March 30, 2012

The Honorable Edward J. Kasemeyer
Chairman, Senate Budget & Taxation Committee
3 W Miller Senate Building
Annapolis MD 21401

The Honorable Norman H. Conway
Chairman, House Appropriations Committee
121 House Office Building
Annapolis MD 21401

Dear Chairman Kasemeyer and Chairman Conway:

Section 3-1002(e) of the State Finance and Procurement Article requires the Department of Budget and Management to report annually to the Budget and Taxation Committee and the Appropriations Committee on the contents of the Managing for Results State Comprehensive Plan and each agencies progress toward the goals outlined in the Plan. The report is attached.

If you have any questions or comments regarding the contents of this report, please do not hesitate to contact me.

Sincerely,

T. Eloise Foster
Secretary

Enclosure

MSAR 6094
MANAGING FOR RESULTS

ANNUAL PERFORMANCE REPORT

Prepared for
THE SENATE BUDGET AND TAXATION COMMITTEE
And
THE HOUSE APPROPRIATIONS COMMITTEE

In Accordance With
State Finance and Procurement Article
Section 3-1002

DEPARTMENT OF BUDGET AND MANAGEMENT
T. ELOISE FOSTER, SECRETARY

MARCH 2012
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Summary of Performance</td>
<td>2</td>
</tr>
<tr>
<td>Improving Education</td>
<td>3</td>
</tr>
<tr>
<td>Economic Growth</td>
<td>25</td>
</tr>
<tr>
<td>Maryland: Smart, Green, and Growing</td>
<td>52</td>
</tr>
<tr>
<td>A Safety Net for Maryland’s Families</td>
<td>76</td>
</tr>
<tr>
<td>A Safer, More Secure Maryland</td>
<td>112</td>
</tr>
<tr>
<td>Efficient and Effective Government</td>
<td>129</td>
</tr>
</tbody>
</table>
INTRODUCTION

The State Finance & Procurement Article, §3-1002 (E) requires the Department of Budget and Management (DBM) to provide an annual report to the Senate Budget and Taxation Committee and the House Appropriations Committee discussing the State’s progress toward achieving the goals outlined in the Managing for Results (MFR) State Comprehensive Plan (the State Plan). The State Plan was revised in November 2009 to more fully align with the priorities of the O’Malley-Brown Administration. The revised plan is available on the DBM Web site at: http://dbm.maryland.gov/agencies/Documents/MFR_documents/MFRStateComprehensivePlan.pdf.

Data concerning each of the performance measures included in the State Plan are presented within the following priority areas around which the Plan is structured:

- Improving Education
- Economic Growth
- Maryland: Smart, Green, and Growing
- A Safety Net for Maryland’s Families
- A Safer, More Secure Maryland
- Efficient and Effective Government

Chart 1 below shows the distribution of the measures for each of these priorities.\(^1\)

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\(^1\) There are 97 measures in the State Plan. Although the following four measures have multiple data sets, each is counted as one measure for the purposes of determining the total number of measures in the State Plan: “percent of students scoring proficient or better by grade and content area” (6 data sets), “percent of schools demonstrating AYP” (2 data sets), “number of reported cases of vaccine preventable, communicable diseases” (4 data sets), and “percent of Developmental Disabilities Administration Community Service respondents of the Ask Me survey who expressed satisfaction with 3 domains” (3 data sets). Data sets are counted as individual measures when calculating overall performance and performance for each priority area, resulting in a total of 108.
SUMMARY OF PERFORMANCE

As shown in the following table, performance for each measure has been categorized as favorable, stable, or unfavorable based on the most recent five years that data are available, unless a different number of years of data is specified.²

Favorable Performance (Change >10%)
Favorable Performance (3% to 10% Change)
Stable Performance (0% - 2% Change)
Unfavorable Performance (3% to 10% Change)
Unfavorable Performance (Change > 10%)

Chart 2 summarizes overall performance for measures in the State Plan. The majority of measures are moving in a favorable direction (52.8%). Performance for nearly one quarter (24.1%) of measures is stable. When combined, slightly more than three quarters (76.9%) of measures are either moving in a favorable direction or are stable. The percent of measures moving in an unfavorable direction is slightly less (23.1%) than the percent with stable performance.

A summary of performance by priority area is shown in Chart 3. Green Maryland, Safer Maryland, and Education have the highest percentages of measures moving in a favorable direction. Each of those three has 55% (rounded) or more of the measures moving favorably, with Green Maryland at the top with 73.3%. Although Efficient Government has the largest percent of measures moving in an unfavorable direction, this performance area experienced the most improvement in performance over last year – a decline of 20 percentage points in the percent of measures moving in an unfavorable direction. Economic Growth and Education have the greatest percentage of measures with stable performance. A detailed presentation of performance for each priority area is included in the following pages. Unless otherwise indicated, data is by State fiscal year.

² Five years of comparable data are not available for all measures. For determining trends when the beginning value is zero, the difference between zero and the ending value is calculated rather than a percent change.
IMPROVING EDUCATION

ENSURING A SUCCESSFUL FUTURE FOR OUR CHILDREN AND OUR STATE BY PROVIDING QUALITY EDUCATION AND MAKING COLLEGE EDUCATION MORE AFFORDABLE FOR MARYLAND FAMILIES

GOAL: Quality education in Maryland will expand opportunities for all Marylanders to have access to quality jobs, succeed in the workforce, and create strong communities.

Maryland will focus on continuing to improve K-12 education, expanding higher educational opportunities for all, and creating an educated workforce which is key to building and maintaining a strong economy.
### EDUCATION

#### Status Indicators Percent

<table>
<thead>
<tr>
<th>Status Indicators</th>
<th>Number of Indicators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorable Performance (Change &gt;10%)</td>
<td>8</td>
<td>36.4%</td>
</tr>
<tr>
<td>Favorable Performance (3% to 10% Change)</td>
<td>4</td>
<td>18.2%</td>
</tr>
<tr>
<td>Stable Performance (0% - 2% Change)</td>
<td>7</td>
<td>31.8%</td>
</tr>
<tr>
<td>Unfavorable Performance (3% to 10% Change)</td>
<td>1</td>
<td>4.5%</td>
</tr>
<tr>
<td>Unfavorable Performance (Change &gt;10%)</td>
<td>2</td>
<td>9.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>22</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

#### Agency/Recent Data Source/4 Years

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Most Recent Data Available</th>
<th>4 Years Prior</th>
<th>4 Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSDE Percent of students entering Kindergarten demonstrating Full Readiness on the Work Sampling System Kindergarten Assessment (2007 - 2011)</td>
<td>81%</td>
<td>67%</td>
<td>20.9%</td>
</tr>
<tr>
<td>MSDE Percent of students scoring proficient or better in Reading – Grade 3 – Total all groups (2007 - 2011)</td>
<td>85.1%</td>
<td>80.5%</td>
<td>5.7%</td>
</tr>
<tr>
<td>MSDE Percent of students scoring proficient or better in Reading – Grade 8 – Total all groups (2007 - 2011)</td>
<td>82.7%</td>
<td>68.3%</td>
<td>21.1%</td>
</tr>
<tr>
<td>MSDE Percent of students scoring proficient or better in English (English 2 replaced reading-grade 10 beginning in 2006; the 2009 data begins a new trend and is not comparable to prior years. Therefore the variance is from 2009 to 2011.)</td>
<td>85.2%</td>
<td>86.6%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>MSDE Percent of students scoring proficient or better in Math – Grade 3 – Total all groups (2007 - 2011)</td>
<td>86.3%</td>
<td>78.6%</td>
<td>9.8%</td>
</tr>
<tr>
<td>MSDE Percent of students scoring proficient or better in Math – Grade 8 – Total all groups (2007 - 2011)</td>
<td>66.1%</td>
<td>56.7%</td>
<td>16.6%</td>
</tr>
<tr>
<td>MSDE Percent of students scoring proficient or better in Algebra (Replaced geometry beginning in 2006; the 2009 data begins a new trend and is not comparable to prior years. Therefor the variance is from 2009 to 2011).</td>
<td>87.9%</td>
<td>88.8%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>MSDE High School Graduation Rate (2007 - 2011)</td>
<td>87.00</td>
<td>85.24</td>
<td>2.1%</td>
</tr>
<tr>
<td>Agency/Data Source</td>
<td>Indicator</td>
<td>Most Recent Data Available</td>
<td>4 Years Prior</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>MSDE</td>
<td>Percent of children in grades 9 through 12 who drop out of school in an academic year (2007 - 2011)</td>
<td>3.20%</td>
<td>3.51%</td>
</tr>
<tr>
<td>MSDE</td>
<td>Percent of schools demonstrating Adequate Yearly Progress in reading – State totals (2007 - 2011)</td>
<td>61.5%</td>
<td>77.4%</td>
</tr>
<tr>
<td>MSDE</td>
<td>Percent of schools demonstrating Adequate Yearly Progress in Math – State totals (2007 - 2011)</td>
<td>59.9%</td>
<td>80.6%</td>
</tr>
<tr>
<td>MSDE</td>
<td>Percent of core academic subject classes staffed with highly qualified teachers (2007 - 2011)</td>
<td>92.4%</td>
<td>82.2%</td>
</tr>
<tr>
<td>MSDE</td>
<td>Percent of Maryland schools that are safe as defined by COMAR 13A.08.01.18B(5) (2007 - 2011)</td>
<td>99.7%</td>
<td>99.6%</td>
</tr>
<tr>
<td>MHEC</td>
<td>Six year graduation rate of first-time, full-time students at public four-year colleges and universities (all groups) (2007 - 2011)</td>
<td>64.1%</td>
<td>64.0%</td>
</tr>
<tr>
<td>MHEC</td>
<td>Percent of bachelor’s degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities (2007 - 2011)</td>
<td>31.8%</td>
<td>31.3%</td>
</tr>
<tr>
<td>MHEC</td>
<td>Number of community college students who transfer to a Maryland public four-year campus (2007 - 2011)</td>
<td>8,582</td>
<td>8,003</td>
</tr>
<tr>
<td>MHEC</td>
<td>Percent of Maryland median family income required to cover tuition and fees at Maryland public four-year institutions (2007 - 2011)</td>
<td>8.7%</td>
<td>10.7%</td>
</tr>
<tr>
<td>MHEC</td>
<td>Percent of Maryland median family income required to cover tuition and fees at Maryland community colleges (2007 - 2011)</td>
<td>4.0%</td>
<td>4.7%</td>
</tr>
<tr>
<td>MHEC</td>
<td>Number of graduates in science, technology, engineering, and math (STEM) from Maryland’s public and private higher educational institutions (2007 - 2011)</td>
<td>11,277</td>
<td>10,196</td>
</tr>
<tr>
<td>MHEC</td>
<td>Number of graduates in teaching from Maryland’s public and private higher educational institutions (2007 - 2011)</td>
<td>2,451</td>
<td>2,576</td>
</tr>
<tr>
<td>MHEC</td>
<td>Number of graduates in nursing from Maryland public and private higher educational institutions (2007 - 2011)</td>
<td>3,429</td>
<td>2,697</td>
</tr>
<tr>
<td>MHEC</td>
<td>Percent of teacher candidates from Maryland public and private higher educational institutions who pass Praxis II (2007 - 2011)</td>
<td>97.0%</td>
<td>96.0%</td>
</tr>
</tbody>
</table>
CHILDREN ENTERING SCHOOL READY TO LEARN

Indicator 1.1:  Percent of students entering kindergarten demonstrating Full Readiness on the Maryland Model for School Readiness (MMSR) Kindergarten Assessment

Target:  By the 2011-2012 academic year, 84% of children enter kindergarten demonstrating Full Readiness

How are we doing?  The Maryland Model for School Readiness (MMSR) Kindergarten Assessment is administered by local public schools, and data are collected by the Maryland State Department of Education. The MMSR Kindergarten Assessment uses a customized version of the Work Sampling System™ Kindergarten Assessment that evaluates what each child knows and is able to do in seven Domains of Learning. Full readiness is defined as consistently demonstrating skills, behaviors, and abilities that are needed to successfully meet kindergarten expectations in those seven developmental and curricular domains. A child’s greatest brain development (nearly 90%) takes place during the years from birth to age five. Therefore those years are the most crucial period of learning in a child’s life. Recent neurological research strongly supports the belief that early learning experience prior to formal education is an essential foundation for later school success. Research on how young children learn encourages the assumption that improvement in school readiness will positively impact school performance, as measured by the results of future assessments administered statewide to Maryland students. MMSR data now show a strong link between kindergarten readiness and grade 3 reading and math scores on the Maryland School Assessment. State strategies to improve school readiness are focused on the quality of teaching personnel, the quality of early care and education programs, and increased awareness and involvement of families in the early education of their children. Maryland, like a number of other states, will be implementing a Quality Rating and Improvement System (QRIS) on a pilot basis in various locations by the end of 2011. QRIS is a systematic approach to assess, improve, and communicate the level of quality in early and school-age care and education programs.

Students continue to show steady progress in demonstrating Full Readiness, with an annual increase in the percent of children entering kindergarten as fully ready since the baseline year of 2001. In 2011, 81% of kindergarten students in Maryland were evaluated by their teachers as “fully ready,” up 3.9% from 78% the previous year, and an increase of 20.9% since 2007. Within the group demonstrating Full Readiness in 2011, kindergarteners demonstrated the strongest readiness in Physical Development, the Arts, and Social and Personal Development, with the most improvement from 2010 in scientific thinking. Progress in kindergarten readiness has been made across subgroups and domains since 2002.

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1 Maryland’s Results for Child Well-Being 2009
2 The seven Domains of Learning are Language and Literacy, Mathematical Thinking, Scientific Thinking, Social Studies, the Arts, Physical Development, and Social and Personal Development, Getting Ready, The 2010-2011 Maryland School Readiness Report, Maryland State Department of Education
3 Getting Ready, The 2010-2011 Maryland School Readiness Report, Maryland State Department of Education
4 Maryland’s Results for Child Well-Being 2009
5 Getting Ready, The 2010-2011 Maryland School Readiness Report, Maryland State Department of Education
6 Children Entering School Ready to Learn, 2010-2011 Maryland Model for School Readiness, Maryland State Department of Education
7 Maryland’s Results for Child Well-Being 2010, Statewide Rollout of the Results for Child Well-Being 2010, Wednesday, November 9, 2011
8 FY 2013: Managing for Results Program Performance, Office of the State Superintendent, Maryland State Department of Education
KEY PERFORMANCE AREA 1
PROVIDING QUALITY K-12 EDUCATION AND HIGHER EDUCATIONAL OPPORTUNITIES FOR ALL MARYLAND RESIDENTS SO THAT THEY CAN CONTRIBUTE TO, SUCCEED, AND PROSPER IN THE WORKFORCE

Percent of Students Entering Kindergarten Demonstrating "Full Readiness"

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>67%</td>
<td>68%</td>
<td>73%</td>
<td>78%</td>
<td>81%</td>
<td></td>
</tr>
</tbody>
</table>
CHILDREN SUCCEEDING IN SCHOOL

Percent of students scoring proficient\(^9\) or better by grade and content area:

**Indicator 1.2:** Reading – Grade 3 – Total all groups
**Indicator 1.3:** Mathematics – Grade 3 – Total all groups
**Indicator 1.4:** Reading – Grade 8 – Total all groups
**Indicator 1.5:** Mathematics – Grade 8 – Total all groups
**Indicator 1.6:** English – Total all groups
**Indicator 1.7:** Algebra – Total all groups

**Target:** 100% of students will attain proficiency or better in reading/language arts and math by 2014\(^{10}\)

**How are we doing?** The Maryland School Assessment (MSA) was established in 2002 to meet the requirements of the 2001 Federal No Child Left Behind Act (NCLB). The MSA test produces a score that describes how well a student masters the reading and math content specified in the Maryland Content Standards.\(^11\) Each child receives a score in each content area that will categorize performance as basic, proficient, or advanced. Attaining proficiency in reading and math is a required Adequate Yearly Progress (AYP) measure. With the approaching 2014 requirement that 100% of students must attain proficiency or better in reading/language arts and math, an increasing number of states petitioned for relief from the escalating demands of the NCLB Act.\(^12\) “Instead of fostering progress and accelerating academic improvement, many NCLB requirements have unintentionally become barriers to State and local implementation of forward-looking reforms designed to raise academic achievement.”\(^13\) In September 2011 the U.S. Department of Education offered states the opportunity to request flexibility regarding specific requirements of NCLB in exchange for “rigorous and comprehensive State-developed plans designed to improve educational outcomes for all students, close achievement gaps, increase equity, and improve the quality of instruction.” This flexibility will build on efforts already under way. Maryland officials are reviewing the U.S. Department of Education’s guidance for waivers. States will have three opportunities to apply beginning in November 2011 and ending sometime after the conclusion of the 2011-2012 school year.\(^14\) As of November 2011, eleven states formally submitted requests for waivers.\(^15\)

Statewide trend data from 2007 to 2011 for grades 3 and 8 in reading and math show slow but steady improvement, with the most improvement in eighth grade reading. Over that timeframe, third grade math increased by 7.7 percentage points, eighth grade math increased by 9.4 percentage points, third grade reading increased by 4.6 points, and eighth grade reading increased 14.4 points. Factors contributing to student improvement on MSA’s since 2003 include increasing levels of pre-kindergarten available for four year olds from “economically disadvantaged backgrounds”, children entering school ready to learn, full-day kindergarten, all early learning programs coordinated by MSDE, teachers with more experience with the State curriculum, increased State education aid, and mandatory local school system master plans.\(^16\)

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\(^9\) Proficient is a realistic and rigorous level of achievement indicating proficiency in meeting the needs of students.
\(^10\) Federal No Child Left Behind Act goal, 2011 Maryland Report Card, Maryland State Department of Education
\(^11\) Science is also tested but proficiency by 2014 is not required in science under the NCLB Act.
\(^12\) Congress is working on a reform bill that would streamline the mandates of No Child Left Behind.
\(^13\) Letter to Chief State School Officers regarding NCLB flexibility, Arne Duncan, Education Secretary, U.S. Department of Education, September 23, 2011
\(^14\) Graduation Rate Rises to Record Level For Class of 2011, 2011 Maryland Report Card announcement, September 30, 2011, Maryland State Department of Education
\(^15\) 11 States Seek Flexibility from NCLB to Drive Education Reforms in First Round of Requests, 39 States, D.C., Puerto Rico to Seek Flexibility in the Coming Months, 2\(^{nd}\) round in February, Press Release, November 15, 2011, U.S. Department of Education
\(^16\) 2011 Maryland Report Card
The High School Assessments (HSA) are end-of-course tests that all students take after they complete the appropriate high school level course. Passing the HSA exams is one of several ways students may meet the Maryland High School Assessment requirement for graduation. The achievement of minimum academic standards not only affects graduation, but also affects adult achievement, future academic pursuits, and life skills. HSA Test Performance Status represents the performance results for all test takers in each of the required High School Assessment exams. Passing scores have been defined for each course. Beginning in 2006, English 2 replaced reading grade 10, and algebra grade 11 replaced geometry grade 10. Beginning in 2008, Maryland used a status model and reported results for high school students on the basis of the student’s highest score achieved for algebra and English regardless of the grade in which the student took the test. In 2008, scores were reported as of the end of grade 11. For 2009 and subsequent years, scores will be reported as of the end of grade 12. Now that HSAs are fully implemented, data for 2009 will be the baseline for future results. Therefore, data shown below for 2006 through 2008 are not comparable to data for 2009 and beyond.

