BOARD OF HIGHER EDUCATION

REQUEST FOR BOARD ACTION

NO.:	BHE 19-02
BOARD DATE:	December 11, 2018

APPROVAL OF NEW PERFORMANCE MEASUREMENT METRICS

MOVED: The Massachusetts Board of Higher Education (BHE) hereby approves the *New and Enhanced Performance Measurement System,* which replaces the previous system authorized under AAC 04-01. This includes a revised list of performance measurement metrics with enhanced measures and analytic detail. The Commissioner is instructed to initiate the immediate implementation of this system consistent with the BHE's statutory responsibility to demonstrate our accountability to the public and provide a resource for institutional self-assessment.

VOTED: Motion adopted by BHE. 12/11/208

Authority: Massachusetts General Laws, Chapter 15A, Section 7A

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Background

In the General Appropriations Act of 1997, the Board of Higher Education was mandated to develop, in collaboration with the institutions, a performance accountability system for state and community colleges "in order to promote accountability for effective management and stewardship of public funds and to achieve and demonstrate measurable educational outcomes."

In June 2003 this performance measurement language was strengthened and expanded in the Board of Higher Education's statute (Chapter 15A). In the General Laws of Massachusetts, Chapter 15a, Section 7a, it states that, "in order to promote accountability for effective management and stewardship of public funds and to achieve and demonstrate measurable educational outcomes, the institutions shall certify achievement of public higher education accountability objectives through a performance measurement system."

Chapter 15a, Section 7a, goes on to establish requirements for the development the Public Higher Education Performance Measurement System in Massachusetts including:
- formation of a Performance Measurement Taskforce,
- inclusion of specific institutional outcome metrics,
- use of institution-specific peers for benchmarking, and

public access to institution-level accountability reporting.

The need for a strong accountability system became a major discussion item during the 2003 Legislative session. The Chancellor and the Chairman of the Board of Higher Education made a commitment to Legislative leadership that the implementation of a strong accountability system would be a Board priority in the coming year and that a Condition of Higher Education report would be presented to the Governor and Legislature.

Beginning in 2004, the Board of Higher Education began to evaluate campus performance and produce an annual report of findings in compliance with Chapter 15a, Section 7a. These reports were developed in collaboration with campus representatives and outside experts and included a broad range of metrics, institution-level data, institution-level benchmarks/peer comparisons and descriptions of best practices. These reports continued through 2010, after which they were put on hold for the development of an alternative system-level accountability project known as the Vision Project.

The Vision Project was authorized under a different section of Chapter 15a (Section 9). Requirements within this section include the requirement of routine data submissions and analyses, but do not have the specific accountability language found in section 7a. The first Vision Project report was produced in 2012. The focus of this report was to assess the performance of our public higher education segments in comparison with estimations of state-level "best in nation" performance. They also included commentary and descriptions of "best practices." These reports continued until 2016, when the Board moved to initiate an overarching review of our performance measurement system.

The 2016 Board motion states: "For the reasons set forth in the background document, the Board of Higher Education (BHE) hereby charges the Department of Higher Education to initiate a System-Wide Performance Measurement Taskforce and to work closely with the campuses to examine the relevance and accuracy of our Performance Measurement System. Included in the review will be the relevant legislation as well as performance metrics, benchmarks, institutional and segmental goals, peer comparisons, and options for reporting and sharing analyses."

The rationale for this review was stated as follows: "In order to achieve the highest possible levels of self-assessment and continuous improvement, our system for measuring institutional performance must undergo a dynamic and iterative process of review. By engaging in such a process, we can ensure that our strategic goals are clearly defined and remain relevant to current public higher education missions and objectives. It also gives us the opportunity to reassess the quality of our existing data and analyses and to examine the possible introduction of newly developed metrics that may provide greater accuracy."

The DHE initiated the System-Wide Performance Measurement Taskforce required by the Board's motion. The Taskforce was composed of a Steering Committee and four Working Groups that addressed specific areas of institutional performance. The DHE convened 14 total meetings which included more than 70 campus representatives. Three Board members served on the Taskforce as well. National experts were also included in these meetings to provide valuable insights and advice regarding effective performance measurement. The result of these meetings is a recommendation of an initial set of metrics in each key performance area and a recommendation to establish Tableau as the environment for delivering Performance Measurement Dashboards to internal and external audiences.

