

Performance Audit Report

---

**Managing for Results  
Performance Measures**

**Education  
Maryland Higher Education Commission**

April 2011

---



**OFFICE OF LEGISLATIVE AUDITS**  
**DEPARTMENT OF LEGISLATIVE SERVICES**  
**MARYLAND GENERAL ASSEMBLY**

- 
- This report and any related follow-up correspondence are available to the public through the Office of Legislative Audits at 301 West Preston Street, Room 1202, Baltimore, Maryland 21201. The Office may be contacted by telephone at 410-946-5900, 301-970-5900, or 1-877-486-9964.
  - Electronic copies of our audit reports can be viewed or downloaded from our website at <http://www.ola.state.md.us>.
  - Alternate formats may be requested through the Maryland Relay Service at 1-800-735-2258.
  - The Department of Legislative Services – Office of the Executive Director, 90 State Circle, Annapolis, Maryland 21401 can also assist you in obtaining copies of our reports and related correspondence. The Department may be contacted by telephone at 410- 946-5400 or 301-970-5400.
-



**DEPARTMENT OF LEGISLATIVE SERVICES**  
**OFFICE OF LEGISLATIVE AUDITS**  
**MARYLAND GENERAL ASSEMBLY**

**Karl S. Aro**  
Executive Director

April 21, 2011

**Bruce A. Myers, CPA**  
Legislative Auditor

Delegate Guy J. Guzzone, Co-Chair, Joint Audit Committee  
Senator James C. Rosapepe, Co-Chair, Joint Audit Committee  
Members of Joint Audit Committee  
Annapolis, Maryland

Ladies and Gentlemen:

We conducted a performance audit to determine the accuracy of selected Managing for Results (MFR) performance measure data reported in the Maryland fiscal year 2011 operating budget request. We also determined whether adequate control systems were in place for collecting, summarizing, and reporting the performance measure data.

As requested by the chairmen of the legislative budget committees, we are systematically auditing the results of the 62 MFR measures contained in the 2005 *Managing for Results - State Comprehensive Plan*, which was produced by the Department of Budget and Management. This audit is the sixth to be conducted on the 62 measures and focuses on data reported for the 6 measures from the Higher Education portion of the *Plan*.<sup>1</sup> The Maryland Higher Education Commission (MHEC) was responsible for reporting these results. A list of the 62 MFR measures is contained in Exhibit 3 of this report.

As a result of our audit, we have classified each of the six measures as Certified, Certified with Qualification, Inaccurate, or Factors Prevented Certification, as noted in the chart on the following page. These designations are further described in Exhibit 2.

---

<sup>1</sup> The *Plan* includes six other education measures, which pertain to secondary education, that are the responsibility of the Maryland State Department of Education. Those six measures were evaluated in our October 2, 2009 audit report.

Level of Certification				Performance Measures Audited (See Exhibit 1)
Certified	Certified with Qualification	Inaccurate	Factors Prevented Certification	
-	1	-	5	6

The primary factors contributing to our inability to certify five measures were that MHEC did not verify degree information reported by colleges and universities and MHEC did not obtain detailed student information from private institutions.

An executive summary of our findings can be found on page 4, and our audit scope, objectives, and methodology are explained on page 11. The response from MHEC to this audit is included as an appendix to this report. We wish to acknowledge the cooperation extended to us by MHEC during the audit.

Respectfully submitted,

Bruce A. Myers, CPA  
Legislative Auditor

## **Table of Contents**

<b>Executive Summary</b>	4
Background Information	4
Conclusions	4
Recommendations	5
<b>Findings</b>	6
Certification Results	6
<b>Scope, Objectives, and Methodology</b>	11
<b>Exhibit 1 – Definitions of the MHEC Performance Measures Audited</b>	13
<b>Exhibit 2 – Categories of Performance Certification</b>	16
<b>Exhibit 3 – Managing For Results – 2005 State Comprehensive Plan – List of 62 Performance Measures in Plan</b>	17
<b>Exhibit 4 – Managing For Results Audit Reports Previously Issued by the Office of Legislative Audits Pertaining to the 62 Measures</b>	21
<b>Agency Response</b>	Appendix