The percent of students passing English increased significantly from 2007 to 2008 by 12.2 percentage points. There was a slight decline of 2.9 percentage points from 2009 to 2010, and the percent of students passing English remained near the 2010 level in 2011. The percent of students passing algebra increased dramatically by 22.4 percentage points between 2007 and 2008. Proficiency in algebra remained stable from 2009 through 2011.

The O’Malley-Brown administration has made quality public education a top priority. One strategy used by Maryland public schools to address school improvement is the Classroom-Focused Improvement Process (CFIP) which is a six-step process for increasing student achievement that is planned and carried out by teachers meeting in grade level, content, or vertical teams as a part of their regular lesson planning cycle. Maryland was one of the first states in the nation to adopt the Common Core State Standards in math and reading/English Language Arts. These standards will form the foundation for Maryland’s new state curriculum. The curriculum framework, the foundation of the new curriculum, was presented to the State Board in June 2011, and the completed curriculum will be implemented in Maryland schools in the 2013-2014 school year. These educational standards are a building block in providing students with high-quality education that will prepare them for success in college and work. These common core state standards will enable development and implementation of comprehensive assessment systems to measure student performance against the common core state standards that will replace existing testing systems.

Maryland’s commitment to preparing its graduates for college and the workforce is evidenced by a number of top national rankings including grades awarded by Education Week’s Quality Counts, the percent of high schools offering and students taking college level courses, and the high percentage (58%) of Maryland high schools included in the Washington Post’s Challenge Index list of top high schools. In June 2011, the Challenge Index list included 107 of 184 Maryland public high schools, all of which are included in the top 7% of schools in the nation.

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17 Maryland Results for Child Well Being 2009, 2010
18 2009 Maryland Report Card; Maryland Results for Child Well Being 2008
19 The status model reports only one score per student, and it is the student’s highest score regardless of how many times he/she was tested. This method more accurately answers the question of what percentage of high school seniors have passed each HSA. (source: Maryland State Department of Education)
20 Maryland State Department of Education fiscal year 2011 MFR
21 Classroom Focused Improvement Process found at: http://mdk12.org/process/cfip/index.html
22 The State Board of Education adopted the standards in June 2010
24 Additional information is provided on Quality Counts on pages 14-16.
25 News Release, Maryland Public High Schools Rank Number One for Third Straight Year, Washington Post Challenge Index Has Maryland With the Highest Percentage of Rigorous High Schools, Maryland State Department of Education, June 1, 2011
KEY PERFORMANCE AREA 1

PROVIDING QUALITY K-12 EDUCATION AND HIGHER EDUCATIONAL OPPORTUNITIES FOR ALL MARYLAND RESIDENTS SO THAT THEY CAN CONTRIBUTE TO, SUCCEED, AND PROSPER IN THE WORKFORCE

Percent of Students Scoring Proficient or Better in Reading and Passing English (All Students)

<table>
<thead>
<tr>
<th>Year</th>
<th>Reading Grade 3</th>
<th>Reading Grade 8</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>68.3%</td>
<td>70.9%</td>
<td>80.5%</td>
</tr>
<tr>
<td>2008</td>
<td>68.3%</td>
<td>72.8%</td>
<td>83.0%</td>
</tr>
<tr>
<td>2009</td>
<td>68.3%</td>
<td>83.1%</td>
<td>84.9%</td>
</tr>
<tr>
<td>2010</td>
<td>68.3%</td>
<td>80.2%</td>
<td>86.6%</td>
</tr>
<tr>
<td>2011</td>
<td>68.3%</td>
<td>84.4%</td>
<td>85.1%</td>
</tr>
</tbody>
</table>

Percent of Students Scoring Proficient or Better in Math and Passing Algebra (All Students)

<table>
<thead>
<tr>
<th>Year</th>
<th>Math Grade 3</th>
<th>Math Grade 8</th>
<th>Algebra</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>78.8%</td>
<td>63.5%</td>
<td>66.1%</td>
</tr>
<tr>
<td>2008</td>
<td>82.6%</td>
<td>61.9%</td>
<td>66.1%</td>
</tr>
<tr>
<td>2009</td>
<td>85.9%</td>
<td>65.8%</td>
<td>66.1%</td>
</tr>
<tr>
<td>2010</td>
<td>85.9%</td>
<td>85.9%</td>
<td>66.1%</td>
</tr>
<tr>
<td>2011</td>
<td>85.9%</td>
<td>85.9%</td>
<td>66.1%</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
PROVIDING QUALITY K-12 EDUCATION AND HIGHER EDUCATIONAL OPPORTUNITIES FOR ALL MARYLAND RESIDENTS SO THAT THEY CAN CONTRIBUTE TO, SUCCEED, AND PROSPER IN THE WORKFORCE

CHILDREN COMPLETING SCHOOL

Indicator 1.8: High School Graduation Rate

Target: By the 2013 – 2014 academic year, all schools will meet the performance standard of a 90% graduation rate.

How are we doing? The graduation rate is a required Adequate Yearly Progress (AYP) measure for all high schools. The graduation rate reported previously in this report was calculated using the Leaver Rate methodology developed by the National Council on Educational Statistics. It was one of the approved graduation rate formulas that Maryland and 35 other states used for accountability purposes. The U.S. Department of Education now requires all states to implement a four year Adjusted Cohort Graduation Rate at the state, district, and high school levels following the 2010-2011 academic year. As required by State law, Maryland is transitioning from the Leaver Rate to the four year Adjusted Cohort Rate to calculate the graduation rate. Using the Adjusted Cohort Rate will provide more accurate data, allow for comparisons across states, and ensure that students who drop out are not counted as transfers. The cohort is a group of students who entered ninth grade for the first time in a specific school year. The number is adjusted at the end of each high school year for transfers in and out and student deaths. The four year adjusted cohort graduation rate is determined by dividing the number of cohort members who graduate in four or fewer years by the total number of students in the adjusted cohort at the end of the four years. The U.S. Department of Education anticipates that this more rigorous method of calculating the graduation rate will result in more accurate data but lower reported graduation rates.

Completion of high school program requirements indicates students’ potential readiness for post-secondary education and/or employment. Education Week reports that income data from 2009 show that median earnings for adults who have not completed high school are only $12,000, and that acquiring a high school diploma generates an additional $10,000 of earnings on average. Data used for this report are based on the Leaver Rate. The percent of students receiving a public high school diploma remained constant over the period of 2007 through 2011, with an overall increase of 2.1% over that period. In 2010, graduation rates improved for all racial subgroups with American Indian/Alaskan Native graduates leading the way, followed by Hispanic, and then African American graduates. Maryland’s high school graduation rate for 2011 at 87.0% was slightly more than in 2010, and is the highest recorded rate. The 4 year Adjusted Cohort Graduation Rate for 2010 was 81.7. Graduation rate data using the 4 year Adjusted Cohort Rate are not yet available for 2011, and historical 4 year Adjusted Cohort Graduation Rate data will not be available. Applying the new calculation methodology (4 year Adjusted Cohort Rate) and considering the federal changes in the racial subgroup categories, 2010 will be the new base year using the Adjusted Cohort Rate.

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26 Maryland along with other states is transitioning to the national system of calculating high school graduation rates based on following cohorts of students through high school (Adjusted Cohort Rate). According to U.S. Department of Education guidance, a state must have 4 years of longitudinal data before adopting this methodology. (Maryland State Department of Education fiscal year 2011 Data Definition and fiscal year 2013 MFR Performance Discussion)
27 MdReportCard.org, Maryland State Department of Education
28 Implementing Graduation Counts, State Progress to Date 2010, National Governors’ Association Center for Best Practices, December 2010
29 2011 Maryland Report Card and fiscal year 2013 MFR Data Definitions and Control Procedures, Maryland State Department of Education
31 Maryland Results for Child Well Being 2009
32 Education Week, Diplomas Count 2011, Beyond High School, Before Baccalaureate; Analysis Finds Graduation Rates Moving Up, May 31, 2011
33 One Maryland, A Message from the Governor, “Maryland graduation rate climbs, drop-out rate declines”, October 12, 2010; 2010 Maryland Report Card: Maryland State: Graduation Rate for Race/Ethnicity and Gender
34 MFR Performance Discussion, fiscal year 2013, Maryland State Department of Education
KEY PERFORMANCE AREA 1
PROVIDING QUALITY K-12 EDUCATION AND HIGHER EDUCATIONAL OPPORTUNITIES FOR ALL MARYLAND RESIDENTS SO THAT THEY CAN CONTRIBUTE TO, SUCCEED, AND PROSPER IN THE WORKFORCE

High School Graduation Rate

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Graduation Rate</td>
<td>85.24</td>
<td>85.09</td>
<td>85.24</td>
<td>86.55</td>
<td>87.00</td>
</tr>
</tbody>
</table>
Indicator 1.9: Percent of children in grades 9 through 12 who drop out of school in an academic year (Annual Event Rate)

Target: Continued decline in the dropout rate

How are we doing? The U.S. Department of Education requires all states to implement a 4-year Adjusted Cohort dropout rate which reflects how many students who began ninth grade for the first time in a given year dropped out of high school over the four years of school (grades 9 through 12). The Cohort Rate is a more precise measurement that accounts for students who may “dropout” of school but re-enroll and graduate. The Adjusted Cohort Rate is significantly higher than the Annual Event Rate. The principal reason for this is the size of the denominator – for the Annual Event Rate it is the total number of students in grades 9 through 12 served by the school, and for the Adjusted Cohort Rate it is the number of students who form the adjusted cohort. Maryland began reporting the Cohort dropout rate in 2011 for the 2010 academic year which will be the new base year. Data used for this report are based on the Annual Event dropout rate across grades 9-12. The Annual Event dropout rate reflects every dropout event that occurred in grades 9 through 12 in a given year.

Failure to complete high school is closely linked with decreased employment opportunities, low pay and limited paths to advancement. Recent studies show that between the ages of 18 and 64, dropouts on average earn some $400,000 less than high school graduates. High school dropouts have unemployment rates that are nearly three times higher than individuals with bachelor's degrees. There was a steady downward trend in the dropout rate from 2007 through 2010, with the decline accelerating in 2009, dropping 26.5% from 2008 to 2010. Overall from 2007 to 2010 the dropout rate declined by 28.8%. Although the 2011 rate is 8.8% lower than in 2007, it increased by 28.0% over 2010. The 4 Year Adjusted Cohort dropout rate for 2010 is 11.93. This data is not comparable to the Annual Event dropout rate. The cohort rate is not yet available for 2011.

Percent of Children in Grades 9 - 12 Who Drop Out of Maryland Public Schools in an Academic Year

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35 Each student is counted only once. The cohort number is adjusted at the end of each high school year by adding transfers in and subtracting transfers out and any deaths - Maryland State Department of Education Report Card
36 Maryland Report Card, Maryland State Department of Education; Maryland State Department of Education fiscal year 2013 MFR Data Definitions and Control Procedures
37 The Annual Event Rate represents the sum of all dropout events occurring over the four grade levels in any given year divided by the total number of students enrolled in high school that year. Because dropout events are counted, one student may be counted more than once. Maryland State Department of Education Report Card
38 Maryland Results for Child Well Being 2009
39 KIDS COUNT Indicator Brief, Reducing the High School Dropout Rate, Annie E. Casey Foundation, July 2009
SCHOOLS PROMOTING HIGH LEVELS OF LEARNING

Indicator 1.10: Percent of schools demonstrating Adequate Yearly Progress (AYP) in reading – State totals

Indicator 1.11: Percent of schools demonstrating Adequate Yearly Progress (AYP) in math – State totals

Target: 100% of students demonstrating proficiency in reading and math by 2014

How are we doing? AYP is the gain that schools, school systems, and states must make each year in the proportion of students achieving proficiency in reading and math in order to achieve the NCLB proficiency goal of 100% of students demonstrating proficiency in reading and math by 2014. Meeting AYP targets is the major student achievement goal for all schools. A school must meet all of its performance goals to achieve Adequate Yearly Progress. Maryland has set Annual Measurable Objectives (AMO’s) that all students and the eight sub-groups identified in NCLB need to meet. The percent of schools demonstrating AYP in reading increased by 6.6% from 2007 to 2008, and steadily dropped each year through 2011. The percent demonstrating AYP in reading dropped by 2.8% from 2008 to 2009, dropped 11.7% from 2009 to 2010, and further dropped by 13.1% in 2011. Overall from 2007 to 2011, the percentage of schools demonstrating AYP in reading declined by 20.5%. After increasing by 3.1% from 2007 to 2008, school performance in math declined by 7.0% between 2008 and 2009, declined by 6.1% in 2010, and dramatically declined by 17.5% in 2011. Overall from 2007 to 2011, the percent of schools demonstrating Adequate Yearly Progress in math declined by 25.7%, a greater decline than for AYP in reading. More than half of Maryland schools demonstrated AYP in both reading and math in 2011, demonstrating better progress than the U.S. Department of Education’s projected 80% of schools nationwide failing to make AYP. The special education sub-group accounted for 65% of schools that missed making AYP in Maryland because of only one sub-group.

Maryland has performed favorably under rating systems which are broader than AYP alone. For the fourth year in a row, Maryland schools were ranked number one in the nation on education performance and policy by Education Week’s Quality Counts, “the most comprehensive ongoing assessment of the state of American education.” Quality Counts grades states across six distinct areas of policy and performance – Chance for Success; K-12 Achievement; Standards, Assessments, and Accountability; the Teaching Profession; School Finance; and Transitions and Alignment. Maryland’s overall grade of B+ far exceeded the national average of C. Maryland, graded at B+, ranked fifth in the nation and surpassed the average national performance of C+ on the Chance-for-Success Index, a signature element of Quality Counts that draws on 13 indicators that together, provide a broad perspective on the role of education in promoting beneficial outcomes at each major stage of life. Maryland achieved a B (up from last year’s B-) and stood at number three in the nation in K-12 Achievement, surpassing U.S. performance of C-. Maryland has been one of the top three scorers in this category since the index was first introduced in 2008.

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41 MSA results are used in the calculation of whether a school met the Adequate Yearly Progress (AYP) target.
42 Maryland Report Card and School Improvement in MD at: http://www.mdk12.org; States may apply for waivers from the 2001 No Child Left Behind Act requirement of 100% of students proficient in math and reading by 2014 in exchange for “rigorous and comprehensive State-developed plans designed to improve educational outcomes for all students, close achievement gaps, increase equity, and improve the quality of instruction”, U.S. Department of Education, September 23, 2011
44 School Improvement in Maryland, How does Maryland implement Adequate Yearly Progress?, http://mdk12.org/assessments/ayp/index.html
45 Fiscal year 2013 MFR Performance Discussion, Maryland State Department of Education
47 Major stages of life include early childhood, the period encompassing formal K-12 education, and adulthood and career.
48 K-12 Achievement evaluates the overall strength of a state’s public against 18 individual indicators that capture current achievement, improvements over time, and poverty-based disparities or gaps - Education Week Press Release January 13, 2012, “Report Awards Grades for Education Performance Policy, Nation Earns a C, Maryland Ranks First for Fourth Straight Year”
graded in 2008. Maryland ranked number one in the nation on Transitions and Alignment⁴⁹ with a grade of A, surpassing the average U.S. grade of C+. Ranked number three with a grade of B in Teaching Profession, Maryland exceeded the national average score of C. Maryland ranked seven at B+ on School Finance, and received its lowest ranking of twenty-fourth with a grade of B+ in Standards, Assessments, and Accountability.

Maryland’s focus on preparing students for success in college and work is evidenced by its ranking for the third year in a row as first in the nation in the “percentage of Maryland seniors who earned a score of 3 or higher on one or more AP (Advanced Placement) exams”, reaching 26.4% percent in 2010, 1.6 percentage points better than 2009 according to the College Board’s Annual AP Report to the Nation. A score of 3 or better is considered “college mastery level” on the AP exams, and many colleges and universities award college credit for high school students scoring in that range.⁵⁰ MSDE has worked in close partnership with the College Board to strengthen the AP program by increasing access to all students, especially those from under-represented groups. In addition, the program has provided on-going professional development to teachers. Maryland will continue to improve the quality of education by wisely using Federal grant money. After naming Maryland as one of 19 finalists in July 2010, the U.S. Department of Education chose Maryland as one of the winning states in the Race to the Top, a competitive Federal grant program that seeks to reward states that are implementing significant reforms in 4 areas – boosting student achievement, reducing gaps in achievement among student subgroups, turning around struggling schools, and improving the teaching profession.⁵¹ The Maryland Education Reform Act of 2010, Chapter 189, addresses the reform area of recruiting, developing, and retaining effective teachers and principals, especially in low performing schools. Maryland has continued to make record investments in public education and school construction despite the economic downturn.⁵² These record investments will be further enhanced by the $250 million Race to the Top Federal grant.