Proposed Performance Indicators

The attached document provides a summary of the key performance indicators developed by Board staff in consultation with representatives from all segments of public higher education in Massachusetts. Detailed information on benchmarks and targets is provided as well as timelines for completion.

Recommended Key Performance Measurement Indicators for Massachusetts Public Higher Education

Key Performance Metric List

Access Metrics
Fall Undergraduate Enrollment Headcount
Graduate Enrollment Trends
Enrollment Representation of Underserved Populations
Enrollment of Pell-Eligible Students

Affordability Metrics
Tuition and Fees as Percent of State and Regional Family Income
Student Loan Debt at Graduation
Unmet Student Financial Need

Student Success and Completion
On-Time Credit Accumulation
Timely Completion of Gateway Course in Math and English
First-Year Retention
Student Engagement
State University Graduation Rates of First-Time Students
State University Graduation Rates of Transfer Students
Comprehensive Success of First-time and Transfer Students
Community College Six-Year Student Success

Workforce Alignment and Outcomes
Degree Production in Fields Associated with High-Demand Occupations
Comparison of Pre- and Post-Enrollment Earnings
Earnings of Students Enrolling in Postsecondary Education Directly After High School Graduation
Enrollment in High-Value, Non-Credit Workforce Development

Fiscal Stewardship
Modified Composite Financial Index (CFI)
Expenditures Devoted to Instruction
Cost of Degree Production
Deferred Maintenance/Facilities Maintenance
Instructor and Classroom Utilization

Access Metrics

Metric	Fall Undergraduate Enrollment Headcount
Definition	Number of students enrolled for credit in the fall term and fiscal year.
Purpose	To assess whether colleges and universities are maintaining expected levels of enrollment.
Segment	SU, CC
Comparison/Benchmark	Campuses will establish expected enrollment levels using a common benchmarking methodology.
Data Source	HEIRS
Timeline	2019
Recommendations	

Metric	Graduate Enrollment Trends
Definition	Number of graduate students enrolled for credit in the fall term and fiscal year.
Purpose	To assess whether universities are maintaining expected levels of enrollment.
Segment	SU
Comparison/Benchmark	Campuses will establish expected enrollment levels using a common benchmarking methodology.
Data Source	HEIRS
Timeline	2019
Recommendations	

Metric	Enrollment Representation of Underserved Populations
Definition	Latinx and African American students as a percent of total enrollment.
Purpose	To assess whether college and universities are enrolling a population fully representative of their service area.
Segment	SU, CC
Comparison/Benchmark	Comparison to Latinx and African American representation in the service area
Data Source	HEIRS, Census
Timeline	2019
Recommendations	Explore comparing state university enrollment demographics to the demographics of feeder high schools.

Metric	Enrollment of Pell-Eligible Students
Definition	Enrollment of Pell Grant recipients as a percent of total undergraduate enrollment.
Purpose	To monitor enrollment of students from lower income backgrounds.
Segment	SU, CC

Comparison/Benchmark	Comparison to the Pell Student enrollment of similar institutions
Data Source	IPEDS
Timeline	2019
Recommendations	

Affordability Metrics

Metric	Tuition and Fees as Percent of State and Regional Family Income
Definition	Tuition and mandatory fees as percent of median and lower quartile family income at the regional and state levels.
Purpose	To assess whether tuition and fees are affordable to the full spectrum of income levels in the predominant region served.
Segment	SU, CC
Comparison/Benchmark	Comparison to similar institutions
Data Source	HEIRS and Census, IPEDS
Timeline	2019
Recommendations	

Metric	Student Loan Debt at Graduation
Definition	Total loans accumulated by associate and bachelor's degree completers at time of graduation.
Purpose	To monitor the indebtedness of public higher education graduates.
Segment	SU, CC
Comparison/Benchmark	Initial comparison will be made to segment averages and trend. Long-term goal is to identify a national benchmark.
Data Source	HEIRS
Timeline	2019
Recommendations	

Metric	Unmet Student Financial Need
Definition	The gap between the sum of a student's expected family contribution (EFC) and non-loan aid and the direct costs (tuition and fees, books and supplies) of a student's education.
Purpose	To monitor whether the combination of federal, state and institutional aid limits out-of-pocket expenses to a family's ability to pay.
Segment	SU, CC
Comparison/Benchmark	Initial comparison will be made to segment averages and trend. Long-term goal is to identify a national benchmark.
Data Source	HEIRS
Timeline	2019
Recommendations	Continued refinement of cost reporting to DHE's Financial Aid Collection.