# **Executive Summary**

## **Background Information**

In July 1997, the Governor implemented the Managing for Results (MFR) initiative, which is a strategic planning process used by department leaders and others to establish direction and priorities for State programs to achieve meaningful results. MFR requires State agencies to submit missions, goals, objectives, and performance measures for each program as part of the annual budget request. This information may then be considered in determining Statewide spending priorities and the allocation of resources in agency budgets. Effective July 1, 2004, the MFR process was established in State law, with the Department of Budget and Management as the lead agency for developing a State comprehensive plan for MFR. The resultant 2005 *Managing for Results - State Comprehensive Plan* categorizes MFR goals into several functional areas, referred to as pillars, which contain a total of 62 measures. Also, State law requires agencies to maintain documentation of the internal controls established to evaluate their performance measures.

As requested by the chairmen of the legislative budget committees, we are systematically auditing these measures. This audit is the sixth to be conducted pursuant to this request and focuses on the data reported by the Maryland Higher Education Commission (MHEC) in the Maryland fiscal year 2011 operating budget request (Exhibit 1). The categories of performance certification are explained in Exhibit 2 of this report, and a list of the 62 MFR measures is contained in Exhibit 3. Exhibit 4 references the first five MFR audit reports issued by our Office, which collectively covered 46 measures in the Public Safety and Safer Neighborhoods, Education, Fiscal Responsibility, Health, and Commerce portions of the *Plan*.

## **Conclusions**

We concluded that, for the six measures tested, one was Certified with Qualification, and five were designated as Factors Prevented Certification. For the measures that were designated as Factors Prevented Certification, our inability to certify the measures was primarily due to MHEC's failure to verify degree information reported by colleges and universities and its failure to obtain and verify certain data reported by the State's independent colleges and universities. These results are further described in the Findings section of this report.

## **Recommendations**

The following detailed recommendations are among those we made to MHEC to help strengthen the quality control processes and improve reporting for the measures we audited:

- Establish procedures to obtain all relevant supporting data from third parties and verify the data are reasonably accurate. Such procedures should include data received from public college and universities, the State's independent schools, and community colleges.
- Establish written criteria to support the methods used to perform all calculations.
- Ensure that the reported performance measure is consistent with its written definition and that the period reported is clearly disclosed in the operating budget.

## Findings

### Certification Results

Agency, Program Name and Budget Reference <sup>1</sup>	Performance Measure (See Exhibit 1 for Definitions)	Results Reported <sup>2</sup>	Level of Certification (See Exhibit 2)	Comments / Causes
<b>MHEC General Administration</b> Book 3, Pages 264, 265	Six-year graduation rate of first-time, full-time students at Maryland public four-year colleges and universities	Students Graduating by Summer 2008  64.3%	Certified with Qualification	MHEC had a process to verify certain data used to calculate the measure. Specifically, MHEC had an independent party verify the accuracy of enrollment data reported by the State's public four-year colleges and universities. However, it did not have a process in place to determine the accuracy of degree data reported by the colleges and universities. Consequently, data for certain students could be erroneously reported. Also, it was not disclosed in the operating budget that the results reported as actual 2009 data reflected students graduating by the summer of 2008, based on the most complete data available. Nevertheless, we were able to determine that the calculated result was reasonably accurate based on our tests of data at the colleges and universities.
	Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities	Academic Year 2008  31.5%	Factors Prevented Certification	MHEC did not receive detailed student data from all of the independent colleges and universities; consequently, as noted above, MHEC did not determine the accuracy of degree data reported by the institutions included in this measure. Instead, only summary student data were used to calculate the measure. These independent institutions accounted for approximately 1,300 of the 8,200 bachelor's degrees awarded to racial and ethnic minorities in academic year 2008 according to the degree data reported by the four-year colleges and universities. We were advised by persons representing the independent colleges and universities that they would be willing to work with MHEC to develop a process to verify reported data.  It was also not disclosed in the operating budget that the results reported as actual 2009 data represented data from academic year 2008.

<sup>1</sup> Reference cited is the Maryland fiscal year 2011 operating budget request.

<sup>2</sup> Results are reported as Actual 2009 data in the Maryland fiscal year 2011 operating budget.