### Percent of Schools Demonstrating Adequate Yearly Progress (AYP) in Reading and Math

<table>
<thead>
<tr>
<th></th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>77.4%</td>
<td>80.5%</td>
<td>82.5%</td>
<td>80.2%</td>
<td>77.3%</td>
</tr>
<tr>
<td>Math</td>
<td>70.8%</td>
<td>72.6%</td>
<td>70.8%</td>
<td>77.3%</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

⁴⁹ Transitions and Alignment tracks state efforts to better coordinate the connections between K-12 schooling and other segments of the educational pipeline, with a focus on three stages: early-childhood education, college readiness, and links to the world of work - Education Week Press Release January 13, 2012, “Report Awards Grades for Education Performance Policy, Nation Earns a C, Maryland Ranks First for Fourth Straight Year”; Quality Counts 2011, Weighing States’ School Performance, Policymaking, January 5, 2011

⁵⁰ Maryland State Department of Education news release, February 9, 2011 Maryland Ranks First In AP Success for Third Straight Year, State Achievement in Advanced Placement is Highlighted in Tour by College Board

⁵¹ Maryland State Department of Education news release, Maryland Named Finalist for Race to the Top, July 27, 2010

KEY PERFORMANCE AREA 1
PROVIDING QUALITY K-12 EDUCATION AND HIGHER EDUCATIONAL OPPORTUNITIES FOR ALL MARYLAND RESIDENTS SO THAT THEY CAN CONTRIBUTE TO, SUCCEED, AND PROSPER IN THE WORKFORCE

Indicator 1.12:  Percent of core academic subject classes staffed with highly qualified teachers

Target:  100% by June 30, 2012

How are we doing?  Under NCLB, states are required to measure the extent to which all students have highly qualified teachers. As defined by NCLB, highly qualified teachers must meet minimum requirements both in content knowledge and teaching skills. Teachers must have a bachelor’s degree, full state certification, and demonstrate content knowledge in the subjects they teach.\(^{53}\) Research shows that teacher effectiveness has a greater impact on student achievement than any other reform under a school’s control.\(^{54}\) There has been a steady upward trend in the percent of core academic subject classes staffed with highly qualified teachers, increasing 12.4% between 2007 and 2011. Two hundred thirty-two additional teachers obtained National Board Certification in 2011. “In 1999, the Maryland General Assembly established a permanent program of state and local aid to pay the assessment fee for public school teachers seeking National Board Certification. In addition, MSDE, in collaboration with colleges, universities and others, sponsor the Maryland National Board Candidate Support Network (NBCSN). Through the Maryland NBCSN candidates receive technical, intellectual, logistical, and emotional support as they progress through the assessment process. In addition to the state’s matching fund of up to $2,000, local school systems contribute to individual teacher costs to support National Board Certification.\(^{55}\) Maryland ranked fifth in the nation with a grade of B in the 2011 Teaching Profession segment of Education Week’s Quality Counts rating system.\(^{56}\) Maryland continues to take steps to improve the quality of education in its public schools. Maryland has developed Teacher Professional Development Standards that are intended to guide efforts to improve professional development for all teachers.\(^{57}\) The Education Reform Act of 2010, Chapter 189 passed during the 2010 legislative session, increases from two to three years the amount of time until a teacher gains tenure, requires student growth to be a significant component of teacher performance evaluations, and requires annual evaluations of non-tenured teachers and prompt assignment of mentors to teachers who are not on track to qualify for tenure. Governor O’Malley signed an Executive Order in June 2010 creating the Maryland Council for Educator Effectiveness that will develop a model evaluation system for educators. One of Maryland’s primary Race to the Top funded reforms is the re-design of the model for preparation, development, retention, and evaluation of teachers and principals.\(^{58}\)

Percent of Core Academic Subject Classes Staffed With Highly Qualified Teachers


\(^{54}\) Building a Grad Nation, Progress and Challenge in Ending the High School Dropout Epidemic, A Report by Civic Enterprises, Everyone Graduates Center at Johns Hopkins University, and America’s Promise Alliance, November 2010

\(^{55}\) Fiscal Year 2013 MFR Performance Discussion, Maryland State Department of Education

\(^{56}\) News Release, Three in a Row for Maryland Public Schools, National Education Newspaper Places State’s System at the Head of the Class for the Third Straight Year, Maryland State Department of Education, January 11, 2011

\(^{57}\) School Improvement in Maryland, Maryland Teacher Professional Development Standards, Maryland State Department of Education Web site, http://mdk12.org/instruction/professional_development/teachers_standards.html

\(^{58}\) MFR Performance Discussion, fiscal year 2013, Maryland State Department of Education
SCHOOLS PROVIDING SAFE AND PROFESSIONAL LEARNING ENVIRONMENTS THAT ENHANCE
EDUCATIONAL QUALITY

Indicator 1.13: Percent of Maryland schools that are safe as defined by COMAR 13A.08.01.18B(5)

Target: All schools will be safe

How are we doing? A safe School is a school that is not on probationary status or designated as persistently dangerous. The Safe Schools Act of 2010 ensures that children are learning in safe environments, and that communication between school officials and law enforcement are improved. The percent of Maryland schools that are safe as defined by COMAR has remained constant from 2007 to 2011, ranging from 99% at the lowest to a high of 99.7%. In 2011, 1,447 of 1,452 schools were safe. Two schools are on probationary status, down from 3 in 2010, and 3 schools are persistently dangerous, up from two in 2010.

Percent of Maryland Schools That Are Safe

<table>
<thead>
<tr>
<th>Year</th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>99.6%</td>
<td>99.5%</td>
<td>99.0%</td>
<td>99.7%</td>
<td>99.7%</td>
</tr>
</tbody>
</table>

59 One Maryland, A Message from the Governor, Governor O'Malley Signs Education Reform Legislation, May 5, 2010
PROMOTING ACCESS AND ACADEMIC SUCCESS IN POSTSECONDARY EDUCATION

Indicator 1.14: Six year graduation rate of first-time, full-time students at Maryland public four-year colleges and universities (all groups)

Target: 67% by 2013

How are we doing? Completion of post-secondary education is linked to increased employment opportunities, earning power, and opportunities for advancement. The six year graduation rate has remained stable from 2007 through 2011, reaching an all-time high of 64.7% in 2010. Second-year retention rates suffered with the onset of the 2007-2008 economic crisis, but have begun to recover which suggests that the 67 percent goal may be attained shortly after 2013.60

Six Year Graduation Rate of First-Time, Full-Time Students at Public Four Year Colleges and Universities

60 Maryland Higher Education Commission(MHEC), MFR Performance Discussion, fiscal year 2013 MFR Submission
Indicator 1.15: Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities

Target: 34% by 2013

How are we doing? In the past 10 years, the proportion of racial and ethnic minorities enrolled at Maryland postsecondary institutions increased from 33% to 38%. Minority students earned close to one third of all bachelor's degrees awarded at Maryland public and independent campuses in each year from 2007 through 2011. However, while nearly one-third of all bachelor's degrees from public institutions are awarded to minority students, the six-year graduation rate gap between African Americans and all others has continued to increase, and has widened sharply over the last five years from 15.1 percentage points for the 1999 cohort of students to 23.0 percentage points for the 2004 cohort of students.

Percent of Bachelor's Degrees Awarded to Racial/Ethnic Minorities at Maryland Colleges and Universities

<table>
<thead>
<tr>
<th>Year</th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31.3%</td>
<td>31.6%</td>
<td>31.5%</td>
<td>31.6%</td>
<td>31.8%</td>
</tr>
</tbody>
</table>

61 Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission
62 Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission
Indicator 1.16: Number of community college students who transfer to a Maryland public four-year campus

Target: 10,526 by 2013

How are we doing? Maryland has made much progress in eliminating barriers to community college transfer to a Maryland public four-year campus, including facilitating strong articulation agreements related to the transfer of credits such as those earned for Associate of Arts in Teaching and Associate of Science in Engineering. The number of community college students who transfer to a Maryland public four-year campus increased by 8% (643 students) between 2007 and 2008. Transfers remained stable between 2008 and 2009, increased by 4.1% from 2009 to 2010, and from 2010 to 2011 declined by 5.1% to slightly below the 2008 level. Community colleges play a pivotal role in Maryland’s efforts to improve degree completion and workforce preparation. In 2011 Maryland secured a grant from Complete College America to underwrite efforts to improve degree completion, particularly through the redesign of remedial mathematics courses.\footnote{Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission}
KEY PERFORMANCE AREA 1
PROVIDING QUALITY K-12 EDUCATION AND HIGHER EDUCATIONAL OPPORTUNITIES FOR ALL MARYLAND RESIDENTS SO THAT THEY CAN CONTRIBUTE TO, SUCCEED, AND PROSPER IN THE WORKFORCE

Indicator 1.17: Percent of Maryland median family income required to cover tuition and fees at Maryland public four-year institutions

Indicator 1.18: Percent of Maryland median family income required to cover tuition and fees at Maryland community colleges

Target: By fiscal year 2013, 7.6% for public four-year institutions and 4% for community colleges

How are we doing? “The State is committed to ensuring that more Marylanders have access to its postsecondary institutions, and keeping colleges and universities affordable is a major part of this effort. This is supported by the fact that Maryland has moved from having the 9th highest average tuition and fees for public colleges and universities in the country in 2006, to the 19th highest in 2011.”64 This is primarily due to the Governor’s multi-year tuition freeze at public four-year colleges and universities. Legislation that passed during the 2010 legislative session created a Tuition Stabilization Account within the Higher Education Investment Fund to protect students and families from facing double digit tuition hikes as they have in the past.65 The State’s financial aid programs play a role in facilitating access and reducing financial barriers to postsecondary education, especially for students from low and moderate-income backgrounds.66 The Commission has increased outreach efforts to inform Marylanders about the availability of financial aid. From 2007 to 2011, the percentage of median family income required to cover tuition and fees at public four-year institutions declined significantly by 18.7%, while the percentage of median family income required at community colleges declined by 14.9%. Year to year from 2007 to 2011, the increases and decreases for community colleges and four-year institutions tracked each other. The most significant decline occurred between 2009 and 2010 with a decline of 17.3% for four-year institutions, and a 15.2% decline for community colleges.67 Despite the end of the tuition freeze, the percentage remained steady for both public four-year institutions and community colleges between 2010 and 2011.

Percentage of Median Family Income Required to Cover Tuition and Fees

Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission
One Maryland, A Message from the Governor, Governor O’Malley Signs Education Reform Legislation, May 5, 2010
Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission
Maryland Higher Education Commission provided corrected data for 2010.
Indicator 1.19: Number of graduates from Maryland’s public and private higher educational institutions in science, technology, engineering and math (STEM)

Indicator 1.20: Number of teacher candidates prepared by Maryland’s public and private higher educational institutions

Indicator 1.21: Number of graduates from Maryland’s public and private higher educational institutions in nursing

Targets:
By 2013, 10,578 STEM graduates
By 2013, 2,912 teacher candidates
By 2013, 3,300 nursing graduates

How are we doing? Identifying workforce shortages and determining how to best meet them is important to maintaining a strong economy. Legislation that passed during the 2010 legislative session established a system to track student progress from kindergarten to college and beyond, and coordinate curriculum with trends in the workforce. MHEC’s Advisory Council on Workforce Shortage, in partnership with the General Assembly, State agencies, the business community, and the non-profit sector, has developed a model to identify critical workforce occupations in the State. These occupations are now being addressed through targeted State financial aid programs. Career and Occupational Aid Programs administered by MHEC are specifically designed to address workforce shortage areas by requiring a promise of employment in return for funding. MHEC administers several programs under this classification, encompassing fields such as nursing, teaching, science and technology.

State-aided independent institutions contribute to the economic competitiveness of the region by supplying skilled and educated workers in shortage professions. The most growth over the five year period of 2007 through 2011 has occurred in STEM graduates with the number increasing by 1,081 from 2007 to 2011. The number of STEM graduates remained flat from 2007 to 2010, with a 9.1% (936) increase from 2010 to 2011. “The STEM and Competitiveness Initiative is one of three high-priority initiatives launched by the University System of Maryland (USM) to address major challenges to Maryland’s educational preparedness, economic leadership, and environment.” This initiative focuses on developing strategies that “strengthen STEM education at the K-12 level, prepare a highly skilled workforce for STEM-based jobs, and promote the innovation and entrepreneurship necessary to position Maryland for leadership in today’s global knowledge economy.”

One focus of the initiative is increasing the number of STEM teachers graduating from USM institutions and pursuing teaching careers in Maryland. Additionally, Governor O’Malley launched the comprehensive Maryland STEM Innovation Network to promote the delivery of high quality STEM education at all levels throughout the State. The number of nursing graduates steadily increased each year from 2007 to 2011, for a total increase of 732 (27.1%). The Nurse Support Program II, one strategy addressing the nursing shortage, is a direct result of efforts of MHEC to increase capacity of nursing education programs and the number of nurses and nurse educators in Maryland. The Nurse Support Program II was established by the General Assembly in fiscal year 2007. This program funds initiatives to expand the number of bedside nurses in the State by increasing nursing graduates. After increasing by 5.4% from 2007 to 2008, the number of teacher candidates declined by 13.5% between 2008 and 2010. Although lower than the 2007 and 2008 levels, there was a rebound to near the 2009 level in 2011.

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68 One Maryland, A Message from the Governor, Governor O’Malley Signs Education Reform Legislation, May 5, 2010
69 Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission
70 Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission
71 National Education Association (NEA) Press Release, NEA names Maryland’s Martin O’Malley America’s Greatest Education Governor, July 6, 2010
72 NEA Press Release, NEA names Maryland’s Martin O’Malley America’s Greatest Education Governor, July 6, 2010
73 Enterprising States, May 2010, U.S. Chamber of Commerce and the National Chamber Foundation
74 Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission
Numbers of Graduates in Shortage Professions from Maryland's Higher Educational Institutions

<table>
<thead>
<tr>
<th>Year</th>
<th>Nursing</th>
<th>Teacher Candidates</th>
<th>Science, Technology, Engineering, and Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 Actual</td>
<td>2,697</td>
<td>2,810</td>
<td>10,196</td>
</tr>
<tr>
<td>2008 Actual</td>
<td>2,716</td>
<td>2,816</td>
<td>10,065</td>
</tr>
<tr>
<td>2009 Actual</td>
<td>2,492</td>
<td>2,893</td>
<td>10,341</td>
</tr>
<tr>
<td>2010 Actual</td>
<td>2,349</td>
<td>3,217</td>
<td>10,341</td>
</tr>
<tr>
<td>2011 Actual</td>
<td>2,451</td>
<td>1,429</td>
<td>11,277</td>
</tr>
</tbody>
</table>
Indicator 1.22  Percent of teacher candidates from Maryland public and private higher educational institutions who pass Praxis II

Target:  98% of teacher candidates pass Praxis II in 2013

How are we doing? Nearly all teacher candidates from Maryland public and private higher educational institutions pass the Praxis II certification examination. The percent of teacher candidates who pass Praxis II has remained stable over the last five years. Ninety-seven percent of all teacher candidates passed the Praxis II certification exam in 2008, 2009, and 2011. Ninety-six percent of all teacher candidates passed the Praxis II certification exam in 2007 and 2010.
ECONOMIC GROWTH

EXPANDING ECONOMIC OPPORTUNITIES FOR MARYLAND’S FAMILIES AND BUSINESSES WHILE BUILDING WORKFORCE DRIVEN ECONOMIC DEVELOPMENT

Goal: Strengthen Maryland’s economic competitiveness and continued economic growth, and expand opportunities for all Marylanders to succeed in quality jobs.

Maryland will focus on maintaining a robust economy and improving economic competitiveness.
## ECONOMIC GROWTH

### Status and Number of Indicators

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Indicators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorable Performance (Change &gt;10%)</td>
<td>3</td>
<td>15.0%</td>
</tr>
<tr>
<td>Favorable Performance (3% to 10% Change)</td>
<td>4</td>
<td>20.0%</td>
</tr>
<tr>
<td>Stable Performance (0% - 2% Change)</td>
<td>9</td>
<td>45.0%</td>
</tr>
<tr>
<td>Unfavorable Performance (3% to 10% Change)</td>
<td>2</td>
<td>10.0%</td>
</tr>
<tr>
<td>Unfavorable Performance (Change &gt; 10%)</td>
<td>2</td>
<td>10.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>100%</strong></td>
</tr>
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</table>

### Agency/ Data Source

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Recent Data Available</th>
<th>4 Years Prior</th>
<th>4 Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Economic Momentum Index (2007 - 2011)</td>
<td>-0.32</td>
<td>-0.58</td>
<td>44.8%</td>
</tr>
<tr>
<td>Maryland Port Administration total general cargo tonnage, (thousands) (2007 - 2011)</td>
<td>8.7</td>
<td>8.6</td>
<td>1.2%</td>
</tr>
<tr>
<td>Annual BWI Marshall passenger growth rate (2006 - 2010)</td>
<td>4.69%</td>
<td>4.86%</td>
<td>-3.5%</td>
</tr>
<tr>
<td>Number of non-stop markets served by BWI Marshall Airport (2007 - 2011)</td>
<td>75</td>
<td>73</td>
<td>2.7%</td>
</tr>
<tr>
<td>Total State sales tax revenue attributable to tourism (millions) (data for 2005 through 2008 based on 5% sales tax and not comparable to subsequent years; 6% tax rate reflected in data beginning with fiscal year 2009) (2009 - 2011)</td>
<td>$359.5</td>
<td>$346.3</td>
<td>3.8%</td>
</tr>
<tr>
<td>Average employment in bioscience establishments in MD (2006 - 2010)</td>
<td>33,602</td>
<td>28,855</td>
<td>16.5%</td>
</tr>
<tr>
<td>Number of bioscience establishments operating in MD (2006 - 2010)</td>
<td>1,752</td>
<td>1,305</td>
<td>34.3%</td>
</tr>
<tr>
<td>Percent of State system roadway mileage with acceptable ride quality (2006 - 2010)</td>
<td>86%</td>
<td>84%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Percent of bridges on Maryland State Highway Administration portion of the National Highway System that will allow all legally loaded vehicles to safely traverse (2006 - 2010)</td>
<td>99%</td>
<td>99%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Agency/ Data Source</td>
<td>Indicator</td>
<td>Most Recent Data Available</td>
<td>4 Years Prior</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>MDOT</td>
<td>Percent of MD State Highway Administration Network in overall preferred maintenance condition (2006 - 2010)</td>
<td>85.8%</td>
<td>87.1%</td>
</tr>
<tr>
<td>MDOT</td>
<td>Total number of passenger trips per service mile traveled for bus and rail transit (2007 - 2011)</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>U.S. DOL/BLS</td>
<td>Ratio between Maryland's unemployment rate and the U.S. rate (2007 - 2011)</td>
<td>0.7817</td>
<td>0.8352</td>
</tr>
<tr>
<td>DLLR</td>
<td>Percent change in Maryland employment from 2001 baseline (12 month average) (2007 - 2011)</td>
<td>1.90%</td>
<td>6.55%</td>
</tr>
<tr>
<td>DLLR</td>
<td>Rate that adult employment trainees enter employment (2007 - 2011)</td>
<td>76.8%</td>
<td>78.3%</td>
</tr>
<tr>
<td>DLLR</td>
<td>WIA adult program participant employment retention rate (2007 - 2011)</td>
<td>88.1%</td>
<td>86.3%</td>
</tr>
<tr>
<td>U.S. Commerce BEA</td>
<td>Annual Percent change in Maryland per capita personal income (2006 - 2010)</td>
<td>2.93%</td>
<td>5.60%</td>
</tr>
<tr>
<td>U.S. Census</td>
<td>Home ownership (2006 - 2010)</td>
<td>68.9</td>
<td>72.6</td>
</tr>
<tr>
<td>MDP</td>
<td>Percent of “other” investment leveraged by the State Rehabilitation Tax Credit in the rehabilitation of historic commercial properties (2007 - 2011)</td>
<td>80%</td>
<td>81%</td>
</tr>
<tr>
<td>MDP</td>
<td>Percent of private investment leveraged by the State Rehabilitation Tax Credit for restoration and preservation of historic residential properties (2007 - 2011)</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>
Indicator 1.1: Growth in total real gross domestic product (GDP) in Maryland (millions of chained 2005 dollars)

Target: Steady growth in the total GDP in Maryland

How are we doing? Total real GDP by state is an inflation-adjusted measure of each state’s production, wherever sold, that is based on national prices for the goods and services produced within that state. The all industry total includes all private industries and government. Data presented below for all years reflects a comprehensive revision of Gross Domestic Product by State that incorporates significant changes in classification and statistical methods to more accurately portray the state economies. The base year is now 2005 rather than 2000. Although year over year growth in millions of chained (2005) dollars from 2006 through 2008 slowed in Maryland compared to growth in 2005, upward growth was steady through 2008, increasing by 2.8% from 2006 to 2008. The total Real GDP in Maryland was essentially level in 2008 and 2009 in contrast to a decline of 2.5% in the total U.S. Real GDP by State in 2009. Maryland’s 2010 real GDP increased by 2.9% over 2009. “Nearly every state saw an increase in real gross domestic product in 2010, a welcome sign of economic recovery after two straight years of drops in the national average. Each region performed differently, with a few states posting impressive 4-plus percent gains and a majority of states falling between 1.5 and 3.5 percent. A June 2011 report by the Bureau of Economic Analysis reveals that real GDP increased in 48 states and the District of Columbia in 2010 over 2009 with a national average increase of 2.6 percent. With average year-over-year GDP growth at 2.9 percent, the Eastern region was CSG’s (Council of State Governments) second highest performing region, beating the national average of 2.6 percent.”

