Massachusetts, Lowell;
5. Michigan Technological University;
6. Oakland University;
7. Jackson State University;
8. The College of New Jersey;
9. CUNY City College;
10. North Carolina A&T State University;
11. Tennessee State University;
12. Texas A&M University, Kingsville.

**University of Maryland Eastern Shore**

Current peers for UMES shall be selected from the public senior universities and within the same Carnegie classification. Current peers shall be identified using the six cluster variations listed in Section V.C. plus a research variation. This research variation shall contain the following two variables:

a. Total headcount enrollment; and
b. Research expenditures per FTE.

The twenty-four institutions closest to UMES based on each variation shall be identified. The group is reduced to the twenty-three institutions that best reflect UMES' needs as an 1890 land-grant university with a research mission and offering doctoral programs. They are:

1. Alabama A&M University;
2. Troy State University, Main;
3. California State University, Bakersfield;
4. Eastern Connecticut State University;
5. Albany State University;
6. Fort Valley State University;
7. Indiana University, Northwest;
8. Bemidji State University;
9. Alcorn State University;
10. Jackson State University;
11. North Carolina A&T State University;
12. University of North Carolina, Pembroke;
13. College of New Jersey;
14. Eastern New Mexico State University;
15. New Mexico Highlands University;
16. SUNY College at Fredonia;
17. Mansfield University of Pennsylvania;

18. Pennsylvania State University, Harrisburg;
19. South Carolina State College;
20. Prairie View A&M University;
21. University of Texas, Permian Basin;
22. University of Texas, Tyler;
23. Virginia State University.

## VI. Selection of Performance Peers

A. The president of each home institution shall select ten peers from the list of current funding peers for the purpose of comparing performance.

B. The president of each home institution shall provide written justification to the Maryland Higher Education Commission for the ten peers selected in paragraph A of this section.

C. The Maryland Higher Education Commission shall validate the ten performance peers selected by each president.

D. Performance peers for Morgan State University, the University of Maryland College Park, and the University of Maryland, Baltimore shall be the entire group of current peers.

## VII. Selection of Aspirational Peers

A. The president of each home institution shall select at least five aspirational peers consistent with the institution's approved mission statement and the State Plan for Higher Education.

B. The president of each home institution shall provide written justification for the aspirational peers selected in paragraph A of this section.

C. The Maryland Higher Education Commission shall approve the aspirational peers selected by the president of each home institution.

## VIII. Resources per Full-Time Equivalent Student for Current Peers

A. The Maryland Higher Education Commission shall annually compute the 75th percentile of resources per full-time equivalent student appropriated to current peers of each home institution, except for the University of Maryland Baltimore and College Park, and based on the latest national data.

B. The resources per full-time equivalent student identified in paragraph A of this section shall be adjusted using the Higher Education Price Index four-year compound annual rate and shall be used to estimate the funding gap between each home institution and its current funding peers.

## IX. Resources per Full-Time Equivalent Student for Aspirational Peers

A. The Maryland Higher Education Commission shall annually compute the unweighted average percentile of resources per full-time equivalent student appropriated to aspirational peers of each home institution based on the latest national data.

B. The resources per full-time equivalent student identified in paragraph A of this section shall be adjusted using the Higher Education Price Index four-year compound annual rate and shall be used to estimate the funding gap between each home institution and its aspirational funding peers.

## X. Computation of Funding Guidelines Based on Current Peer Comparisons

A. The Maryland Higher Education Commission shall annually compute funding guidelines based on current funding peer comparisons for each home institution by multiplying the adjusted resources per full-time equivalent student as determined in Section VIII for all current peers by the projected enrollment as determined in Section IV paragraph F and subtracting the projected tuition and mandatory fees.

B. Not withstanding paragraph A, the funding guidelines per full-time equivalent student at each home institution shall not be less than $5,000, except for the University of Maryland, University College.

## XI. Computation of Funding Guidelines Based on Aspirational Peer Comparisons

The Maryland Higher Education Commission shall annually compute funding guidelines based on aspirational peer comparisons for eligible home institutions by multiplying the adjusted resources per full-time equivalent student as determined in Section IX for all aspirational peers by the projected enrollment as determined in Section IV paragraph F and subtracting the projected tuition and mandatory fees.

## XII. Funding Guidelines for FY 2001

Except as provided in Sections XIV, XV, and XVI, in fiscal year 2001, the funding guidelines for each home institution shall be equal to the result obtained in Section X.

## XIII. Funding Guidelines for FY 2002 and thereafter

A. Except as provided in Sections XIV, XV, and XVI and paragraph B of this section, in fiscal 2002 and thereafter, the funding guidelines for each home institution shall be based on the result obtained in Section X.