## Certification Results

Agency, Program Name and Budget Reference <sup>1</sup>	Performance Measure (See Exhibit 1 for Definitions)	Results Reported <sup>2</sup>	Level of Certification (See Exhibit 2)	Comments / Causes
<b>MHEC General Administration</b> Book 3, Page 266	Number of community college students who transfer to a Maryland public four-year campus	Fall 2007 Semester  8,690	Factors Prevented Certification	<p>This measure is based on data drawn from MHEC's Enrollment Information System. MHEC compared enrollment at Maryland community colleges from the Fall 2006 semester to enrollment at Maryland public four-year colleges and universities in the Fall 2007 semester. Although MHEC had instituted a process to independently verify enrollment data for the public four-year colleges and universities, no similar process had been adopted for community colleges. In addition, our review of the related enrollment data disclosed that because many students attended more than one institution in the same semester, MHEC randomly eliminated all but one of the schools attended each semester before calculating the measure. For example, one student we reviewed was enrolled in both a community college and a university in 2006 and was only enrolled in the university in Fall 2007. Because MHEC randomly eliminated the student's year 2006 enrollment in the community college, the student was not counted as a transfer student for purposes of this measure. As a result, 3,380 records pertaining to 3,332 students who were enrolled in the Fall 2007 semester were eliminated from the calculation. MHEC had no documented process to define which school should be eliminated and no analysis to show that randomly eliminating one of the schools produced the intended result.</p> <p>It was also not disclosed in the operating budget that the results reported as actual 2009 data represented data from the Fall 2007 semester.</p>

<sup>1</sup> Reference cited is the Maryland fiscal year 2011 operating budget request.

<sup>2</sup> Results are reported as Actual 2009 data in the Maryland fiscal year 2011 operating budget.

## Certification Results

Agency, Program Name and Budget Reference <sup>1</sup>	Performance Measure (See Exhibit 1 for Definitions)	Results Reported <sup>2</sup>	Level of Certification (See Exhibit 2)	Comments / Causes
<b>MHEC General Administration</b> Book 3, Page 266	Number of graduates in teaching from Maryland's public and private higher educational institutions	Academic Year 2007  2,492	Factors Prevented Certification	<p>The measure is based on a survey of State colleges and universities distributed and collected by MSDE. However, neither MSDE nor MHEC determined the accuracy of degree data reported. In addition, as previously mentioned, MHEC did not receive detailed student data from all of the independent colleges and universities. Although MSDE compared the reported results to information received from other sources, these sources were not sufficient as they were based on data that may or may not correspond to the number of candidates, such as data from local school systems of newly hired teachers. According to the above survey, these independent institutions accounted for 36 percent of all teacher candidates prepared in academic year 2007.</p> <p>It was also not disclosed in the operating budget that the results reported as actual 2009 data represented data from academic year 2007.</p>

<sup>1</sup> Reference cited is the Maryland fiscal year 2011 operating budget request.

<sup>2</sup> Results are reported as Actual 2009 data in the Maryland fiscal year 2011 operating budget.

## Certification Results

Agency, Program Name and Budget Reference <sup>1</sup>	Performance Measure (See Exhibit 1 for Definitions)	Results Reported <sup>2</sup>	Level of Certification (See Exhibit 2)	Comments / Causes
<b>MHEC General Administration</b> Book 3, Page 266	Percentage of teacher candidates from Maryland public and private higher educational institutions who pass Praxis II	Test Results for Academic Year 2007  97%	Factors Prevented Certification	<p>The reported percentage is based on a report prepared by the Maryland State Department of Education (MSDE) using summary test result data received from the third-party vendor who conducts the testing. Neither MSDE nor MHEC perform any verification of the accuracy of the reported information. Instead, MSDE only periodically receives detail test result data from the vendor in both electronic and paper form. We were unable to use these data to establish the validity of the measure results, primarily because MHEC did not ensure that the detail data reported by the third-party vendor were complete and usable. For example, we noted the following conditions:</p> <ul style="list-style-type: none"> <li>• The vendor did not provide MSDE with a consolidated data file to support the reported results.</li> <li>• MSDE did not have, and the vendor did not provide, a master schedule of results to ensure all testing data were provided. For example, during academic year 2007, MSDE received data weekly for certain months but only received one or no reports for other months. Further, several of the supporting electronic data files we were provided were corrupted and not usable.</li> <li>• Electronic results were not formatted in a manner that would allow for verification. For example, the reports for each individual included many test results, including those for Praxis I which is a separate series of tests administered by the same vendor. Based on our review of the file layout, elimination of Praxis I results could accidentally result in the elimination of Praxis II results as well.</li> </ul> <p>It was also not disclosed in the operating budget that the results reported as actual 2009 data represented data from academic year 2007.</p>

<sup>1</sup> Reference cited is the Maryland fiscal year 2011 operating budget request.