Metric	Student Loan Default Rate
Definition	Percentage of a school's borrowers who enter loan repayment and default within three years.
Purpose	To monitor whether students leaving with loan debt are able to afford the debt accumulated while enrolled in public postsecondary education.
Segment	SU, CC
Comparison/Benchmark	Comparison to national default rates of similar institutions.
Data Source	USDOE
Timeline	2019
Recommendations	

Student Success and Completion

Metric	On-Time Credit Completion
Definition	Percent of first-time, full-time, degree-seeking students completing 24-30 credits in first academic year. Percent of part-time, degree-seeking students completing 12-15 credits in the first academic year.
Purpose	To assess institutional performance with regard to timely student progression toward a degree or certificate.
Segment	SU, CC
Comparison/Benchmark	Initial comparison will be made to segment averages and trend. Long-term goal is to identify a national benchmark.
Data Source	HEIRS
Timeline	2019
Recommendations	DHE should enhance credit reporting in HEIRS to delineate between credits earned internally and externally.

Metric	Timely Completion of Gateway Course in Math and English
Definition	Percent of degree-seeking students completing college-level math and English classes by end of first academic year and by the end of second academic year, disaggregated by initial enrollment in developmental courses.
Purpose	To assess institutional performance with regard to timely student progression toward a degree or certificate.
Segment	SU, CC
Comparison/Benchmark	Initial comparison will be made to segment averages and trend. Long-term goal is to identify a national benchmark.
Data Source	HEIRS
Timeline	2019
Recommendations	DHE should enhance course data collection to more comprehensively identify courses satisfying initial math and English requirements.

Metric	First-Year Retention
Definition	Percent of first-time, full-time, degree-seeking students returning the year after initial enrollment.
Purpose	To assess institutional performance with regard to timely student progression toward a degree or certificate.
Segment	SU, CC
Comparison/Benchmark	Comparison to similar institutions
Data Source	HEIRS , IPEDS
Timeline	2019
Recommendations	

Metric	State University Student Engagement
Definition	A composite measure of student engagement based on scores on items from the National Survey of Student Engagement that are associated with high-impact learning practices.
Purpose	To assess whether four-year institutions are supporting participation in high impact practices.
Segment	SU
Comparison/Benchmark	Comparison to similar institutions
Data Source	NSSE
Timeline	2020-2021
Recommendations	

Metric	State University First-Time Student Graduation Rates
Definition	Percent of first-time, full-time, degree-seeking students graduating within four years of entry and within six years of entry.
Purpose	To assess whether institutions are promoting graduation of first-time, full-time students.
Segment	SU
Comparison/Benchmark	Comparison to similar institutions
Data Source	IPEDS
Timeline	2019
Recommendations	

Metric	State University Transfer Student Graduation Rates
Definition	Percent of new transfer, degree-seeking students graduating within four years disaggregated by number of transferable credits.
Purpose	To assess whether institutions are promoting on-time graduation of students who enter as transfers.
Segment	SU
Comparison/Benchmark	Initial comparisons will be made to segmental averages and trend overtime. Long-term goal is to establish a benchmark for good performance.

Data Source	HEIRS
Timeline	2019
Recommendations	

Metric	**Comprehensive Success of First-time and Transfer Students (IPEDS Expanded Outcomes)**
Definition	Percent of first-time and transfer students (full- and part-time) who graduate or transfer within eight years of entry.
Purpose	To assess institutional performance with regard to timely student progression toward a degree or certificate.
Segment	SU, CC
Comparison/Benchmark	Comparison to similar institutions
Data Source	IPEDS
Timeline	2019
Recommendations	DHE should monitor the reporting of this relatively new IPEDS indicator for consistent and comprehensive reporting.

Metric	**Community College Six Year Comprehensive Student Success Rate (VFA)**
Definition	Percent of new students (including transfers and first-time students) who graduate, transfer, attain 30 credits or remain enrolled six years after initial entry.
Purpose	To assess whether institutions are promoting attainment of the success outcomes associated with the complex mission of community colleges.
Segment	CC
Comparison/Benchmark	Initial comparisons will be made to segmental averages and trend overtime. Long-term goal is to establish a benchmark for good performance.
Data Source	HEIRS, Voluntary Framework of Accountability (VFA)
Timeline	2019 initial, 2020 enhanced
Recommendations	DHE should work with the Community Colleges to ensure comprehensive participation in VFA reporting and to further refine the HEIRS based calculation of the VFA success rate.