B. 1. If a home institution's performance on the accountability factors identified in Section XVII meets or exceeds the performance of its current performance peers, the home institution's funding guidelines shall be computed based on current and aspirational peer comparisons as computed in Section X and XI, respectively.

2. Aspirational peer comparisons will be integrated into the funding guidelines for eligible home institutions on an incremental basis beginning in fiscal year 2002 according to the following weights:

First Eligible Year: current peer at the 75th percentile = 90% weight aspirational peers at the unweighted average = 10% weight

Second Eligible Year: current at the 75th percentile = 80% weight aspirational peers at the unweighted average = 20% weight

Third Eligible Year: current peer at the 75th percentile = 70% weight aspirational peers at the unweighted average = 30% weight

3. The integration of aspirational peer comparisons into the funding guidelines shall be capped at no more than 30% for each home institution.

## XIV. Funding Guidelines for the University of Maryland, College Park

In fiscal year 2001 and thereafter, the funding guidelines for the University of Maryland, College Park shall equal the result obtained in Section XI.

## XV. Funding Guidelines for the University of Maryland Biotechnology Institute and the University of Maryland Center for Environmental Science

A. Except as provided in paragraph B of this section, in fiscal year 2001 and thereafter, the funding guidelines for the University of Maryland Biotechnology Institute and the University of Maryland Center for Environmental Science shall be equal to the institution's prior year appropriation as determined in paragraph C of this Section multiplied by the percentage increase in the funding guidelines computed for the University of Maryland College Park in accordance with Section XIV.

B. In any fiscal year that the percentage increase in the funding guidelines computed for the University of Maryland College Park in accordance with Section XIV is greater than the average percentage increase in the funding guidelines for all University System of Maryland institutions, the funding guidelines for the University of Maryland Biotechnology Institute and the University of Maryland Center for Environmental Science shall be equal to the institution's prior year appropriation multiplied by the average percentage increase in the funding guidelines for all University System of Maryland institutions.

C. Prior Year appropriations for the University of Maryland Biotechnology Institute and the University of Maryland Center for Environmental Science shall be adjusted to reflect on-going operating appropriations and not initial start-up appropriations for new programs or other one-time initiatives.

## XVI. Funding Guidelines for the University of Maryland, Baltimore

A. In fiscal year 2001 and thereafter, the funding guidelines for the University of Maryland, Baltimore shall be based on the unweighted average percentile of five composite peers selected by the six professional schools utilizing defining characteristics such as: size, location, programmatic structure, national reputation, and other key variables.

B. Composite peers shall be selected from the Carnegie Research I and the Specialized-Medical institution classifications. Each peer selected shall contain a medical school and at least three of the other five professional schools.

C. The Maryland Higher Education Commission shall annually compute the unweighted average percentile of resources per full-time equivalent student appropriated to composite peers based on the latest national data.

D. The Maryland Higher Education Commission shall annually compute funding guidelines based on composite peer comparisons for eligible home institutions by multiplying the adjusted resources per full-time equivalent student by the projected enrollment as determined in Section IV paragraph F and subtracting the projected tuition and mandatory fees.

## XVII. Performance Indicators

A. The Maryland Higher Education Commission shall approve the performance indicators developed and proposed by each home institution, in consultation with the presidents and the University System of Maryland.

B. The performance indicators shall be in line with the Managing For Results accountability process with an emphasis on outcome-oriented indicators.

C. The benchmarks for the performance indicators shall be the home institution's ten current performance peers as determined in Section VI and/or approved aspirational peers, if applicable.

D. The Maryland Higher Education Commission shall prepare a report annually on each home institution's performance, in accordance with this section.

E. If the home institution's performance on several key performance indicators is below the performance of its peers, the institution's president and governing board shall submit a report to the Maryland Higher Education Commission which shall include an analysis of the institution's deficiencies and a strategic plan to improve performance.

## XVIII. Efficiency and Cost Containment

Each home institution shall submit a report to the Maryland Higher Education Commission that focuses on the following cost containment classifications:

A. Cost Savings: The home institution shall report any item that represents a reduction in current operating expenses.

B. Strategic Reallocation: The home institution shall report any item that redirects current resources toward a campus priority or critical need.

C. Cost Avoidance: The home institution shall report any item that meets the following two conditions. First, the item represents a potential cost for a demonstrable unmet need. Second, the cost is avoided and the need is satisfied.

D. Revenue Enhancement: The home institution shall report on any enhanced funding streams that will add to the fund balance. If additional revenue is created and used for a spending purpose, the amount shall fall into one of the previous categories discussed above.

Revised: June 2002