<sup>2</sup> Results are reported as Actual 2009 data in the Maryland fiscal year 2011 operating budget.

## Certification Results

Agency, Program Name and Budget Reference <sup>1</sup>	Performance Measure (See Exhibit 1 for Definitions)	Results Reported <sup>2</sup>	Level of Certification (See Exhibit 2)	Comments / Causes
<b>MHEC General Administration</b> Book 3, Page 266	Number of graduates in nursing from Maryland public and private higher educational institutions	Academic Year 2008  2,993	Factors Prevented Certification	<p>MHEC's reported result was based on the number of degrees awarded instead of the number of actual graduates. Our review of the related degree files disclosed that 82 students received dual nursing degrees in academic year 2008 and were included twice in the reported results. Also, as previously mentioned, MHEC did not determine the accuracy of degree data reported by the public colleges and universities as reflected in the Degree Information System. In addition, MHEC did not receive detailed student data from one independent university that, according to the degree data reported by the colleges and universities, accounted for 12 percent of the nursing degrees awarded in 2008; the school only provided summary data which were used to calculate the measure.</p> <p>It was not disclosed in the operating budget that the results reported as actual 2009 data represented data from academic year 2008.</p>

<sup>1</sup> Reference cited is the Maryland fiscal year 2011 operating budget request.

<sup>2</sup> Results are reported as Actual 2009 data in the Maryland fiscal year 2011 operating budget.

# Scope, Objectives, and Methodology

## Scope

Under the authority of the State Government Article, Section 2-1221 of the Annotated Code of Maryland, we conducted an audit of selected performance measure results reported in the Maryland fiscal year 2011 operating budget request. The audit was performed in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

As requested by the chairmen of the legislative budget committees, we are systematically auditing the performance measures from the 2005 *Managing for Results - State Comprehensive Plan* produced by the Department of Budget and Management (DBM). This *Plan* included 62 performance measures categorized into several functional areas referred to as pillars.<sup>2</sup> This audit is the sixth to be conducted pursuant to this request and focuses on 6 performance measures from the Higher Education area as reported by DBM in the *Plan* and by the Maryland Higher Education Commission (MHEC) in the Maryland fiscal year 2011 operating budget request.

## Objectives

The objectives of our audit were (1) to determine whether the most recent actual measurement results for the selected performance measures were accurately reported in MHEC's fiscal year 2011 operating budget request, and (2) to determine whether adequate control systems existed over the collection and reporting of the data related to the measurement results. Our performance audit did not include an assessment of whether the performance measures reviewed were consistent with the goals and objectives of the related programs or were meaningful indicators of program performance.

## Methodology

To accomplish our objectives, we interviewed MHEC and other personnel, as appropriate, responsible for collecting and reporting the measure data; reviewed performance measure calculations for accuracy; reviewed the data collected and reported for the performance measures; and determined whether the calculations

---

<sup>2</sup> DBM reissued the *State Comprehensive Plan* in November 2009 with 98 performance measures categorized into six functional areas. The measures under this new *Plan* will be reported on by State agencies in the fiscal year 2012 budget cycle or later.

and data were consistent with the definitions of the performance measures as noted in Exhibit 1. We used sampling techniques or other methods as deemed appropriate to test the related source documents. We also analyzed MHEC's performance measurement data collection and reporting activities to evaluate whether proper controls existed to ensure data integrity.

We developed a system to categorize the results of our audit of performance measures. The four categories represent varying levels of certification of the accuracy of the performance reported. The categories of performance certification are defined in Exhibit 2. If during the course of our audit of a measure we found circumstances that would require us to conclude that the measure was inaccurate or that factors prevented certification, we did not perform additional audit work that may have disclosed other factors that might have adversely impacted the reported results.