“By several economic measures, the U.S. made little or no progress during the last decade. Maryland bucked these trends, indicating that the state’s current advantages in economic performance have not just recently emerged, but are instead part of long-term trends.” Those long term trends for Maryland show positive growth in employment, median household income, and per capita GDP as compared to the U.S. Enterprising States, a study by the U.S. Chamber of Commerce and the National Chamber Foundation found that Maryland ranks among the nation’s most enterprise-friendly states in both the 2010 and 2011 studies. The studies looked at five policy strategies that states use to accelerate growth and create jobs, and used a set of metrics to measure performance. Maryland was rated one of the top overall Growth Performers, ranking fifth in 2011 and fourth in 2010 on all seven metrics used to measure growth performance. Maryland ranked as one of the top performers in Entrepreneurship and Innovation in both 2010 and 2011, and ranked as one of the top performers in Workforce and Training in 2011.

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1 Bureau of Economic Analysis, U.S. Department of Commerce
2 Advance Statistics of GDP by State 2010, Bureau of Economic Analysis; actual data for 2006 – 2009 were updated
4 Economic Pulse, An Overview of Maryland’s Economic Indicators, January 29, 2010, DBED
5 2011 and 2010 Enterprising States Report, A Project of the U.S. Chamber of Commerce and the National Chamber Foundation; U.S. Chamber of Commerce, Press Release May 19, 2010, Maryland Among Nation’s Leaders in Growing Jobs
6 2011 and 2010 Enterprising States, a project of the U.S. Chamber of Commerce and the National Chamber Foundation, http://ncf.uschamber.com/enterprising-states/
7 2011 and 2010 Enterprising States, a project of the U.S. Chamber of Commerce and the National Chamber Foundation, http://ncf.uschamber.com/enterprising-states/
Total Real Gross Domestic Product - Millions of Chained (2005) Dollars - Maryland

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>Year to Year Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2006</td>
<td>$257,023</td>
<td>1.7%</td>
</tr>
<tr>
<td>CY 2007</td>
<td>$259,431</td>
<td>1.8%</td>
</tr>
<tr>
<td>CY 2008</td>
<td>$257,382</td>
<td>0.9%</td>
</tr>
<tr>
<td>CY 2009</td>
<td>$252,434</td>
<td>-0.8%</td>
</tr>
<tr>
<td>CY 2010</td>
<td>$264,882</td>
<td>2.9%</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

Indicator 1.2: Maryland State Economic Momentum Index

Target: Steady improvement in economic growth

How are we doing? The State Economic Momentum Index ranks states based on their most recent performance in three key measures of economic vitality: personal income growth, employment growth and population growth. Measures of the most recent one-year changes in these three components are averaged and each state’s score is expressed as a percent above or below the national average which is set at zero. In 2007, slightly more than half of states lagged the national economy. Although Maryland’s economic performance began to improve in 2008 at -0.46% below the national average, Maryland placed 38th overall and in the middle of the pack of those states that lagged the national average. This was at a time that an equal number of states lagged and exceeded the national economy. Maryland’s economy continued to improve in 2009 to 0.28% above the national average (19th in the nation). Maryland has benefited from the initial flow of Federal stimulus funds, and as of March 2010, Maryland exceeded the national average by 1.16% (2nd in the nation behind North Dakota), one of only three states that exceeded the national average by more than 1%. Most states’ economic performance fell within 1% (+ or -) of the national average, with more states exceeding the national average than lagging it. By December 2010, although exceeding the national average by 0.08, Maryland slipped to 21st in the nation in the Index of State Economic Momentum. During the first quarter of 2011, Maryland’s economic vitality dropped to -0.32 below the national average (40th in the nation), one of 27 states that fell below the national average. However, no state lagged the national average economic performance by more than 1% as of March 2011. Expiration of additional Federal assistance under the Recovery Act and Federal deficit reduction are two stressing factors for Maryland’s economic momentum due to Maryland’s higher than average per capita flow of Federal funds to states. With decreases in Federal funding in the coming years, “states will need to count on the strength of the economic recovery to sustain their economic momentum, and the strength of their own tax collections to sustain their improvement on the Continuum of State Fiscal Stress” which provides a snapshot of state fiscal conditions based on a survey that addresses reductions in enacted budgets and tax collections, and levels of fund balances.

A number of economic indices indicate that Maryland fares well compared to other states in the nation. The State New Economy Indices for 2008 and 2010 indicate that Maryland along with three to four other states is leading the United States’ transformation into a global, entrepreneurial and knowledge and innovation-based “New Economy”. This is not surprising in that states at the top of the ranking tend to have a high concentration of managers, professionals and college-educated residents working in “knowledge jobs”—those that require at

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8 The Index is updated each calendar quarter. Data is taken from the Federal Funds Information for States’ (FFIS) publication “State Policy Reports” issued in March of each year. FFIS obtains state personal income data from the Bureau of Economic Analysis, employment statistics from the Bureau of Labor Statistics, and population counts and estimates are from the U.S. Census Bureau.

9 State Policy Reports, Federal Funds Information for States.


15 Maryland was fourth in the nation in fiscal year 2009 in the per capita flow of Federal funds to states, State Policy Reports Volume 29, Issue 14, July 2011.


17 Rather than measuring state economic performance or state economic policies, the 2008 and 2010 indices focus more narrowly on the question: “To what degree does the structure of state economies match the ideal structure of the New Economy?” 2010 Ranking of ‘New Economy’ States’ Highlights Leaders and Laggards in Innovation, According to Kauffman/ITIF Study’, Ewing Marion Kauffman Foundation; The 2010 Index uses 26 indicators, divided into five categories that best capture what is new about the “New Economy: knowledge jobs, globalization, economic dynamism, transformation to a digital economy, and technological innovation capacity. The 2010 State New Economy Index, Benchmarking Economic Transformation in the States, The Information Technology & Innovation Foundation with financial assistance by the Kauffman Foundation.

KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

least a two-year degree. The 2010 State New Economy Index ranks Maryland third in the nation in the degree to which the state economies are knowledge-based, globalized, entrepreneurial, IT-driven, and innovation-based, with the highest rankings in managerial, professional, and technical jobs, workforce education, non-industry investment in R&D, and broadband telecommunications.

In the spring of 2011, Governor O’Malley rolled out a five-year economic development plan - Charting Maryland’s Economic Path - that focuses on four core strategies to move Maryland’s economy forward.

- “Position Maryland for growth, through accelerating efforts to sustain a knowledge-dependent, global, entrepreneurial economy, driven by innovation.”
- “Build on, and protect, leading drivers of economic growth, such as life sciences, information technology, and federal and military-related economic activity.”
- “Embrace regional and economic diversity, by investing in and transforming Maryland’s traditional sectors of agriculture, manufacturing and tourism.”
- “Make it easy to do business and live in Maryland (State, local and Federal), through transparency, predictability and automation.”

Another initiative launched in early 2011 by Governor O’Malley is Maryland Made Easy, an inter-agency effort to make it easier to do business in Maryland. Maryland Made Easy includes specific strategies to help improve Maryland’s business environment by streamlining processes, simplifying regulations and improving communication. Several strategies support Maryland Made Easy:

- Central Business Licensing (CBL) initiative which provides an on-line system to consolidate all State permits and licenses regardless of agency or type of business;
- FastTrack program to expedite state review of qualifying development projects that include job creation and promote growth in redevelopment areas; and
- State Highway Administration (SHA) Access Permit Process to make it easier for businesses to obtain permits for development projects.

State Economic Momentum Index

19 The 2008 and 2010 State New Economy Indices are not comparable because of slightly different indicators and methodologies, and therefore do not indicate changes in the states' economies.
20 The 2010 State New Economy Index, Benchmarking Economic Transformation in the States, The Information Technology & Innovation Foundation with financial assistance by the Kauffman Foundation
21 Governor O’Malley, Economic Development Commission Release Five-Year Plan to Position State for Growth in the New Economy, Governor’s press release, April 14, 2011
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

Indicator 1.3: Maryland Port Administration (MPA) total general cargo tonnage (millions)

Target: Enhanced cargo capacity

How are we doing? General cargo includes foreign and domestic waterborne cargo - it does not include bulk commodities, container tare weight, empty containers, or domestic non-waterborne cargo. The annual total tonnage moving across MPA’s terminals is a gross outcome measure of the attractiveness of MPA’s infrastructure and facilities. Although there is a correlation between facilities and cargo volumes, caution must be used because there are many factors outside MPA’s influence that impact the movement of freight, i.e. national and world economic trends, labor costs (here and at competing ports), value of the U.S. dollar, rail and highway service and rates, prolonged weather phenomena, and changes in vessel sizes. After six consecutive record breaking years, peaking at 9.1 million tons in 2008, total general cargo tonnage declined by 14.3% from 2008 to 2009. Tonnages began falling during the second half of the 2008 calendar year with steep drops in December 2008 and again in January 2009. Total general cargo tonnage continued to decline by an additional 2.6% from fiscal year 2009 to 2010 due to the global recession. However, tonnage was up 8.4% during the second half of fiscal year 2010 compared to the same period in the prior year. An increase of 14.5% in total general cargo tonnage from 2010 to 2011 indicates that recovery from the recession is progressing. The Port ranks 13th in the nation for total foreign cargo for both public and private terminals at the Port, moving up from 15th in 2009. The greatest percentage gains at MPA terminals were in imported roll-on/roll-off equipment and exported autos. The Port of Baltimore handles more roll-on/roll-off cargo than any other U.S. port. Ports America, under a 50 year contract with MPA, will construct a 50 foot berth for the Port that will result in increased business opportunities, and allow larger vessels to dock in Baltimore. The project completion is anticipated in the summer of 2012. The primary reasons for positive changes in general cargo tonnage include strong local market and diversified trade lanes that helped limit container declines, signed agreements with 6 companies, dredging Seagirt Marine Terminal’s berths, and exposure and recognition as one of the nations top auto ports by hosting the Journal of Commerce’s Auto Logistics Conference. The primary reasons for negative changes in general cargo tonnage include the global economic downturn which slowed international cargo volumes, and a plunge in U.S. auto sales to a record low of eight million vehicles per year.

Maryland Port Administration Total General Cargo Tonnage (Millions)

Maryland Department of Transportation 2010 and 2011 Annual Attainment Reports on Transportation System Performance, and Maryland Port Administration fiscal year 2012 MFR Performance Measure Profile
Maryland Department of Transportation, Maryland Port Administration, FY 2013 MFR budget book submission
Maryland Department of Transportation, Maryland Port Administration, FY 2011 MFR Performance Discussion
Maryland Department of Transportation, Maryland Port Administration, FY 2012 MFR Performance Discussion
Maryland Department of Transportation, Maryland Port Administration, FY 2013 MFR Performance Discussion
Maryland Department of Transportation, Maryland Port Administration, FY 2012 MFR Performance Discussion; Maryland Department of Transportation 2010 and 2011 Annual Attainment Reports on Transportation System Performance
Maryland Department of Transportation 2010 and 2011 Annual Attainment Reports on Transportation System Performance
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

Indicator 1.4: Annual Baltimore Washington International (BWI) Marshall Airport passenger growth rate

Target: Increased passenger usage of BWI Marshall

How are we doing? The recession and increased fuel prices have had a direct impact on aviation demand.\(^{30}\) The passenger growth rate slowed by 3.2 percentage points between 2006 and 2007, and continued a steep decline through 2008. Between 2007 and 2008 the number of passengers declined by a half million, taking the growth rate into negative territory (-2.64% in 2008). The number of passengers lost was fully regained in 2009, with a passenger growth rate of 2.27% between 2008 and 2009. During that same time period, air travel in the U.S. was down 6%.\(^{31}\) BWI Marshall Airport has weathered the recession better than other airports largely due to low cost carrier competition. BWI Marshall Airport and San Francisco International were the only two “large hub” airports to experience passenger growth in 2009.\(^{32}\) The passenger growth rate more than doubled from 2009 to 2010, bringing the 2010 growth rate to 4.69%. In 2010, 21.9 million passengers traveled through BWI Marshall. Passenger growth will be further facilitated by an upcoming major renovation of BWI Marshall Airport which will streamline security check-ins, eliminate a major passenger bottleneck, and give its number one carrier room to grow.

\(^{30}\) 2010 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation
\(^{31}\) 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation
\(^{32}\) The Baltimore Sun, article about the Southwest merger, September 28, 2010; Confirmed by Maryland Department of Transportation, Maryland Aviation Administration, October 11, 2010
Indicator 1.5: Number of non-stop markets served by BWI Marshall Airport

Target: Average number of domestic and international nonstop markets served at or above 70 per year

How are we doing? “Growth in the number of non-stop destinations served provides enhanced mobility options to passengers traveling to cities in the U.S. and around the world; increases attractiveness of BWI Marshall Airport as the airport of choice in the region; and reflects the success of MAA’s (Maryland Aviation Administration) marketing efforts to increase the competitiveness of BWI Marshall airport for business and leisure travel.”

Reasons for changes in the number of nonstop markets served include the addition of JetBlue Airways and Cape Air service; a period of high fuel prices followed by the economic downturn causing carriers to continue to cut capacity in both domestic and international markets; and retiring aircraft from airline fleets.

The number of non-stop markets served by BWI Marshall has fluctuated between 69 and 75 during the period of 2007 to 2011. The number of non-stop markets served dropped by 5.5% from 2007 to 2008, and remained at the 2008 level in 2009. The number of non-stop markets increased by 7.1% from 2009 to 2011, bringing the number to 75 - 2 more non-stop markets served than in 2007. BWI Marshall’s two largest carriers, Southwest and AirTran, have continued to initiate service in new markets, and AirTran has continued to increase international presence at BWI Marshall. Those two carriers merged in 2011 which is anticipated to provide more travel destination options, including service to small domestic cities and access to international markets in the Caribbean and Mexico. Delta increased frequencies to several large cities. BWI Marshall will continue to focus marketing campaigns on the advantages of using the airport, meet with targeted airlines to promote air service opportunities to BWI Marshall, and promote BWI Marshall as a convenient gateway to Washington, D.C.
Indicator 1.6: Total State sales tax revenue attributable to tourism (millions)

Target: Increased State sales tax revenue in tourism tax categories

How are we doing? The Comptroller and the Department of Business and Economic Development (DBED) have identified tax classification codes to identify tourism tax revenues, as well as percentages of revenues in each of these categories that are attributable to tourism (referred to as adjusted tourism codes). The state sales tax increased in January 2008 from 5% to 6%. For data comparability, fiscal year 2008 revenues shown below were adjusted to represent a 5% sales tax rate for the entire fiscal year. Beginning with fiscal year 2009, the sales tax revenue is based on a 6% tax rate, and therefore data prior to fiscal year 2009 are not comparable. Total State sales tax revenue attributable to tourism increased by 2.7% from 2007 through 2008. Revenues attributable to tourism remained stable between 2009 and 2010, and increased by 5.1% in 2011. Adjusted tourism codes performed twice as well as overall sales taxes during fiscal year 2011. Transportation and food account for the largest share of visitor spending, followed by spending on lodging, shopping, and entertainment.

State Sales Tax Revenue Attributable to Tourism (Millions)

- 2007 Actual: $290.3
- 2008 Actual: $298.2
- 2009 Actual: $346.3
- 2010 Actual: $342.0
- 2011 Actual: $359.5

Fiscal year 2010 data was corrected from what was reported last year.

Maryland Tourism Monitor, July 31, 2011 (a monthly report of Maryland travel and tourism trends as monitored by the Office of Tourism Development, Department of Business and Economic Development)

Tourism Marketing & Development Plan, Fiscal Year 2012, Maryland Tourism Development Board and the Office of Tourism Development
that Maryland's growth trend in Life Sciences continues even during down economic times increased 16.5% from 2006 to 2010, and the number of establishments has increased 34.3%. The data shows and the relatively narrow approach employed by some.39 “Maryland has been a national leader since the earliest days of the life sciences field due to the state’s perennial leading position in research and development.”40 Over 1,700 private sector establishments are directly involved in life sciences work in Maryland, the fifth highest concentration in the U.S. Maryland’s concentration of private life sciences employment is the ninth largest in the U.S. Maryland’s concentration of research universities, Federal agencies,41 and several Fortune 500 corporations position Maryland as a national leader not only in life sciences but in the broader STEM (Science, Technology, Engineering, and Math) related industries.42 The Baltimore metro region ranks second out of the 51 largest metro areas in tech job growth, according to Forbes magazine. Since 2001, high-tech jobs in Baltimore have grown 18.6%, while traditional tech regions such as Silicon Valley have suffered significant job losses. Deloitte’s 2011 Technology Fast 500 ranks the fastest growing technology, media, telecommunications, life sciences and clean technology companies in North America based on percentage fiscal year revenue growth from 2006 to 2010. Maryland is home to 18 of the companies, up from 17 in 2010. Five companies on the list received investment financing from the Maryland Department of Business and Economic Development.43

Ninety-four percent of all private life sciences jobs in Maryland are in the sub-sectors of Research and Medical Laboratories (74%), and Drugs and Pharmaceuticals (20%). Increased numbers of Research, Testing and Medical Laboratories continue to drive growth in the Bio sector. The number of private establishments in this sub-sector has increased 38.4%, and private employment in this sub-sector has increased 18.6% over the period of 2006 to 2010. Although the number of Drugs and Pharmaceuticals firms increased by only 4.8% from 2006 to 2010, employment in that sub-sector increased 18.8%. The average size of Drugs and Pharmaceuticals establishments is 101.1 workers, much larger than the total sector’s 19.2 workers per establishment. Over the past five years, employment has declined 11.3% in the Medical Devices and Equipment sub-sector, but the number of establishments has increased 3.6 percent. This could represent more efficient manufacturing practices. The Agricultural Feedstock and Chemicals sub-sector is small but growing. Although there was job loss during the recession in 2008 and 2009, employment increased 32.6% over the last 5 years – 2006 to 2010. The number of firms also increased 15.8%. Like the Medical Devices and Equipment sub-sector, the Agricultural Feedstock and Chemicals sub-sector is small and volatile. Overall, private employment in the Bio sector has increased 16.5% from 2006 to 2010, and the number of establishments has increased 34.3%. The data shows that Maryland’s growth trend in Life Sciences continues even during down economic times.