Workforce Alignment and Outcomes

Metric	**Degree Production in Fields Associated with High Demand Occupations**
Definition	Certificate and degree production in fields associated with high demand and projected growth.
Purpose	To assess whether institutions are promoting completion of degree and certificates aligned with occupations that will be of employment benefit to students and also meet the needs of the Commonwealth's economy.

Segment	SU, CC
Comparison/Benchmark	Trend in Count and Share
Data Source	HEIRS, Burning Glass, EOLWD Projections and Vacancies
Timeline	2019
Recommendations	DHE should explore regional identification of high-demand occupations.

Metric	**Comparison of Pre and Post Enrollment Earnings**
Definition	Annual earnings prior to enrollment compared to annual earnings post-graduation or at last known date of enrollment for students entering as non-traditional students.
Purpose	To monitor the wage record gains attributable to postsecondary enrollment and award completion.
Segment	SU, CC
Comparison/Benchmark	Trend
Data Source	HEIRS, DUA Wage Records
Timeline	2020
Recommendations	

Metric	**Earnings of Students Enrolling in Postsecondary Education Directly After High School Graduation**
Definition	Annual earnings one and five years after completion or last known date of enrollment for students entering postsecondary education compared to earnings of HS graduates without postsecondary education.
Purpose	To monitor the wage record gains attributable to postsecondary enrollment and award completion.
Segment	SU, CC
Comparison/Benchmark	Trend
Data Source	HEIRS, DESE, DUA Wage Records
Timeline	2020
Recommendations	

Metric	**Enrollment in High-Value, Non-Credit Workforce Development**
Definition	Enrollment in non-credit courses associated with positive employment and earning outcomes.
Purpose	To monitor the wage record gains attributable to postsecondary enrollment and award completion.
Segment	CC
Comparison/Benchmark	Trend
Data Source	HEIRS, DESE, DUA Wage Records
Timeline	2021

Recommendations	DHE should improve non-credit activity identification in HEIRS and analyze wage record and employment data to identify non-credit courses and programs associated with positive outcomes.

Fiscal Stewardship

Metric	Modified Composite Financial Index (CFI)
Definition	CFI is an index of four financial ratios: primary reserve, viability, return on net assets, and net operating revenues. The index will be adjusted for recent changes in GASB reporting standards to more accurately reflect the balance sheets of the institutions.
Purpose	To assess the financial health of the institutions.
Segment	SU, CC
Comparison/Benchmark	An established benchmark for good performance.
Data Source	HEIRS Fiscal
Timeline	2019-2020
Recommendations	

Metric	Expenditures Devoted to Student Instruction and Support
Definition	Expenditures committed to instruction, academic support and student services relative to total expenditures.
Purpose	To assess whether institutions are allocating sufficient funds to instruction and student support.
Segment	SU, CC
Comparison/Benchmark	Comparison to similar institutions
Data Source	HEIRS Fiscal, IPEDS
Timeline	2019
Recommendations	DHE should monitor the reporting of the IPEDS expenditure fields for consistent and comprehensive reporting by peer institutions

Metric	Cost of Degree Production
Definition	Total expenditures per degree produced.
Purpose	To monitor whether institutions are expending reasonable resources per degree produced.
Segment	SU, CC
Comparison/Benchmark	An established benchmark for good performance.
Data Source	HEIRS Fiscal, IPEDS
Timeline	2020
Recommendations	

Metric	Deferred Maintenance/Facilities Maintenance
Definition	Percent of state appropriation and retained tuition revenue allocated to capital adaptation and renewal.

Purpose	To monitor whether institutions are allocating sufficient revenue to maintaining and restoring physical resources.
Segment	SU, CC
Comparison/Benchmark	Five percent of budget devoted to capital adaptation and renewal is the BHE authorized requirement.
Data Source	HEIRS Fiscal
Timeline	2019
Recommendations	DHE should continue to work with campus CFOs on refining the definitions of capital adaptation and renewal

Metric	Instructor and Classroom Utilization
Definition	Instruction and classroom resources allocated per student.
Purpose	To monitor whether institutions are allocating instructor and classroom resources in an efficient manner.
Segment	SU, CC
Comparison/Benchmark	An established benchmark for good performance.
Data Source	HEIRS Fiscal
Timeline	2020
Recommendations	