Our fieldwork was conducted on site at MHEC during the period from December 2009 to May 2010. The response from MHEC to our findings and recommendations appears as an appendix in this report. As prescribed in State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise MHEC regarding the results of our review of its response.

**Exhibit 1**  
**Definitions of the MHEC**  
**Performance Measures Audited**

Page 1 of 3

Performance Measure	Definition <sup>3</sup>
<b>Six-year graduation rate of first-time, full-time students at Maryland public four-year colleges and universities</b>	<p>This measure presents the percentage of first-time, full-time students who enrolled at a Maryland public four-year institution and who earned a bachelor's degree from any Maryland public four-year institution within six years of enrollment.</p> <p>This rate is based on information drawn from the Maryland Higher Education Commission's (MHEC) retention and graduation files. These files are built by matching student records in the Enrollment and Degree Information Systems. The files are updated each year with student enrollment and completion data. MHEC tracks students' enrollment each fall for six years after entry and their degree completion for seven years after entry.</p>
<b>Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities</b>	<p>This measure presents the number of bachelor's degrees awarded to racial/ethnic minorities during the academic year at Maryland public four-year institutions and state-aided independent colleges and universities divided by the total number of bachelor's degrees awarded during the same period at these institutions.</p> <p>Racial/ethnic minorities for this measure include African-American, Asian, Hispanic, and Native American students. Students who identify as foreign and "other race" are not included in this measure. The MFR submission is based on data drawn from MHEC's Degree Information System.</p>

---

<sup>3</sup> The definitions are substantially derived from those provided to the Department of Budget and Management (DBM) in annual State agencies' Managing for Results budget submissions and from DBM's 2010 *Managing for Results Annual Performance Report*. Additional information, such as data sources, was included in certain definitions in this exhibit for informational purposes. Also, certain definitions were modified to enhance readability.

**Exhibit 1**  
**Definitions of the MHEC**  
**Performance Measures Audited**

Page 2 of 3

Performance Measure	Definition
<b>Number of community college students who transfer to a Maryland public four-year campus</b>	<p>This measure, which is based on data drawn from MHEC's Enrollment Information System, presents the number of all full-time and part-time students who were primarily enrolled at a Maryland community college in the fall semester and who transferred to a Maryland public four-year college or university in the next fall semester.</p>
<b>Number of graduates in teaching from Maryland's public and private higher educational institutions</b>	<p>This measure presents the number of graduates in teaching from Maryland's public and private higher educational institutions each academic year.</p> <p>MHEC reports summary information collected by MSDE from Maryland public and private colleges and universities based on an annual <i>Teacher Staffing Report</i> that includes the number of teacher candidates by content area and institution. MSDE requests that each institution of higher education offering teacher preparation programs (23 institutions) submit the number of graduates reported by content area, gender, and ethnicity.</p>
<b>Percentage of teacher candidates from Maryland public and private higher educational institutions who pass Praxis II</b>	<p>This measure presents the percentage of Maryland teacher candidates from public and private higher education institutions who take the Praxis II tests, a certification requirement, each academic year and pass the tests during the same period.</p> <p>Once a year, the Maryland State Department of Education (MSDE) is required to report the number of candidates passing the Praxis to the federal government. MSDE contracts with the vendor who conducts the testing to search its database for all Maryland candidates, by graduating institution, who take the Praxis exams. The vendor reports to MSDE the number and passing percentage of candidates, by institution and by content area, and provides statewide data for the number and percentage of candidates passing the test for each content area. MHEC utilizes the report submitted by MSDE to the federal government for MFR reporting.</p>



**Exhibit 1**  
**Definitions of the MHEC**  
**Performance Measures Audited**

Page 3 of 3

Performance Measure	Definition
<b>Number of graduates in nursing from Maryland public and private higher educational institutions</b>	This measure, which is based on data drawn from the Degree Information System, presents the annual number of Maryland college and university graduates who receive degrees in registered nursing and licensed practical nursing.