**Indicator 1.7 – 1.8:** Percent change over five years in the number of bioscience/life science establishments operating in Maryland

**Indicator 1.8:** Percent change over five years in average employment in bioscience/life science establishments in Maryland

**Target:** Steady growth in the bioscience/life science sector

**How are we doing?** These indicators include private bioscience/life science sector establishments and employment based on standard industry categories. The four bio industry sub-sectors included in the bio/life science definition for these two indicators are (1) Research, Testing and Medical Laboratories, (2) Medical Devices and Equipment, (3) Drugs and Pharmaceuticals, and (4) Agricultural Feedstock and Chemicals. There is not a universally accepted definition of life sciences. The definition used for these indicators is based on one presented by Battelle Technology Partnership Practice because it is balanced between overly broad definitions and the relatively narrow approach employed by some.39 “Maryland has been a national leader since the earliest days of the life sciences field due to the state’s perennial leading position in research and development.”40 Over 1,700 private sector establishments are directly involved in life sciences work in Maryland, the fifth highest concentration in the U.S. Maryland’s concentration of private life sciences employment is the ninth largest in the U.S. Maryland’s concentration of research universities, Federal agencies,41 and several Fortune 500 corporations position Maryland as a national leader not only in life sciences but in the broader STEM (Science, Technology, Engineering, and Math) related industries.42 The Baltimore metro region ranks second out of the 51 largest metro areas in tech job growth, according to Forbes magazine. Since 2001, high-tech jobs in Baltimore have grown 18.6%, while traditional tech regions such as Silicon Valley have suffered significant job losses. Deloitte’s 2011 Technology Fast 500 ranks the fastest growing technology, media, telecommunications, life sciences and clean technology companies in North America based on percentage fiscal year revenue growth from 2006 to 2010. Maryland is home to 18 of the companies, up from 17 in 2010. Five companies on the list received investment financing from the Maryland Department of Business and Economic Development.43

39 In its Life Sciences Maryland report (Life Sciences Maryland: Jobs Analysis & Economic Impact Report 2011, Maryland Department of Business & Economic Development - http://www.choosemaryland.org/aboutdbed/Documents/ProgramReports/Life_Sciences_Maryland.pdf), DBED defines private sector life sciences as “life sciences activity at establishments or facilities located in Maryland, owned by a non-academic private firm or organization, and based on standard industry categories (North American Industrial Classification System – NAICS – used by the Bureau of Labor Statistics) to reflect core life science activities.” Data regarding academic and federal bioscience establishments are not reported by NAICS codes, and therefore are not included in these indicators. Data for this report have been revised based on this definition.

40 Life Sciences Maryland: Jobs Analysis & Economic Impact Report 2011, Maryland Department of Business & Economic Development

41 Economic Pulse, An Overview of Maryland’s Economic Indicators, November 30, 2011; The Best Cities for Technology Jobs, Forbes magazine, November 18, 2011

42 Enterprising States, May 2010, U.S. Chamber of Commerce and the National Chamber Foundation

The Milken State Technology and Science Index “provides a nationwide benchmark for states to assess their science and technology capabilities, and whether they have the ecosystems for converting those capabilities into companies and high-paying jobs.” The Index for 2010 ranked Maryland second overall in the nation (same rank as in the 2008 Index) and first in the major composite index of human capital capacity, and second in academic research and development per capita. Marylan d has a number of initiatives in place to support growth in technology, bioscience in particular. The BioMaryland 2020 State Strategic Plan for Life Sciences was developed by the Maryland Life Sciences Advisory Board. Bio 2020 provides a $1.3 billion investment in the State’s life science industry over 10 years which will attract and grow the bioscience opportunities of tomorrow in Maryland.

The Maryland Biotechnology Center was created in 2009 by Governor Martin O’Malley as one of the first initiatives of BioMaryland 2020. “The Center is a portal to programs and resources intended to grow and strengthen the State’s bioscience community. The Center, in collaboration with some of the State’s finest partner programs, will serve to integrate entrepreneurial strategies to stimulate the transformation of scientific discovery and intellectual assets into capital formation and business development.” A central component of the BioMaryland 2020 initiative is the Biotechnology Investment Incentive Tax Credit Program that allows for a tax break for investors in qualified biotechnology companies. Other resources supportive of Maryland’s bioscience industry include the Maryland Technology Incubator Program run by the Maryland Technology Development Corporation (TEDCO); the Maryland Technology Enterprise Institute (Mtech) of the University of Maryland that educates the next generation of technology entrepreneurs, creates successful technology ventures, and connects companies with university resources to help them succeed; and InvestMaryland that is aimed at creating a public-private partnership to fuel venture capital investment in Maryland’s “Innovation Economy” such as bioscience companies.

### Percent Change in Number of Bioscience Establishments Operating in Maryland

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Bioscience Establishments</th>
<th>5-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>1,305</td>
<td>32.9%</td>
</tr>
<tr>
<td>2007</td>
<td>1,464</td>
<td>39.3%</td>
</tr>
<tr>
<td>2008</td>
<td>1,558</td>
<td>36.7%</td>
</tr>
<tr>
<td>2009</td>
<td>1,654</td>
<td>34.7%</td>
</tr>
<tr>
<td>2010</td>
<td>1,752</td>
<td>34.3%</td>
</tr>
</tbody>
</table>

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44 The State Technology and Science Index consists of 79 indicators that are subdivided into five equally-weighted major composite indexes. The research and development composite index gauges a region’s R&D capabilities and includes such measures as industrial, academic, and federal R&D funding, Small Business Innovation Research awards, and the Small Business Technology Transfer program. The human capital capacity composite index weighs various areas of a region’s educational attainment, including the number of bachelor’s, master’s, and Ph.D.s relative to a state’s population, and measures of specific science, engineering, and technology degrees - State Technology and Science Index 2010, Enduring Lessons for the Intangible Economy, Executive Summary, January 2011

45 Department of Business and Economic Development Web site: [http://www.choosemaryland.org/industry/Health/default.aspx](http://www.choosemaryland.org/industry/Health/default.aspx)

46 Maryland Biotechnology Center Web site, [http://marylandbiocenter.org/Pages/Homepage.aspx](http://marylandbiocenter.org/Pages/Homepage.aspx)

47 [http://www.mtech.umd.edu/](http://www.mtech.umd.edu/)

48 Press release, June 1, 2010, “Governor Martin O’Malley Announces InvestMaryland Proposal to Spur Jobs, Investments in Maryland’s Innovation Economy”
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

Percent Change in Average Employment in Bioscience Establishments Operating in Maryland

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
<th>5-Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>28,855</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>31,928</td>
<td>19.1%</td>
</tr>
<tr>
<td>2008</td>
<td>32,244</td>
<td>21.7%</td>
</tr>
<tr>
<td>2009</td>
<td>32,906</td>
<td>18.3%</td>
</tr>
<tr>
<td>2010</td>
<td>33,602</td>
<td>16.5%</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

IMPLEMENTING A COMPREHENSIVE TRANSPORTATION POLICY THAT CONTRIBUTES TO ECONOMIC DEVELOPMENT, JOB GROWTH, AND QUALITY OF LIFE, AS WELL AS PROTECTS THE ENVIRONMENT AND THE HEALTH OF NEIGHBORHOODS AND RESIDENTS

Indicator 1.9:  Percent of State system roadway mileage with acceptable ride quality

Target:  At least 84% with acceptable ride quality

How are we doing?  “The traveling public has identified acceptable ride quality (smoothness or roughness of the pavement) as a priority. Ride quality facilitates mobility, efficiency, and safe movement of people and goods within Maryland.” Road condition is affected by many factors, including weather, traffic volume and vehicle type, the presence or absence of an effective preventive maintenance program, and population density. The Highway Statistics Report produced by Federal Highway Administration (FHWA) shows that the ride quality on Maryland roadways is average compared to other states’ roadways on the National Highway System. During the period of calendar years 2006 through 2009, the percent of State system roadway mileage with acceptable ride quality ratings increased by one percentage point per year to 87% in 2009. The percent of State system roadway mileage with acceptable ride quality declined by one percentage point to 86% in 2010. State system roadway mileage with acceptable ride quality condition is due to the cumulative effect of increased investment in pavement maintenance, and implementation of business plan strategies to maintain ride quality condition of the roadway mileage with limited resources. Additional projects were funded using American Recovery and Reinvestment Act (ARRA) funds.

Percent of Maryland State System Roadway Mileage With Acceptable Ride Quality

- CY 2006 Actual: 84%
- CY 2007 Actual: 85%
- CY 2008 Actual: 86%
- CY 2009 Actual: 87%
- CY 2010 Actual: 86%

Acceptable ride quality is defined as the percent of roadway network in very good, good and fair condition in terms of the five Federal Highway Administration (FHWA) condition states for ride quality. Ride quality is represented by the International Roughness Index (IRI).

50 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation
51 State Comparative Performance Measurement, Transportation, a national report from the Council of State Governments, 2009
52 Maryland Department of Transportation, State Highway Administration FY 2013 MFR Performance Discussions
53 Maryland Department of Transportation, State Highway Administration FY 2012 and FY 2013 MFR Performance Discussions
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

Indicator 1.10: Percent of bridges along the MDOT highway network that will allow all legally loaded vehicles to safely traverse

Target: 100% of bridges allow all legally loaded vehicles to safely traverse

How are we doing? Road condition not only impacts transportation (ride quality, commute times, fuel consumption, and vehicle maintenance costs), but also commerce and safety. Maintaining safe conditions along the MDOT highway network is essential to commerce in terms of movement of goods and provision of services throughout the State. Maintaining bridges along the MDOT highway network free from weight restrictions is the State Highway Administration’s top structural priority. Over the period of 2006 through 2010, 99% of Maryland’s bridges allowed all legally loaded vehicles to safely traverse. In 2010, 2,805 of the 2,832 bridges along the MDOT highway network allowed all legally loaded vehicles to safely traverse.

The 2011 Report Card for Maryland’s Infrastructure prepared by the Maryland Section of the American Society of Civil Engineers assigned a grade of B- for Maryland bridges. This grade surpasses the national grade of C assigned by the American Society of Civil Engineers 2009 Report Card for America’s Infrastructure. The report looked at all bridges in Maryland, approximately 55% of which are on the State highway system and which represent more than 80% of the total bridge deck area in Maryland. The study looked at functionally obsolete bridges, structurally deficient bridges, and the capacity of bridges to carry legally loaded vehicles. The report commended Maryland for making good progress toward reducing the number of structurally deficient bridges, and pointed out that the number of weight posted bridges that are State owned is relatively low and has steadily declined over the last decade. The report also stated that “Maryland has well-planned asset management and maintenance programs.”

Percent of Bridges Along the MDOT Highway Network That Allow All Legally Loaded Vehicles to Safely Traverse

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>99%</td>
<td>99%</td>
<td>99%</td>
<td>99%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Data reflects Federal reporting in April of each year.
State Comparative Performance Measurement, Transportation, a national report from the Council of State Governments.
Maryland Department of Transportation fiscal year 2012 MFR Performance Discussion
2011 Report Card for Maryland’s Infrastructure, Maryland Section of the American Society of Civil Engineers
**Indicator 1.11:** Percent of the Maryland State Highway Administration Network in overall preferred maintenance condition

**Target:** 84% in overall preferred maintenance condition

**How are we doing?** The overall condition of the State Highway Administration Network reflects how well asset management strategies, improved operations, and technology have sustained the quality and safety of existing roadways. A Composite Level of Service is assessed using the Maryland Condition Assessment Reporting System (MCARS). Twenty-one maintenance elements in four categories are assessed. The categories are shoulder, drainage, traffic control/safety, and roadside. Actual maintenance conditions are compared against desired conditions. The percentage of the State Highway Administration Network in overall preferred maintenance condition remained relatively stable over the period of 2006 through 2010 with the exception of 2008 when performance declined by 4% from 2007. Performance returned close to prior levels in 2009, increasing by 6.4% between 2008 and 2009. The percentage of the State Highway Administration Network in overall preferred maintenance condition remained near the 2009 level in 2010.

![Percentage of the Maryland State Highway Administration Highway Network in Overall Preferred Maintenance Condition](image)

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58 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation
59 Managing for Results Performance Measure Profile Fiscal Year 2012, State Highway Administration, Maryland Department of Transportation
60 Data corrected by Maryland Department of Transportation from what was reported in the FY 2011 MFR.
Indicator 1.12: Total number of passenger trips per service mile traveled for bus and rail transit\(^{61}\)

Target: Maximized passenger trips per service mile (increased service productivity)

How are we doing? This measure is a service productivity metric that indicates the level of transit service available on Maryland Transit Administration (MTA) modes of transit, and in use by the general public, i.e. utilized capacity on MTA modes of transit.\(^{62}\) An increase or decrease in passenger trips per service mile means that in the average service mile, more or fewer riders are using the service offered.\(^{63}\) The number of passenger trips per service mile increased by 8.7% from 2007 to 2009, dropped by 12.0% to 2.2 in 2010\(^{64}\), and then increased by 4.5% in 2011, returning to the 2006 level. During 2007 through 2009, high gas prices were a disincentive to driving, and an incentive to use public modes of transportation. Additionally, growth in State population and Federal employment contributed to increases in commuter ridership.\(^{65}\) The decrease in ridership on most modes due to a decrease in fuel prices, the economy and exceptional snow events in December 2009 and in February 2010 contributed to the decline in passenger trips in 2010.\(^{66}\) Strategies to improve ridership include improved scheduling, expanded customer information services, and increased service availability. An additional MTA strategy to increase utilization is to expand partnerships with employers, government agencies and educational institutions by enrolling riders in Commuter Choice Maryland and the College Pass Program.\(^{67}\) Creating a sustainable transit system to reduce highway congestion, and increasing transit ridership continue to be major priorities of the O'Malley Brown administration.

![Total Number of Passenger Trips Per Service Mile Traveled for Bus and Rail Transit](chart)

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\(^{61}\) A service mile is each mile for which a transit vehicle is in service and accepting customers, i.e. generating revenue. This measure is derived by dividing the total passenger trips by total revenue (service) miles traveled, Maryland Transit Administration Performance Measure Profile, FY 2012

\(^{62}\) 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

\(^{63}\) Maryland Transit Administration Performance Measure Profile, fiscal year 2013 MFR

\(^{64}\) 2010 data was updated for actual data

\(^{65}\) Maryland Transit Administration FY 2010 MFR Performance Discussion

\(^{66}\) 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

\(^{67}\) Maryland Transit Administration FY 2012 and FY 2013 MFR Strategies
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

CREATING STRONG VIABLE COMMUNITIES, REVITALIZING DECLINING NEIGHBORHOODS, AND GROWING MARYLAND’S MIDDLE CLASS BY EXPANDING OPPORTUNITIES FOR ALL MARYLAND RESIDENTS TO CONTRIBUTE TO, SUCCEED AND PROSPER IN THE WORKFORCE

Indicator 1.13:  Ratio between Maryland’s unemployment rate and the U.S. rate

Target:  Increased employment

How are we doing?  Maryland’s unemployment rate has continued to compare favorably to the U.S. unemployment rate, ranging from 16.5% to 26.7% below the average 12 month U.S. rate during the period of November 2006 through October 2011. Over the last two twelve month periods ending in October, the Maryland average unemployment rate was 23.9% and 21.8% below the U.S. unemployment rate. The ratio of Maryland’s unemployment rate to the U.S. rate was nearly the same in 2006 and 2007, declined by 12.2% in 2008, increased by 3.8% in 2009, remained at the 2009 level in 2010, and increased slightly by 2.7% in 2011. In October 2011, forty states registered unemployment rate decreases from a year earlier (including Maryland), eight states and the District of Columbia had increases, and two states experienced no change.\(^6^8\) Vulnerable families have been hit hard by the recession. Eight percent (8%) of children in Maryland had at least one unemployed parent in 2010. Nationally 11% of children had at least one unemployed parent.\(^6^9\) Maryland has provided support to its unemployed through the Federal Emergency Unemployment Compensation (EUC) program which provides additional unemployment benefits for those who have exhausted State benefits. The U.S. Congress temporarily extended the Emergency Unemployment Compensation Program (EUC) and the Extended Benefits (EB) Program for two months through February 28, 2011.

Ratio Between Maryland's Unemployment Rate and the U.S. Rate


\(^{69}\) 2011 Kids Count Data Book, The Annie E. Casey Foundation, statistics for Maryland
Indicato 1.14: Percent change in Maryland employment from 2001 baseline (12 month average)

Target: Create, save, or place Marylanders into 250,000 jobs by the end of 2012

How are we doing? Maryland’s distinctive economic strengths, principally its proximity to the federal government, has positioned the state for stability in employment and contracting. This has enabled Maryland to perform better than the rest of the country during the course of the recession, and it is likely to continue to do so. The strength of the state’s core health and education services industries also contribute to Maryland’s economic stability, economists agree. Maryland has shown strong employment growth over the 2001 baseline of 2.7 million employed, increasing in 2007 to 6.6% growth (2.9 million employed) over 2001. In 2008, growth continued at 6% over 2001. The national economic downturn significantly impacted Maryland’s labor market in 2009. Maryland’s 2009 employment (2.8 million) was only 1.6% over the 2001 baseline. There was virtually no employment growth in 2010. In 2011 there was slight growth of 1.9% from the 2001 baseline, with employment returning to the 2009 level. Gallup’s Job Creation Index for the first half of 2010 ranked Maryland along with West Virginia as the seventh best job market in the nation. Maryland benefited from the presence of Federal government hiring. Maryland is well positioned to benefit from further job growth related to the Federal Base Realignment and Closure (BRAC), and has benefited from the Federal American Recovery and Reinvestment Plan. Between January and September 2010, Maryland created 36,400 new jobs, the best job growth during that period since 2000, growing three times as fast as the rest of the country.

The O’Malley Brown administration is focusing on a variety of initiatives to create more jobs in Maryland. One way that Maryland is growing jobs is to offer a number of targeted tax credit programs such as the Job Creation and Recovery Tax Credit, tax credits for Enterprise Zones, and Research and Development Tax Credits. A major workforce development initiative launched in March 2010 is Skills2Compete-Maryland which works to align job creation efforts with the skills-training needed for Maryland’s workforce to fill those jobs. The demand for middle-skill workers in the State will remain high in the decade between 2006 and 2016, with more than 434,000 middle-skill job openings - 42 percent of all job openings - expected during this time. The Skills2Compete-Maryland initiative will help to ensure that the State’s workforce has the skills needed to meet business demand, foster innovation, and grow shared prosperity. The Department of Labor, Licensing, and Regulation upgraded the MD Workforce Exchange to new technology which aggregates every job search website, every employer website, and every job posting in Maryland to provide a more dynamic virtual One Stop Employment Center. The Maryland Workforce Exchange provides Maryland job seekers with more resources and better access to job openings.

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70 Governor’s Delivery Unit goal
71 Alfredo Goyburu, economist with Maryland Department of Business and Economic Development, Doing Business in Maryland, A Supplement to the Daily Record, November 2009, (joint effort by Maryland Department of Business and Economic Development and the Daily Record; endorsed by Governor O’Malley)
72 2010 data corrected from what was reported last year.
74 Jobs Across Maryland, A Message from Governor Martin O’Malley, October 22, 2010
75 One Maryland, A Message from the Governor, Building a World-Class Workforce, March 2, 2010
76 Maryland’s Forgotten Middle Skill Jobs, National Skills Coalition, March 2010
77 Governor’s Delivery Unit and StateStat Skills Stock Take, September 29, 2010
78 The Workforce Exchange may be found at: https://mwejobs.maryland.gov/
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

Percent Change in Maryland Employment from 2001 Baseline
(12 Month Average - Nov. of Prior Year to Oct. of Current Year)

<table>
<thead>
<tr>
<th>Year</th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>6.55%</td>
<td>6.02%</td>
<td>1.57%</td>
<td>0.83%</td>
<td>1.90%</td>
</tr>
</tbody>
</table>

(10% 9% 8% 7% 6% 5% 4% 3% 2% 1% 0%)
**KEY PERFORMANCE AREA 1**  
**IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY**

**Indicator 1.15:** Rate that Workforce Investment Act (WIA) adult employment trainees enter employment

**Indicator 1.16:** Workforce Investment Act adult program participant employment retention rate

**Target:** Meet or exceed the Federal standard for entered and retained employment

**How are we doing?** Entered employment lost 2008 gains in 2009, and remained near the 2009 level through 2011. Employment retention returned to the 2007 level in 2009 and remained at that level through 2011. Both the rate by which Workforce Investment Act adult program participants entered employment and retained employment were near the same levels in 2011 as they were in 2007. Entered employment fell short of the negotiated Federal standard during the timeframe of 2007 through 2011, ranging from 5.8 percentage points minimum to 12.7 percentage points maximum. The employment retention rate exceeded the negotiated Federal standard in 2010 and 2011, and nearly met the standard in 2007 and 2009. Employment retention fell short of the negotiated standard in 2008 by 5.2 percentage points. The U.S. Department of Labor (USDOL), Employment and Training Administration (ETA) considers attainment by the states of 80% or more of the Federal standard as acceptable performance.\(^\text{79}\) Therefore, although the entered employment and employment retention rates were below the negotiated Federal standard during the years stated above, the rates were within the acceptable range of 80% of the negotiated standard for all years 2007 through 2011. An effort which will enhance attainment of employment is the Skills2Compete initiative that involves establishing a relationship with the WIA One-Stop Job Services Centers. This relationship will contribute to increasing the number of Marylanders who receive skills training.

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**Rate that WIA Adult Employment Trainees Enter Employment**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate (%)</td>
<td>91%</td>
<td>89%</td>
<td>86%</td>
<td>84%</td>
<td>84%</td>
</tr>
</tbody>
</table>

\(^\text{79}\) Department of Labor, Licensing, and Regulation
KEY PERFORMANCE AREA 1
IMPROVING ECONOMIC COMPETITIVENESS, AND MAINTAINING A ROBUST ECONOMY

WIA Adult Program Participant Employment Retention Rate
**Indicator 1.17:** Annual percent change in Maryland per capita personal income (estimated)\(^80\)

**Target:** Increased per capita personal income

**How are we doing?** Annual estimates of per capita personal income are an indicator of economic well-being of the residents of a state. Although the per capita personal income for both Maryland and the U.S increased each year over the period of 2006 through 2008, the annual percent change slowed in each year. Although Maryland’s per capita personal income declined by 2.4\% in 2009, the U.S. per capita personal income declined by more than two times that, signaling greater strength in Maryland’s economy during the recession. In 2009, Maryland’s per capita personal income of $49,070 was 22.7\% higher than the national average. In 2010, the change in Maryland’s per capital personal income came out of negative territory, and the average Maryland per capita personal income increased by $1,396 (2.9\%) over the 2009 level. The U.S. percent increase was nearly the same as for Maryland at 2.8\%.

Per capita income growth is one of the seven variables in the Healthy Economy measure of the Camelot Index. The Index ranks states on six “quality of life” measures of which a Healthy Economy is one.\(^81\) Maryland was ranked fifth in the nation in the Healthy Economy component of the 2011 Camelot Index.

**Annual Percent Change in Per Capita Personal Income**

<table>
<thead>
<tr>
<th>Year</th>
<th>Maryland</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2006</td>
<td>5.60%</td>
<td>6.50%</td>
</tr>
<tr>
<td>CY 2007</td>
<td>4.42%</td>
<td>4.72%</td>
</tr>
<tr>
<td>CY 2008</td>
<td>4.30%</td>
<td>3.65%</td>
</tr>
<tr>
<td>CY 2009</td>
<td>-2.42%</td>
<td>-5.13%</td>
</tr>
<tr>
<td>CY 2010</td>
<td>2.93%</td>
<td>2.83%</td>
</tr>
</tbody>
</table>

\(^80\) Personal income is income received by persons from all sources. It is the sum of net earnings by place of residence, property income, and personal current transfer receipts - U.S. Department of Commerce, Bureau of Economic Analysis, News Release, State Personal Income: Second Quarter 2010, September 20, 2010.

\(^81\) Other measures are healthy people, a crime-free state, an educated population, a healthy society, and prudently managed state government. The Index is based on the assumption that the ultimate measures of state performance deal with what is important to citizens. The 2011 Camelot Index, State Policy Reports, Volume 29, Issue 6.
Indicator 1.18: Home ownership (estimated)

Target: Increased home ownership

How are we doing? Home ownership in Maryland experienced a slow decline of 1% to 1.5% each year from 2006 to 2010 despite the recession, home foreclosure crisis, and changes in lending practices. Home ownership was 5.1% lower in 2010 than in 2006. Maryland’s home ownership rate has exceeded the U.S. rate by 3.8 to 2.0 percentage points each year from 2006 through 2010. Foreclosure mediation legislation, foreclosure reform laws that extend time for a solution to foreclosure, and changing the foreclosure process protect those Marylanders fortunate enough to own their own homes.

Home Ownership Rate

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>72.6%</td>
<td>71.7%</td>
<td>70.6%</td>
<td>69.6%</td>
</tr>
<tr>
<td>U.S.</td>
<td>68.8%</td>
<td>68.1%</td>
<td>67.8%</td>
<td>67.4%</td>
</tr>
</tbody>
</table>
**Indicator 1.19:** Value of commercial rehabilitation expenditures approved for the State Sustainable Communities Rehabilitation Tax Credit (SCTC) for restoration and preservation of historic properties, and percent of “other” investment (millions)

**Target:** Other investment of at least 80% per project

**How are we doing?** The Maryland Sustainable Communities Rehabilitation Tax Credit Program is administered by the Maryland Historical Trust and provides Maryland income tax credits based on a percentage of the qualified capital costs expended in the rehabilitation of “certified historic structures” and non-historic “qualified rehabilitated structures.” Over time, significant changes have been made to the program. Legislation passed during the 2010 session extended and altered the Heritage Structure Rehabilitation Tax Credit to be the Sustainable Communities Tax Credit, but retained the commercial credit as a budgeted tax credit. The 2010 legislation also expanded eligibility for the credit to qualified rehabilitated non-historic commercial buildings located in a Main Street Maryland Community, or beginning in fiscal year 2012, a sustainable community as defined by statute. The 2010 changes also included a 5% increase in the 20% credit available to historic projects which qualify as high performance structures (LEED Gold certified or equivalent). Although the value of commercial rehabilitation expenditures has been much lower for the last three years than in 2008, the percent of other investment leveraged by the SCTC for rehabilitation of historic commercial properties remained stable from 2007 through 2011, achieving the performance target for each of the last 5 years.

![Value of Commercial Rehabilitation Expenditures Approved for the State Sustainable Communities Rehabilitation Tax Credit (SCTC) - Millions](image)

82 Major Issues Review 2007-2010, Department of Legislative Services
83 Maryland Department of Planning, November 8, 2011
**Indicator 1.20**: Value of residential rehabilitation expenditures approved for the State Sustainable Communities Rehabilitation Tax Credit (SCTC) for restoration and preservation of historic properties, and percent of private investment (millions)

**Target**: Private investment of at least 80% per project

**How are we doing?** Although the value of residential rehabilitation expenditures has declined each year from 2007 through 2011, the percent of private investment leveraged by the SCTC for rehabilitation of single family, owner-occupied historic residential properties remained stable from 2007 through 2011. The performance target was achieved for each of the last 5 years.
MARYLAND: SMART, GREEN AND GROWING

PROTECTING AND PRESERVING OUR QUALITY OF LIFE AND OUR NATURAL RESOURCES FOR A CLEANER AND HEALTHIER MARYLAND

GOAL: All Marylanders will live in a healthy environment and enjoy a revitalized Chesapeake Bay and Maryland's open spaces.

Maryland will focus on protecting and preserving the air we breathe, the water we drink, the land we use, and the energy we consume for today and for generations to come.
MARYLAND: SMART, GREEN AND GROWING

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Indicators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorable Performance (Change &gt;10%)</td>
<td>6</td>
<td>40.0%</td>
</tr>
<tr>
<td>Favorable Performance (3% to 10% Change)</td>
<td>5</td>
<td>33.3%</td>
</tr>
<tr>
<td>Stable Performance (0% - 2% Change)</td>
<td>1</td>
<td>6.7%</td>
</tr>
<tr>
<td>Unfavorable Performance (3% to 10% Change)</td>
<td>1</td>
<td>6.7%</td>
</tr>
<tr>
<td>Unfavorable Performance (Change &gt; 10%)</td>
<td>2</td>
<td>13.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agency/ Data Source</th>
<th>Indicator</th>
<th>Most Recent Data</th>
<th>4 Years Prior</th>
<th>4 Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>UMCES EcoCheck</td>
<td>Chesapeake Bay Habitat Health Index (2006 - 2010)</td>
<td>40%</td>
<td>37%</td>
<td>8.1%</td>
</tr>
<tr>
<td>DNR</td>
<td>Acres of submerged aquatic vegetation (2006 - 2010)</td>
<td>40,193</td>
<td>32,586</td>
<td>23.3%</td>
</tr>
<tr>
<td>DNR</td>
<td>Dredge survey index of stock size - crabs (2007 - 2011)</td>
<td>46</td>
<td>28</td>
<td>64.3%</td>
</tr>
<tr>
<td>DNR</td>
<td>Oyster biomass index (2007 - 2011)</td>
<td>0.9</td>
<td>0.9</td>
<td>0.0%</td>
</tr>
<tr>
<td>DNR</td>
<td>Estimated nitrogen load to the Chesapeake Bay from Maryland (in million lbs.) (2007 - 2011)</td>
<td>50.98</td>
<td>53.20</td>
<td>-4.2%</td>
</tr>
<tr>
<td>MDA</td>
<td>Acres of cover crops planted (2007 - 2011)</td>
<td>400,331</td>
<td>241,914</td>
<td>65.5%</td>
</tr>
<tr>
<td>MDE</td>
<td>Waters impaired by nutrients per the Integrated Report of Surface Water Quality (2002 - 2010)</td>
<td>102</td>
<td>123</td>
<td>-17.1%</td>
</tr>
<tr>
<td>MDE</td>
<td>Percent of Marylanders served by public water systems in significant compliance with all new and existing regulations (Data for 2009 is not comparable to 2006-2008) (2009 - 2011)</td>
<td>83%</td>
<td>87%</td>
<td>-4.6%</td>
</tr>
<tr>
<td>MDE</td>
<td>3 year average of days the 8 hour ozone standard was exceeded (2007 - 2011)</td>
<td>27.0</td>
<td>45.3</td>
<td>-40.4%</td>
</tr>
<tr>
<td>MDE</td>
<td>Percent of oil-contaminated sites cleaned-up (2007 - 2011)</td>
<td>96%</td>
<td>91%</td>
<td>5.5%</td>
</tr>
<tr>
<td>DNR</td>
<td>Total acres preserved by all land preservation programs (2007 - 2011)</td>
<td>1,449,884</td>
<td>1,355,272</td>
<td>7.0%</td>
</tr>
<tr>
<td>Agency/ Data Source</td>
<td>Indicator</td>
<td>Most Recent Data Available</td>
<td>4 Years Prior</td>
<td>4 Year Change</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>DGS</td>
<td>Percent change from the base year (fiscal year 2008) in energy consumption by all State government facilities (owned and leased) (2009 -2011 - shows difference rather than percent change)</td>
<td>-6.68%</td>
<td>0.00%</td>
<td>-6.7%</td>
</tr>
<tr>
<td>MEA</td>
<td>Percent change in per capita electricity consumption compared to the 2007 baseline (12.32 megawatt hours) in megawatt hours (2008 - 2010)</td>
<td>-1.50%</td>
<td>-2.23%</td>
<td>-32.7%</td>
</tr>
<tr>
<td>MEA DBM</td>
<td>Percent of newly purchased light duty vehicles in the State vehicle fleet that are hybrid or alternative fueled vehicles (2007 - 2011)</td>
<td>31.5%</td>
<td>26.9%</td>
<td>17.1%</td>
</tr>
<tr>
<td>MEA</td>
<td>Percent change from the prior year in number of alternative fuel vehicles and hybrid-electric vehicles registered in Maryland (2007 - 2011)</td>
<td>-48%</td>
<td>71%</td>
<td>-167.6%</td>
</tr>
</tbody>
</table>
**Indicator 1.1:** Chesapeake Bay Habitat Health Index for Maryland

**Target:** Chesapeake Bay Program goals achieved

**How are we doing?** The Chesapeake Bay Habitat Health Index measures the progress of three water quality indicators and three biotic indicators toward scientifically derived ecological thresholds or goals. These indicators relate to the management objectives in the Chesapeake 2000 Agreement, and represent key ecological processes. The six indicators are combined into one overarching Bay Health Index. Health of the Chesapeake Bay is reported upon annually in the Chesapeake Bay Report Card. Factors that impact health of the Bay and Watershed are shown in the table below.

Bay health improved from 2000 to 2002 because of successive dry years. Wet conditions washing excess sediment and nutrients into the Bay during 2003 caused the Bay-wide score to decline from C+ in 2002 to D+ in 2003. Recovery from the wet conditions in 2003 has been gradual. The Bay-wide health score of C in 2009 is the best Bay-wide score since 2002. The improvements in 2009 in overall Bay health likely reflect reduced nutrient and sediment loads from the Susquehanna River (which provides half of the freshwater flows to the Bay in average years), whose watershed received less precipitation than average in 2009.

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1 Data and analyses are from the annual Chesapeake Bay Report Cards produced by Chesapeake EcoCheck, a partnership between the National Oceanic and Atmospheric Administration (NOAA) and the University of Maryland Center for Environmental Science (UMCES)

2 The three water quality indicators are chlorophyll a, dissolved oxygen, and water clarity; the three biotic indicators are submerged aquatic vegetation, Benthic Index of Biotic Integrity, and Phytoplankton Index of Biotic Integrity.

3 Chesapeake Bay Health and Restoration Assessment: Executive Summary, 3/10/09, Chesapeake Bay Program, www.chesapeakebay.net

4 During wet years the Bay’s health deteriorates and during dry years it improves - 2008 Chesapeake Bay Health Report Card; the full report may be found at: http://www.eco-check.org/reportcard/chesapeake/2008/overview/.

5 Chesapeake Bay Report Card 2009
The data presented in the graph on the next page are for the Maryland portion of the Chesapeake Bay and Bay-wide. The scores for the Maryland portion of the Bay have followed the same trend as the Bay-wide scores. After improving by 9 percentage points (28%) between 2003 and 2004 to a grade of C-, health of the Maryland portion of the Bay received a D+ for each year 2005 through 2007. From 2007 to 2009, Maryland’s score improved by 7 percentage points (18.4%) and returned to a grade of C-. In 2009, looking at Bay-wide ecosystem health, the regions with the best and worst grades are in Maryland. The Upper Western Shore was the top-ranked region for the third year in a row with a score of B-. The Patapsco and Back Rivers were the lowest ranked region in 2009, with a score of F. In 2010 the health of the overall Bay as well as the Maryland portion of the Bay declined for the first time since 2006. Between 2009 and 2010, Maryland’s score dropped by five percentage points (11%) returning to the 2008 score of C–, and the score for overall health of the Bay declined by four percentage points (8.7%), also to a score of C–.

The varying primary nitrogen sources (for example agriculture and point sources) and the Bay health scores highlight the need for targeted implementation of best management practices. Some of the most important and new best management practices being undertaken in agriculture and urban areas include cover crops, septic upgrades, stormwater management control, and enhanced nutrient removal through upgraded wastewater treatment plants.7

There is a renewed push at the Federal and state levels to restore the health of the Chesapeake Bay. In May 2009, President Obama issued an Executive Order for the Protection and Restoration of the Chesapeake Bay. The Federal Environmental Protection Agency (EPA) is leading a major initiative to establish and oversee achievement of a strict “pollution diet” known as a Total Maximum Daily Load (TMDL), that will drive actions to clean local waters and the Chesapeake Bay.8 Maryland, as well as the other five jurisdictions in the Bay watershed, prepared a Phase I Watershed Implementation Plan (WIP) detailing how the State will accomplish its portion of the pollution diet. The Phase I WIP is part of a 3-phased planning process to achieve nutrient and sediment clean-up goals for the Chesapeake Bay. Maryland’s Phase I of the WIP is supported by a series of two-year milestones for achieving specific near-term pollution reduction targets needed to keep pace with long-term restoration commitments. EPA’s September 24, 2010 evaluation of Maryland’s draft Plan stated that “Maryland developed the most substantial Watershed Implementation Plan and is committed to having practices in place by 2020 to meet the allocations, and by 2017 to achieve 70% of reductions.” The final Plan was submitted to EPA in December 2010 and has been accepted. The final Bay TMDL was established in December 2010. Maryland began working with local teams in 2011 to develop a Phase II WIP. Phase II of the planning process encompasses development of significantly more detailed work plans for the strategies in the Final Phase I WIP.

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6 It is not possible to completely separate Maryland data from Bay reporting regions. Three of the regions include parts of Virginia - Lower Eastern Shore, Mid Bay, and Potomac River. Per the University of Maryland Center for Environmental Science, in the broad scheme, Maryland data presented above is not affected much by including data for parts of Virginia.