## Exhibit 2

### Categories of Performance Certification

Category	Definition
<b>Certified</b>	Reported performance was reasonably accurate.
<b>Certified with Qualification</b>	Reported performance was reasonably accurate even though minor deficiencies were noted with the supporting documentation, controls were not sufficient, or the methodology used to calculate reported performance was not consistent with the measure definition.
<b>Inaccurate</b>	Reported performance differed significantly from actual performance; the calculation process was wrong, such as excluding data relevant to the calculation; or, as reported, the measure was misleading, such as failing to disclose the measure as a rate when applicable.
<b>Factors Prevented Certification</b>	Reported performance could not be verified, as documentation was unavailable, controls were not adequate to ensure the accuracy of the results, or results were not presented in a manner consistent with the performance measure description.

**Exhibit 3**  
**Managing for Results – 2005 State Comprehensive Plan**  
**List of 62 Performance Measures in Plan**

Page 1 of 4

<b>Performance Area</b>	
<b>Goal</b>	
<b>MFR Measure</b>	
<b>Public Safety and Safer Neighborhoods</b>	
Keeping Maryland communities safe – measured by	
1	Firearm homicide rate per 100,000 (calendar year)
2	Recidivism: Percent of offenders returned to Department of Public Safety and Correctional Services supervision for a new offense within one year of their release from the Division of Correction - all releases
3	Traffic fatality rate per 100 million miles traveled (calendar year)
Maintaining necessary security standards in correctional institutions – measured by	
4	Number of inmates who escape from all Division of Correction Facilities, Patuxent Institution, and Division of Pretrial Detention and Services facilities (in aggregate)
5	Total number of inmates who walk off from Division of Correction minimum security settings, prerelease or alternative confinement settings (in aggregate)
Providing effective rehabilitation and treatment services to offenders or substance abusers – measured by	
6	Percent of Proactive Community Supervision cases closed where the offender had satisfactorily completed substance abuse treatment programs
Preventing youth violence, alcohol and substance abuse – measured by	
7	Violent offense arrest rate for youths between 15 and 17 years of age (per 100,000 children per calendar year)
8	Recidivism: Percent of youth re-adjudicated or reconvicted within 1 year after release
9	Percent of 12th grade public school children who report using alcohol within the last 30 days
10	Percent of 10th grade public school children who report using heroin within the last 30 days
Protecting the well being of children – measured by	
11	Rate of injury-related deaths due to accidents to children and youth between 0 and 19 years of age (per 100,000 children per calendar year)
12	Percent of children with recurrence of maltreatment within six months of first occurrence
13	Statewide percent of current child support paid (Includes cases for persons who receive public assistance, and for other persons who apply for child support services from the Department of Human Resources)

**Exhibit 3**  
**Managing for Results – 2005 State Comprehensive Plan**  
**List of 62 Performance Measures in Plan**

Page 2 of 4

<b>Performance Area</b>	
<b>Goal</b>	
<b>MFR Measure</b>	
<b>Education</b>	
Children will enter school ready to learn – measured by	
1	Percent of students entering Kindergarten demonstrating Full Readiness on the Work Sampling System Kindergarten Assessment
Children will be successful in school – measured by	
2	Percent of students scoring proficient or better by grade and content area <ul style="list-style-type: none"> <li>• Reading – Grade 3 – Total all groups</li> <li>• Reading – Grade 8 – Total all groups</li> <li>• Reading – Grade 10 – Total all groups</li> <li>• Mathematics – Grade 3 – Total all groups</li> <li>• Mathematics – Grade 8 – Total all groups</li> <li>• Algebra – Total all groups</li> </ul>
Children will complete school – measured by	
3	High School Graduation Rate
4	Percent of children in grades 9 through 12 who drop out of school in an academic year
Schools will promote high levels of learning – measured by	
5	Percent of schools demonstrating Adequate Yearly Progress in reading – State totals
6	Percent of schools demonstrating Adequate Yearly Progress in mathematics – State totals
<b>Higher Education</b>	
Promoting access and academic success in postsecondary education – measured by	
1	Six-year graduation rate of first-time, full-time students at Maryland public four-year colleges and universities (all groups)
2	Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities
3	Number of community college students who transfer to a Maryland public four-year campus
Producing an educated and skilled workforce including addressing the State's critical workforce and healthcare needs – measured by	
4	Number of graduates in teaching from Maryland's public and private higher educational institutions
5	Percent of teacher candidates from Maryland public and private higher educational institutions who pass Praxis II
6	Number of graduates in nursing from Maryland public and private higher educational institutions