7 Overview – 2010 Chesapeake Bay Report Card – Chesapeake EcoCheck

8 Maryland’s Chesapeake Bay Tributary Strategy Statewide Implementation Plan of January 2008 indicated if the water quality standards are not met by 2010, a Bay TMDL will be developed that will set pollutant loading limits for all sources within the watershed. The EPA, working with its state partners, developed the Bay TMDL, a tool of the Federal Clean Water Act which identifies the necessary pollution reductions from major sources of nitrogen, phosphorus and sediment, and sets binding limits on nutrient and sediment pollution. http://www.epa.gov/chesapeakebaytmdl/
Chesapeake Bay Habitat Health Index

Maryland

Bay-wide
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

Indicator 1.2: Acres of submerged aquatic vegetation (SAV)\(^9\)

Target: 114,000 acres of SAV - Chesapeake 2000 Bay Agreement

How are we doing? Bay grasses are a key indicator of Chesapeake Bay health because of their sensitivity to small changes in water pollution.\(^10\) "Aquatic grasses, or submerged aquatic vegetation, are one of the most important habitats in Chesapeake Bay. Bay grasses provide critical habitat to key species such as blue crab and striped bass, and can improve water clarity."\(^11\) Other important ecological roles of SAV include stabilizing sediment at the bottom of the water column; as a byproduct of photosynthesis, releasing oxygen which is essential to underwater organisms such as fish; inhibiting wave action that erodes shorelines; and absorbing excess nutrients. Factors that affect growth of Bay grasses include excess nutrients that can cause increases in algae which affect the amount of available light, which in turn affects photosynthesis.\(^12\) Submerged aquatic vegetation is one of the three indicators in the biotic component of the Bay Health Index. Although Maryland received a grade of C – (moderate poor health) for biotic health in 2009, an improvement from a grade of D+ (poor health) in 2007, biotic health dropped in 2010 to D+ (poor health). A photographic survey of all shallow waters of the Bay is annually conducted and analyzed to determine estimates of the extent of SAV in the Bay. The number of acres of SAV declined in 2006 due to high temperatures and turbidity. Although there was improvement in 2007 of 7.5\% and in 2008 of 21.3\% over 2007, the levels of aquatic grasses were still well below the restoration goal.\(^13\) SAV increased an additional 11.3\% in 2009. The total increase of 45\% (14,700 acres) from 2006 to 2009 was significant. This increase is principally due to expansion of coverage in the freshwater areas of the Bay, and recovery of eelgrass in Maryland’s lower Bay.\(^14\) SAV declined in 2010 for the first time in four years. “However, Maryland’s 2010 bay grass coverage was the sixth highest recorded since the Virginia Institute of Marine Science began the annual bay grass survey in 1984.”\(^15\) Much of the 15\% decline in 2010 occurred in the mid-Bay region. “Long-term reductions in water clarity, along with record-breaking hot summertime temperatures, may have contributed to the bay grass declines in this region.”\(^16\) The estimated SAV abundance for 2011 is 45,000 acres. Actual data should be available in spring 2012.\(^17\)

Bay grass restoration has been a continuing effort over time beginning with the first Chesapeake Bay Agreement of 1983. One component of the Chesapeake 2000 Bay Agreement specified the restoration of 114,000 acres of bay grasses. The most recent new goal and strategy for restoration and protection of SAV was developed by Maryland and its Bay partners in 2003. The enhanced bay grass restoration goal calls for the protection and restoration of 185,000 acres of bay grass by 2010.\(^18\) "Further reductions in the amount of polluted runoff and sediment entering Maryland’s waterways are necessary for continued bay grass restoration success. Working through the Chesapeake and Coastal Bays Trust Fund, Governor Martin O’Malley is bringing together citizens, businesses, and local, state and federal government agencies to reduce polluted runoff. Programs to plant cover crops and restore natural filters, such as streamside vegetation and wetlands, as well as conserve high priority lands, restore habitats and foster smarter, greener growth and living in Maryland will benefit bay grasses and the Bay’s other natural resources."\(^19\)

\(^9\) Data was previously reported by fiscal year, and is now reported on a calendar year basis
\(^10\) John Griffin, Secretary, Maryland Department of Natural Resources (DNR), DNR press release, April 27, 2010, “Governor O’Malley Announces Maryland Bay Grasses Continued to Expand in 2009”
\(^11\) 2009 Chesapeake Bay Report Card, Eco-Check
\(^12\) Maryland Department of Natural Resources Web site, October 2010
\(^13\) 2008 Chesapeake Bay Report Card, Eco-Check
\(^14\) Department of Natural Resources, December 6, 2010
\(^15\) Maryland’s Bay Grasses Declined 15\% in 2010, Significant bay grass declines in mid-Bay area overshadow gains, DNR news, April 2011
\(^16\) Maryland’s Bay Grasses Declined 15\% in 2010, Significant bay grass declines in mid-Bay area overshadow gains, Department of Natural Resources press release, April 2011
\(^17\) However, the availability of actual data may be affected because flights to survey SAV in the upper Bay have been delayed because of turbid conditions due to floods from tropical storms Irene and Lee in late summer of 2011.
\(^18\) Bay Grass Restoration in Maryland, Maryland Department of Natural Resources Web site: http://www.dnr.state.md.us/bay/sav/restoration.asp
\(^19\) Maryland’s Bay Grasses Declined 15\% in 2010, Significant bay grass declines in mid-Bay area overshadow gains, Department of Natural Resources press release, April 2011
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

Acres of Submerged Aquatic Vegetation

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Actual</th>
<th>Actual</th>
<th>Actual</th>
<th>Actual</th>
<th>Est.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2006</td>
<td>32,586</td>
<td>35,017</td>
<td>42,481</td>
<td>47,286</td>
<td>40,193</td>
<td>45,000</td>
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</table>


**KEY PERFORMANCE AREA 1**  
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND  
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES  

**Indicator 1.3:**  
Dredge Survey Index of stock size (crabs) – estimated  

**Target:**  
Improved viability of the blue crab population  

**How are we doing?**  
Total stock size refers to the total number of crabs of all sizes in the over-wintering crab population, i.e. the Index is a measure of crab density. The data is derived from the annual Bay-wide winter dredge survey conducted by the Maryland Department of Natural Resources and the Virginia Institute of Marine Science. Indices of stock size are average catches per tow, after the catches have been corrected for the efficiency of the dredge gear and overwintering mortality. The Index value increased substantially by 139.3% from 2007 to 2010. In 2009, the number of spawning females doubled and increased again in 2010. The number of juvenile crabs (smaller than 2.4 inches) doubled from 2009 to 2010, and reached its highest density since 1997. Although the Index declined by 31% from 2010 to 2011, the blue crab population was at its second highest level since 1997 and nearly double the record low of 249 million in 2007, as well as above the target level (200 million crabs) for the third year in a row. The blue crab population can vary dramatically from year to year. Crabs are vulnerable to extreme cold, and this past winter’s below average temperatures are to blame for the reduction of adult crabs. Crab reproduction was also lower in 2011. The abundance of adult females declined in 2011 largely due to high overwintering mortality from rapidly declining water temperature early in the winter, resulting in an extended period of extremely low water temperatures. Actions taken in 2008 by Maryland, Virginia, and the Potomac River Fisheries Commission to reduce crab harvests appear to be paying dividends with increases in the crab population each year 2008 to 2010. Bills were passed during the 2011 legislative session that increased enforcement authority and penalties for certain egregious violations of striped bass, oyster and blue crab rules.

**Dredge Survey Index of Stock Size**  

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20 Maryland Department of Natural Resources, Fisheries Service, Data Definition and Control Procedures, fiscal year 2012 and 2013  
21 Governor Martin O’Malley Announces 2011 Blue Crab Winter Dredge Survey Results, Population at 2nd highest level since 1997; Management actions continue to benefit Maryland, DNR news, April 19, 2011  
22 Maryland Department of Natural Resources, Fisheries Service, MFR Performance Discussion, fiscal year 2013  
23 Maryland Department of Natural Resources, Fisheries Service, MFR Performance Discussion and Data Controls and Definitions, fiscal year 2012; Governor Martin O’Malley Announces 2011 Blue Crab Winter Dredge Survey Results, Population at 2nd highest level since 1997; Management actions continue to benefit Maryland, DNR news, April 19, 2011
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

Indicator 1.4: Oyster Biomass Index

Target: Improved viability of oysters – 2010 goal is an index of 10

How are we doing? The Oyster Biomass Index measures the status of the oyster population. The biomass of an oyster is its living tissue, not including the shells. As the Bay’s oyster population improves or declines, so does the biomass. The Maryland Department of Natural Resources samples selected oyster bars each year, assesses the amount of oyster biomass in the samples, and calculates an Index based on this data. Oysters require shell habitat and other hard habitat to survive and grow. The O’Malley Brown administration is implementing Maryland’s Oyster Restoration and Aquaculture Development Plan. One of the goals of the Plan is to improve the health of the Bay by significantly increasing Maryland’s network of oyster sanctuaries where the oysters enrich the ecosystem and Maryland’s oyster population. As part of the oyster restoration program, the Maryland Department of Natural Resources plants shells and other habitat materials on the Bay bottom to increase and improve habitat to provide increased numbers and biomass of oysters, and additional brood stock for future natural oyster production. “Oyster (shellfish) sanctuaries and reserves have been created as study areas and as broodstock reservoirs to attempt to combat the massive loss of the native oyster due to parasitic disease.” The Oyster Biomass Index remained stable at 0.9 from 2007 through 2011, indicating a nine fold increase in the oyster population since 1994. The 2010 fall oyster survey indicated that the percentage of oysters found alive in a sample was at 88%, the highest level since 1985 before diseases took hold of the oyster population, and more than double 2002 when record disease levels left only 42% of Maryland’s oyster population alive. The Oyster Disease Research Project analyses confirmed that oyster mortalities from dermo and MSX diseases remained moderate in 2011 for the eighth consecutive year. These moderate oyster disease impacts and strong oyster reproduction during 2010 indicate that oyster conservation initiatives of the 2010 Oyster Restoration and Aquaculture Development Plan are having a positive impact. A new program available under the oyster restoration budget will provide through a partnership between the Maryland Department of Natural Resources and the Maryland Agricultural and Resource-Based Industry Development Corporation, subsidized loans to watermen and others interested in launching or expanding commercial shellfish aquaculture operations in Maryland.

Oyster Biomass Index

24 The Chesapeake Bay Program set 1994 as the oyster benchmark - 1994 is the base year with a value of 1. The 10 fold goal for oysters established by the Bay Program represents a 10 fold increase in oysters from 1994. Maryland Department of Natural Resources, Fisheries Service, Data Definition and Control Procedures, fiscal year 2012
25 Maryland Department of Natural Resources, Fisheries Service, Data Definition and Control Procedures, fiscal year 2013
26 Maryland Department of Natural Resources, Fisheries Service, fiscal year 2012 Managing for Results Performance Discussion
27 Governor Martin O’Malley Announces Oyster Reproduction, Survival Rates at Highest Levels Since 1997, Trends indicate population may be developing resistance to disease; More Marylanders looking to start up or expand aquaculture businesses, Press Release February 8, 2011
28 Maryland Department of Natural Resources, Fisheries Service, fiscal year 2013 Managing for Results Performance Discussion
29 One Maryland, A Message from the Governor, “Governor O’Malley directs $10.6 million to support oyster restoration, aquaculture and green jobs”, October 25, 2010
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

Indicator 1.5: Estimated nitrogen load to the Chesapeake Bay from Maryland (in millions of pounds)

Target: Maryland’s Tributary Strategies goal for nutrient reduction is met

How are we doing? The main cause of the Bay's poor water quality and aquatic habitat loss is elevated levels of two nutrients, nitrogen and phosphorous. Nitrogen occurs naturally in soil, animal waste, plant material, and even the atmosphere (78% of the earth's atmosphere is inert nitrogen gas). When too much nitrogen enters local rivers, streams and the Bay, it can create harmful conditions by causing more algae to grow, blocking out sunlight and reducing oxygen for Bay grasses, fish, blue crabs, and other Bay life. The top two sources of nitrogen delivered to the Bay come from emissions (from vehicles, industries, agriculture, electric utilities and other sources), and chemical fertilizers. The methodology for calculating these estimates changed beginning with FY 2009 data (FY 2012 MFR Submission). BayStat with the U.S. EPA Phase 4.3 Watershed Model, 2009 Progress Scenario replaced the Integrated Watershed Analysis and Management System. In 2011 the EPA Watershed model was upgraded from version 4.3 to Phase 5.3.2. Data for FY 2010 and FY 2011 were calculated using this methodology, and are not comparable to previously reported data. This new Watershed Model is more refined and includes changes to land use and associated acres, and revisions to various best management practices and associated pollution reduction efficiencies. Maryland must reduce the amount of nitrogen entering the Bay annually by approximately 11 million pounds from 2009 levels – about a 21% reduction in order to reach Maryland’s Bay restoration goals. The estimated nitrogen load to the Chesapeake Bay declined by 2.4% from 2010 to 2011. Strategies to reduce nitrogen load include nutrient management plans and key conservation practices (best management practices). Maryland uses technology to reduce nutrients in wastewater. One technique is the Enhanced Nutrient Removal (ENR) process that improves upon nutrient reductions achieved through the use of Biological Nutrient Removal (BNR), which uses microorganisms to remove nitrogen and phosphorus from wastewater during treatment. Maryland’s Bay Restoration Fund provides funds for ENR upgrades of major wastewater treatment plants that discharge to the Bay. Maryland is the leader in Bay restoration. Since 1985 Maryland reduced nitrogen pollution by 33% and phosphorous pollution by 38%, even as the population (1.28 million) increased by 29% between 1985 and 2009. In 2008, Maryland committed to ambitious two year milestones to accelerate on-the-ground efforts to meet nutrient reduction goals by 2020 - five years earlier than the 2025 end date agreed to by the U.S. EPA and the other Bay jurisdictions. Maryland used its BayStat process to develop these milestones. Over the past four years, Maryland has continued its leadership in Bay restoration through actions such as:

- Being first state in the watershed to receive federal approval for the Concentrated Animal Feeding Operation program that meets the new EPA regulations and requires comprehensive nutrient management on poultry farms for the first time;
- Being the first State in the watershed to require nutrient removal technology for new and failing septic systems in its Critical Area;
- Creating the Chesapeake Bay 2010 Trust Fund to fund cost-effective projects to reduce non-point source pollution with required monitoring that tracks implementation and progress;
- Achieving a record setting commitment by farmers to plant cover crops – one of the most cost effective nutrient reduction practices available;
- Being the first state in the Watershed to require environmental site design to reduce stormwater runoff on all new development approved after May of 2010;
- Implementing one of the most progressive set of stormwater requirements for a stormwater (MS4) permit in the Bay Watershed;

30 Chesapeake Bay Program - http://www.chesapeakebay.net/status_nitrogensources.aspx?menuitem=19797
http://www.chesapeakebay.net/websitesearchresults.aspx?
31 Department of Natural Resources FY 2012 and FY 2013 MFR submissions
32 Maryland’s Actions and Strategies to Restore the Chesapeake Bay, Solutions, BayStat:
http://www.baystat.maryland.gov/solutions.html
33 Chesapeake Bay Program, Wastewater Treatment
34 Maryland Phase I Watershed Implementation Plan – Executive Summary Submitted Final 12/03/10
35 Letter to the U.S. Environmental Protection Agency, Region 3 from the four BayStat agencies transmitting Maryland's Final Phase I Watershed Implementation Plan, December 3, 2010
36 Maryland Phase I Watershed Implementation Plan – Executive Summary Submitted Final 12/03/10

62
In addition, the "Board of Public Works approved $125,129.46 in agricultural cost-share grants in 10 counties for 27 projects that will prevent soil erosion, manage nutrients and safeguard water quality in streams, rivers and the Chesapeake Bay. Together, these projects will prevent 3,858.08 pounds of nitrogen, 1,276.68 pounds of phosphorus, and 231.80 tons of soil from entering the Bay and its tributaries. These projects are funded by state general obligation bonds and are not part of MDA’s general fund budget allocation."  

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**Estimated Nitrogen Load to the Chesapeake Bay From Maryland**

(Millions of Pounds)

<table>
<thead>
<tr>
<th>Year</th>
<th>Load (Millions of Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 Actual</td>
<td>53.20</td>
</tr>
<tr>
<td>2008 Actual</td>
<td>54.36</td>
</tr>
<tr>
<td>2009 Actual</td>
<td>52.12</td>
</tr>
<tr>
<td>2010 Actual</td>
<td>52.23</td>
</tr>
<tr>
<td>2011 Actual</td>
<td>50.98</td>
</tr>
</tbody>
</table>

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37 Board of Public Works Approves $125,129 in Agricultural Cost-Share Grants, Grants will help farmers implement conservation practices to protect the environment, Governor’s Press Release, November 16, 2011
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

Indicator 1.6:  Acres of cover crops planted

Target:  Maryland’s Tributary Strategies goal for nutrient reduction is met

How are we doing?  Sustaining well-managed agricultural land is critical to the long-term health of the region’s water resources. Maryland’s Chesapeake Bay Tributary Strategy Implementation Plan of January 2008 includes an agricultural strategy for improving the health of the Chesapeake Bay and its tributaries. Expanding the cover crop program is part of that agricultural strategy, and is one of the O’Malley Brown administration’s primary efforts to reduce nutrient and sediment loads to the Chesapeake Bay. Cover crops are planted in the fall for nutrient removal and erosion control. Through the Cover Crop Program, farmers plant non-harvested cereal crops on agricultural land to control soil erosion and absorb unused nitrogen and phosphorus remaining in the soil following the fall harvest, with the goal of safeguarding water quality. 38 The Cover Crop Program provides cost share assistance to farmers to implement this best management practice. 39 To encourage early planting, the Maryland Department of Agriculture adds $20 per acre for cover crops planted by October 1st and $10 per acre for cover crops planted Oct 1st – 15th. 40 Through the cover crop program, the number of acres planted has increased dramatically, jumping from 53,391 in 2005 to over 200,000 in four of the six subsequent years. A record number of acres of cover crops were planted in 2007 to 2011 (1.28 million acres). The number of acres of cover crops planted nearly doubled in 2011 over 2010 levels. The add on payments for management options, expanded outreach, and targeted communication and recruitment by the local soil conservation districts resulted in record enrollment in the cover crop program in 2011. “The Administration’s allocation of adequate funding to support this level of effort dovetailed with planting conditions ideal for maximizing cover crop acres. Farmers harvested summer crops early because of drought conditions which provided an increased window for planting cover crops, and the fall weather was excellent for planting cover crops in 2010.” 41

![Acres of Cover Crops Planted](image)

38 Overview, Chesapeake Bay Report Card, 2010, Chesapeake EcoCheck

39 Cost-share support is administered through Maryland Agricultural Water Quality Cost-Share (MACS) program, Maryland’s Chesapeake Bay Tributary Strategy Implementation Plan, January 2008

40 BayStat executive briefing memorandum for reporting period September 2010

41 Letter from the Maryland Department of Agriculture, Cover Crop Performance 2011, November 15, 2011
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

IMPROVING AND PROTECTING WATER QUALITY AND ENSURING SAFE DRINKING WATER

Indicator 1.7: Number of waters impaired by nutrients per the Integrated Report of Surface Water Quality

Target: Commitments to the Chesapeake Bay Program are met

How are we doing? The Federal Clean Water Act requires states to identify waters assessed as not meeting water quality standards, and compile a List of Impaired Surface Waters (the historical 303(d) List) that includes impaired waters for which a Total Maximum Daily Load (TMDL) is required. A TMDL is the maximum amount of a pollutant that can enter a water body and still allow the water quality standards to be met. Like the Bay nutrient reduction goals, a TMDL sets a limit, or cap, on pollutants that impair water quality and cause violations of water quality standards for a stream, lake, river, or the Bay. In general, TMDLs set pollutant limits for all sources by dividing, or “allocating,” the maximum allowable pollutant loads among those sources. A key function of the Watershed Implementation Plan is to identify final target loads to be achieved by various pollution source sectors and in different geographic areas. The final target loads will be used by EPA in setting TMDL allocations. States’ Plans also help to provide “reasonable assurance” that sources of pollution will be cleaned up, which is a basic requirement of all TMDLs. In addition, the Plans are part of a new “accountability framework” that EPA is establishing to ensure the TMDL goals are reached in a reasonable timeframe. The List of Impaired Surface Waters is included in the biennial Integrated Report of Surface Water Quality (reported every even numbered year) that describes different categories of water quality. Data for two of those categories are shown in the following graph - Category 4(a) which includes impaired or threatened waters that do not need or have already completed a TMDL, and Category 5 which includes impaired waters for which a TMDL is required. Waters on the List of Impaired Surface Waters require some restoration action(s) to meet water quality standards - completion of a TMDL allocation is not sufficient to meet water quality standards. Although the following chart shows that the number of waters that have completed TMDL’s (Category 4(a) of the List of Impaired Surface Waters) declined by 21.7% from the 2006 reporting cycle to the 2008 reporting cycle, changes in the data between 2 year reporting cycles are partly attributable to re-segmentation of the Chesapeake Bay waters. The period from 2006 to 2008 was a transition period in preparation for the Bay TMDL where Maryland transitioned from an 8-digit watershed basis for listing units to a tributary segment basis for listing. In some cases, water bodies for which individual TMDL’s had been completed were aggregated to a single super-water body at the Bay segment level, resulting in previous multiple TMDL’s being counted as a single TMDL. Similarly, the declining number of waters on Category 5 of the List of Impaired Surface Waters between 2006 and 2008 reporting cycles can be attributed in part to re-segmentation of the Chesapeake Bay waters. To a small degree, minor factors such as errors in listing and refinements to the scale of listing, have influenced the changes in numbers.