**Exhibit 3**  
**Managing for Results – 2005 State Comprehensive Plan**  
**List of 62 Performance Measures in Plan**

Page 3 of 4

<b>Performance Area</b>	
<b>Goal</b>	
<b>MFR Measure</b>	
<b>Health</b>	
Promoting health and well being: Babies Born healthy – measured by	
1	Infant mortality rate for all races (per 1,000 live births)
2	Rate of live births to adolescents between 15 and 19 years of age (per 1,000 women)
Promoting health and well being: Healthy children, adolescents, and adults – measured by	
3	Percent of Maryland children fully immunized (by 24 months)
4	Number of children under 6 years of age with elevated blood lead levels (>10ug/dl)
5	Cumulative percent change from the calendar year 2000 baseline for underage high school students smoking cigarettes
6	Overall cancer mortality rate per 100,000 persons (age adjusted to 2000 U.S. Standard Population)
7	Percent change in number of new HIV cases from calendar year 2000 baseline
8	Rate of primary/secondary syphilis incidence (cases per 100,000)
9	Number of reported cases of vaccine preventable communicable diseases including hepatitis A, measles, mumps, pertussis
Promoting health and well being: Services to the disability community – measured by	
10	Number of people with disabilities who achieved successful employment through assistance by the Department of Education's Disability Rehabilitation Services rehabilitation programs
11	Percent of Developmental Disabilities Administration Community Service respondents of the "Ask ME Survey" who expressed satisfaction with physical well-being, personal development, and self-determination (reported separately)
Promoting health and well being: Substance abuse treatment – measured by	
12	Percent of substance use decrease during substance abuse treatment
Promoting health and well being: Mental health services – measured by	
13	Percent of adults who report mental health services have allowed them to deal more effectively with daily problems
<b>Environment</b>	
Restoring the health of the Chesapeake Bay and its living resources – measured by	
1	Acres of submerged aquatic vegetation
2	Blue crab landings (3 year average)
3	Oyster landings (3 year average)
4	Estimated nitrogen load to the Chesapeake Bay from Maryland (in million pounds)
Improving and protecting water quality and ensuring safe drinking water – measured by	
5	Watersheds impaired by nutrients
6	Percent of Marylanders served by public water systems in significant compliance with all rules adopted as of 2002

**Exhibit 3**  
**Managing for Results – 2005 State Comprehensive Plan**  
**List of 62 Performance Measures in Plan**

Page 4 of 4

<b>Performance Area</b>	
<b>Goal</b>	
<b>MFR Measure</b>	
Ensuring clean air – measured by	
7	Three-year average of days the one-hour ozone standard was exceeded
Restoring contaminated industrial sites to productive use – measured by	
8	Number of acres of property in the Voluntary Clean-up Program completed and a No Further Requirements Determination or a Certificate of Completion issued
Reducing hazardous waste and hazardous materials in the environment – measured by	
9	Number of remedial actions at all State Superfund sites that are completed
<b>Commerce</b>	
Helping businesses to grow and create jobs – measured by	
1	Percent change in Maryland employment from the 2001 baseline (12 month average)
2	Rate that adult employment trainees enter employment
3	Maryland Port Administration total general cargo tonnage, (thousands)
4	Estimated direct expenditures from film, television, and other production activities in Maryland (Measure not audited - not included in the Comprehensive Plan reissued in November 2009)
5	Annual Baltimore Washington International Airport passenger growth rate
Improving the State's transportation infrastructure – measured by	
6	Percent of State system roadway mileage with acceptable ride quality
7	Percent of bridges on the State portion of the National Highway System that will allow all legally loaded vehicles to safely traverse
8	Total ridership for bus and rail transit (in millions)
9	System Preservation Funding Levels in the Consolidated Transportation Program (in millions) (Measure not audited - not included in the Comprehensive Plan reissued in November 2009)
Invigorating communities – measured by	
10	Home ownership
11	Annual percent change in Maryland per capita personal income
12	Total acres enrolled in agricultural preservation districts
Making the most of Maryland's history and culture – measured by	
13	Value of rehabilitation expenditures approved for the State Rehabilitation Tax Credit for restoration and preservation of historic properties
<b>Fiscal Responsibility</b>	
Effective resource management – measured by	
1	Number of fiscal years closed with a positive General Fund balance
2	Maintaining a triple A bond rating from all three nationally recognized bond rating agencies for each issuance of State General Obligation Bonds

**Exhibit 4**  
**Managing for Results Audit Reports**  
**Previously Issued by the Office of Legislative Audits**  
**Pertaining to the 62 Measures**

<b>Report</b>	<b>Report Date</b>	<b>Number of Measures Audited</b>
Public Safety and Safer Neighborhoods	March 19, 2009	13
Education	October 2, 2009	6
Fiscal Responsibility	March 31, 2010	2
Health	February 4, 2011	13
Commerce	April 18, 2011	11 <sup>4</sup>

---

<sup>4</sup> Two of the Commerce measures included in the 2005 *Managing for Results – State Comprehensive Plan* (as detailed in Exhibit 3) were not included in the *Plan* when it was reissued by DBM in November 2009. Furthermore, DBM had not reported on these two measures since March 2008 (reported fiscal year 2007 actual results). Consequently, these two measures were not included in this audit.

## APPENDIX



Martin O'Malley  
Governor

Anthony G. Brown  
Lt. Governor

Anwer Hasan  
Chairperson

Elisabeth A. Sachs  
Interim Secretary

April 19, 2011

Bruce A. Myers, CPA, Legislative Auditor  
Department of Legislative Services  
Office of Legislative Audits  
Maryland General Assembly  
301 West Preston Street  
Baltimore, MD 21201

Dear Mr. Myers:

Thank you for the audit report of the Maryland Higher Education Commission's FY 2011 Managing for Results submission. We have reviewed the report and concur with its findings and recommendations.

Enclosed are our responses to the three recommendations in the final report. MHEC staff are prepared to implement the changes necessary to address the issues presented in the findings and recommendations. Please let me know if you any questions or concerns regarding our response.

Sincerely,

Elisabeth A. Sachs  
Interim Secretary of Higher Education

Enclosure



**Managing for Results – Fiscal Year 2011  
Responses to Performance Measures Audit  
Maryland Higher Education Commission (MHEC)**

**Audit Recommendation:**

**Establish procedures to obtain all relevant supporting data from third parties and verify the data are reasonably accurate. Such procedures should include data received from public colleges and universities, the State's independent schools, and community colleges.**

*Response:*

MHEC concurs with this recommendation. MHEC recognizes the need for expanded auditing of various types of data submitted by institutions. The Commission will undertake a study to develop a plan for establishing a more extensive auditing process. In order to accomplish this the Commission will address five major points: applicability of using institution based independent audits; expansion of the data being audited to include community college enrollment information; expansion of auditing student degree records submitted to the Commission; determination of the how these auditing needs can best be implemented; and an examination of auditing of data submitted to MHEC by non-profit institutions under the Maryland Independent Colleges and University Association (MICUA). It is expected that this will develop into a scope of work requiring the procurement of outside independent auditors to perform these functions. This would require additional funding for the Commission to obtain an independent third party auditor for this process.

**Audit Recommendation:**

**Establish written criteria to support the methods used to perform all calculations.**

*Response:*

MHEC concurs with this recommendation. Staff will develop criteria for all research indicators and will document the methodology used to perform calculations.

**Audit Recommendation:**

**Ensure that the reported performance measure is consistent with its written definition and that the period reported is clearly disclosed in the operating budget.**

*Response:*

MHEC concurs with this recommendation. There is often a difference of one to two years between the current fiscal year, and the most recently available postsecondary data. For this reason, the MFR data that are reported for a given measure may not always correspond to the current fiscal year. In the future, MHEC will carefully note instances where the reported data are not representative of the current and/or request fiscal year.

AUDIT TEAM

**Edward L. Shulder, CPA**  
Audit Manager

**David S. Propper**  
Senior Auditor

**Catherine M. Clarke, CFE**  
**Carey L. Harper**  
Staff Auditors