In 2009, Maryland completed a re-evaluation of its comprehensive water monitoring strategy for consistency with current priorities and goals. The Maryland Department of the Environment has implemented several updated or new water permits designed to reduce impacts from storm water associated with development and construction as well as animal feeding operations. Additionally, the Department has placed a renewed emphasis on protecting water of high water quality.

42 Previously referred to as the 303(d) List which has been combined with the 305(b) Report into a single integrated report
43 A water quality standard is the combination of a designated use for a particular body of water and the water quality criteria designed to protect that use – Maryland Department of Environment’s Web site about the Integrated Report of Surface Water Quality found at: http://www.mde.maryland.gov/programs/Water/TMDL/Integrated303dReports/Pages/Programs/WaterPrograms/TMDL/Maryland%20303%20dlist/index.aspx
44 In September 2005, the U.S. Environmental Protection Agency published revised state water quality standards that Maryland adopted. These standards establish a regulatory framework for the Bay restoration effort through the development of a Total Maximum Daily Load (TMDL) allocation.
46 Maryland Phase I Watershed Implementation Plan – Executive Summary Submitted Final 12/03/10
47 Maryland Department of the Environment
48 Facts About…Maryland’s Draft 2010 Integrated Report
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

Number of Waters Impaired by Nutrients Per the Integrated Report of Surface Water Quality

- Category 4(a) on List of Impaired Surface Waters - TMDL Completed or Not Needed
- Category 5 on the List of Impaired Surface Waters - TMDL Needed
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

Indicator 1.8: Percent of Marylanders served by public water systems in compliance with rules adopted as of 2009

Target: 97% served by public water systems in compliance with all rules adopted as of 2009

How are we doing? This measure captures both technical and health-based violations. Water systems are evaluated for compliance with technical and health-based rules, as well as compliance with health-based drinking water standards. Technical violations include items such as monitoring and reporting of compliance reports, failure to issue public notification, and failure to complete corrective actions for treatment technique requirements. Health-based standards are established for over eighty regulated contaminants such as bacteria, nitrates, arsenic, lead and copper, disinfection byproducts, and radionuclides. EPA and states have adopted the management goal of bringing water supply systems into compliance within five years of the adoption of new regulations. During 2007, 97% of Marylanders were served by public water systems in compliance with all rules adopted as of 2002. Performance declined by 15.5% from 2007 to 2008 due to violations of a more restrictive technical requirement for timely reporting of violations required by a new Federal Enforcement Directive. Despite this drop in compliance with all standards adopted as of 2002, 99% of Marylanders were served by public water systems that were in compliance with the health-based standards in 2008. Data for 2009 and forward is not comparable to prior years because the measure was modified to include regulations adopted as of 2009. In 2009, while 87% of Marylanders were served by public water systems in compliance with all new and existing regulations that have been adopted and implemented as of 2009 (since 2002), 99% were served by public water systems that were in compliance with health-based standards. In 2010, while 80% of Marylanders were served by public water systems in compliance with all rules adopted as of 2009, an 8% drop from 2009, 98% were served by public water systems that were in compliance with health-based standards. In 2011, compliance with all rules adopted as of 2009 increased by 3.8% to 83%. Compliance with health-based standards in 2011 was at 95.8%. The 2011 2.2% decline in compliance with health-based standards was a result of one large water system failing to comply with a single drinking water standard for a six month period. The U.S. Environmental Protection Agency (EPA) is developing a broad set of new strategies to better protect the public from contaminants in drinking water by going beyond the traditional framework of addressing contaminants one at a time. The EPA is initiating a national conversation to identify better ways to address contaminants in groups, improve drinking water technology, and more effectively address potential risks.

49 The 2005 through 2008 actual data reflects compliance with rules adopted as of 2002. Beginning with 2009, this measure was revised to reflect all new and existing regulations that have been adopted and implemented since 2002.
50 Maryland Department of the Environment, e-mail dated November 21, 2011 Re “Data Request – Percent of Marylanders served by public water systems in significant compliance with health-based standards”
51 Maryland Department of the Environment 2009 Managing for Results Work Plan
52 Maryland Department of the Environment, e-mail dated November 21, 2011 Re “Data Request – Percent of Marylanders served by public water systems in significant compliance with health-based standards”
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND'S NATURAL RESOURCES

Percentage of Marylanders Served by Public Water Systems in Compliance
With All State and Federal Rules

<table>
<thead>
<tr>
<th>Year</th>
<th>All Rules</th>
<th>Health Based Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011 Actual</td>
<td>83.0%</td>
<td>95.8%</td>
</tr>
<tr>
<td>2010 Actual</td>
<td>80.0%</td>
<td>98.0%</td>
</tr>
<tr>
<td>2009 Actual</td>
<td>87.0%</td>
<td>99.0%</td>
</tr>
<tr>
<td>2008 Actual</td>
<td>82.0%</td>
<td>99.3%</td>
</tr>
<tr>
<td>2007 Actual</td>
<td>97.0%</td>
<td>99.0%</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

ENSURING CLEAN AIR

Indicator 1.9: Three year average of days the eight-hour ozone standard\(^{54}\) was exceeded

Target: Eight hour ozone standard attained

How are we doing? Breathing ozone, a primary component of smog, can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma, and can also reduce lung function. Other impacts of air pollution are reduced visibility, damaged crops, forests and buildings, and acidified lakes and streams. Ground-level or "bad" ozone is not emitted directly into the air, but is created by chemical reactions between oxides of nitrogen (NO\(_x\)) and volatile organic compounds (VOC) in the presence of sunlight. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NO\(_x\) and VOC.\(^{55}\) Maryland's ozone problem is not only due to ozone-forming pollutants being emitted by sources within Maryland, but from ozone formed in other states that is delivered to Maryland by prevailing winds.\(^{56}\) Maryland is doing its part locally to meet National Ambient Air Quality Standards (NAAQS) for ozone and fine particulate matter through the Maryland Healthy Air Act (HAA), the toughest power plant emission law on the east coast. The Maryland Department of the Environment implemented the HAA in July 2007 through regulations that constitute the most sweeping air pollution emission reduction measure in Maryland history.\(^{57}\) In July 2011, the U.S. Environmental Protection Agency finalized the Cross-State Air Pollution Rule (CSAPR) that requires twenty-seven states in the eastern half of the nation, including Maryland, to significantly improve air quality by reducing power plant emissions that contribute to ozone and/or fine particle pollution in other states. "Following the Clean Air Act’s “Good Neighbor” mandate to limit interstate air pollution, the rule will help states that are struggling to protect air quality from pollution emitted outside their borders, and it uses an approach that can be applied in the future to help areas continue to meet and maintain air quality health standards."\(^{58}\) The three year average of days the eight-hour ozone standard was exceeded declined significantly by 37.5% from 2007 to 2010. The average is estimated to decline an additional 4.6% in 2011. The annual number of days the eight-hour ozone standard was exceeded increased dramatically from 2009 to 2010, principally due to the record breaking hot summer Maryland experienced in 2010. A cloudy and wet August in 2011 suppressed the 2011 estimated three year average.\(^{59}\)

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\(^{54}\) In March 2008, the U.S. Environmental Protection Agency strengthened the National Ambient Air Quality Standards for ground-level ozone from 85 parts per billion (ppb) to 75 ppb. Historical data has been adjusted to the 75 ppb standard.

\(^{55}\) U.S. Environmental Protection Agency, Ground Level Ozone, Basic Information, http://www.epa.gov/air/ozonepollution/basic.html

\(^{56}\) Maryland Department of the Environment


\(^{58}\) EPA Reduces Smokestack Pollution, Protecting Americans’ Health from Soot and Smog/Clean Air Act protections will cut dangerous pollution in communities that are home to 240 million Americans, U.S. Environmental Protection Agency news release, July 7, 2011, http://www.epa.gov/airtransport/basic.html

\(^{59}\) Maryland Department of the Environment, October 27, 2010
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

REDDUCING HAZARDOUS WASTE AND HAZARDOUS MATERIALS IN THE ENVIRONMENT

Indicator 1.10: Percent of oil-contaminated sites cleaned-up

Target: 96% of underground storage tank (UST) releases cleaned-up

How are we doing? Releases of petroleum can render drinking water unfit for consumption, endanger wildlife, and create flammable and explosive conditions. The time required to clean up petroleum releases varies from case to case and depends upon a variety of factors. Some sites require active removal of petroleum product from the ground over a period of years, while a minor surface spill may be quickly resolved. The percent of oil-contaminated sites cleaned-up increased by 5.5% from 2007 to 2011, with the greatest year to year increase (3.3%) occurring between 2007 and 2008. Ninety-six percent (96%) of oil-contaminated sites were cleaned up during 2010 and 2011. The number of open confirmed release cases declined by 36.8% from 2007 to 2009. MDE anticipated that the number of open cases would continue to decline over the next two years, and thereafter remain level due to the anticipated long term, difficult remaining cases. On average nationally, 21% of release cases remain open, whereas 6% of confirmed release cases remain open in Maryland.

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Percent of Oil-Contaminated Sites Cleaned-Up During the Year

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60 Maryland Department of the Environment
61 Maryland Department of the Environment, performance summary, February 2010
KEY PERFORMANCE AREA 1
SMART, GREEN AND GROWING - PROVIDING A CLEAN AND HEALTHY ENVIRONMENT, AND
PROTECTING AND PRESERVING THE HEALTH OF MARYLAND’S NATURAL RESOURCES

MANAGING GROWTH AND DEVELOPMENT IN A MORE SUSTAINABLE WAY TO BALANCE ECONOMIC
GROWTH, PRESERVE AND PROTECT MARYLAND’S NATURAL RESOURCES AND THE QUALITY OF
LIFE OF ALL MARYLANDERS, AND TO SUSTAIN THE AGRICULTURAL INDUSTRY OF MARYLAND

Indicator 1.11: Total acres preserved by all land preservation programs

Target: Increased number of acres of preserved land

How are we doing? Land preservation programs exist to keep land ecologically sound as well as safe from
development. Preserved lands include forests, wetlands, sensitive habitat, agricultural land, and areas important
for protecting water quality. Land Preservation programs manage protected lands through fee simple ownership
or long-term or permanent easements. The Maryland Environmental Trust (MET) is “the most cost-effective land
preservation program in Maryland State government. MET does not spend taxpayer dollars to purchase land or
easements, rather MET generates donations of conserved land to the State. In fiscal year 2011 the cost per
acre to secure and process donated easements was $70 an acre.”62

The GreenPrint interactive land conservation map implemented by the O’Malley Brown administration helps to
guide preservation of Maryland’s most vital landscapes – Targeted Ecological Areas. It assists in aligning
infrastructure growth with ecosystem restoration programs and stewardship efforts. Data for this indicator are
updated each year. “Reported figures are based on best-available data at the time the report is generated. New
areas are continually being added and sometimes areas leave protection programs, which are the primary
reasons for changing totals over time.”63 The number of acres of preserved land has steadily increased between
2007 and 2011, with a total increase of 7.0%. As of 2011, there are 1.45 million acres preserved out of a total of
6.25 million acres in Maryland (23.2%). The O’Malley Brown administration has continued to support the land
preservation programs during the recession, a time when land has been less expensive to purchase. This has
allowed the State to preserve a greater number of acres at a lower cost.

Total Acres Preserved Under All Land Preservation Programs

<table>
<thead>
<tr>
<th>Year</th>
<th>2007 Actual</th>
<th>2008 Actual</th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,290,000</td>
<td>1,310,000</td>
<td>1,330,000</td>
<td>1,350,000</td>
<td>1,370,000</td>
</tr>
<tr>
<td>2007</td>
<td>1,355,272</td>
<td>1,372,859</td>
<td>1,390,000</td>
<td>1,410,000</td>
<td>1,430,000</td>
</tr>
<tr>
<td>2008</td>
<td>1,429,782</td>
<td>1,442,029</td>
<td>1,449,884</td>
<td>1,470,000</td>
<td>1,490,000</td>
</tr>
</tbody>
</table>

62 Maryland Department of Natural Resources, fiscal year 2013 MFR Performance Discussion
63 “However, there are other factors that can affect the reported acreage for any given program. Tracking and reporting
mechanisms are continually being refined, and there is currently an effort underway to modernize tracking within certain
programs. Processes are being applied and refined to ensure there is not duplicate reporting amongst programs (as some
areas may be under more than one form of protection). These factors may render previous reports incorrect. Some figures
may also contain rounding errors.” – Maryland Protected Lands Reporting hosted by the Maryland Department of Natural
Resources - http://dnrweb.dnr.state.md.us/gis/preports/currenttotals.asp

71
KEY PERFORMANCE AREA 2
PROMOTING ENERGY EFFICIENCY AND CONSERVATION

IMPLEMENTING A COMPREHENSIVE ENERGY POLICY FOCUSED ON EFFICIENCY, CONSERVATION, AFFORDABILITY, AND ALTERNATIVE AND RENEWABLE ENERGY SOURCES

Indicator 1.12: Percent change from the 2008 base year (13.03 millions of MMBTU’s) in energy consumption by all State government facilities

Target: 15% reduction by 2015

How are we doing? Governor O’Malley and the General Assembly have set ambitious energy goals and enacted policies to reduce electricity consumption, level peak demand, improve the market for renewable energy in Maryland, improve the environment, and grow a green economy. A key initiative to promote energy efficiency and conservation is EmPower Maryland. The O’Malley Brown administration implemented the EmPower Maryland initiative in 2007 to save taxpayers money, reduce stress on Maryland’s energy markets, and improve the environment. Under the initiative, the goal is to reduce energy consumption by 15% by 2015. Among other objectives, Maryland is working toward reduction of energy usage across all State operations. The baseline consumption by State government facilities in 2008 was 13.03 millions of MMBTU’s. State government consumption stayed level in 2009 at 13.03 million MMBTU’s, declined by 3.61% from the base year in 2010, and further declined by 6.68% from the base year in 2011.

Percent Change From the Base Year (2008) in Energy Consumption by All State Government Facilities (Owned and Leased)

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<tr>
<td>0.00%</td>
<td>13.03</td>
<td>13.03</td>
<td>12.56</td>
<td>12.16</td>
<td>11.73</td>
<td>11.60</td>
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<tr>
<td>-3.61%</td>
<td></td>
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<tr>
<td>-6.68%</td>
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<tr>
<td>-9.96%</td>
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<tr>
<td>-10.97%</td>
<td></td>
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</tr>
<tr>
<td>-12%</td>
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</tr>
<tr>
<td>-14%</td>
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<td></td>
</tr>
<tr>
<td>-16%</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>-18%</td>
<td></td>
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</tbody>
</table>


Percent change from the base year in consumption

Total consumption (millions of MMBTU’s)

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64 Maryland Energy Outlook, Maryland Energy Administration, January 2010
65 MMBTU=one million British Thermal Units
Indicator 1.13: Percent change in per capita electricity consumption compared to the 2007 baseline (12.32 megawatt hours)\textsuperscript{66}

Target: 15\% reduction by 2015

How are we doing? Maryland is making slow but steady progress toward achieving the EmPower Maryland energy efficiency/consumption target. Per capita electricity consumption has been below the 2007 baseline for each year 2008 through 2010. In 2008, per capita electricity consumption across the State declined by 2.23\% from the 2007 baseline, and further declined by 3.94\% from the baseline in 2009. Per capita electricity consumption increased to slightly above the 2008 level in 2010, resulting in a decline of only 1.50\% from the 2007 baseline. Consumption is expected to more rapidly decline in 2011, followed by accelerating declines in 2012 and 2013. A multitude of strategies are in place to promote efficiency and conservation. Utilities have received regulatory approval to implement a variety of programs and consumer incentives. The Maryland Energy Administration has launched programs funded by the Strategic Energy Investment Fund (SEIF) and the American Recovery and Reinvestment Act of 2009 to promote energy efficiency by low and moderate income families, farmers, commercial and industrial businesses, and local and State government. Additionally, Maryland is promoting energy efficiency through adoption of the 2009 International Energy Conservation Code regulating the State’s building energy codes, adoption and enforcement of efficiency standards for appliances not covered by Federal standards, and promoting efficient combined heat and power systems.\textsuperscript{67} Maryland was cited as one of the top 10 states as well as one of the six most improved states in the 2011 State Energy Efficiency Scorecard produced by the American Council for an Energy-Efficient Economy. The Scorecard examines six state energy efficiency policy areas: (1) utility and public benefits programs and policies; (2) transportation policies; (3) building energy codes; (4) combined heat and power; (5) state government initiatives; and (6) appliance efficiency standards. The scorecard presents “a comprehensive ranking of the states based on an array of metrics that capture best practices and recognize leadership in energy efficiency policy and program implementation. The Scorecard benchmarks progress and provides a roadmap for states to advance energy efficiency in the residential, commercial, industrial, and transportation sectors.” Maryland was one of the states recognized for significantly increasing utility-sector energy efficiency efforts to meet energy savings targets established in Energy Efficiency Resource Standards, greenhouse gas tailpipe emission standards, integration of transportation and land use planning, and for adopting energy-efficient transportation policies.\textsuperscript{68}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{percent_change_graph}
\caption{Percent Change in Per Capita Electricity Consumption Compared to the 2007 Baseline (12.32 MWh)}
\end{figure}

\textsuperscript{66} Data has been updated from what was reported last year.

\textsuperscript{67} Maryland Energy Outlook, Maryland Energy Administration, January 2010

KEY PERFORMANCE AREA 2
PROMOTING ENERGY EFFICIENCY AND CONSERVATION

Indicator 1.14:  Percent of newly purchased light duty vehicles in the State vehicle fleet that are hybrid or alternative fueled vehicles

Target:  Reduced petroleum consumption

How are we doing?  Use of alternative fueled and hybrid vehicles is a strategy to reduce consumption of petroleum, thereby reducing the deleterious impact on air quality. The use of alternative fuels like ethanol, biodiesel, and compressed natural gas is currently being introduced into State and local government fleets in Maryland. These alternative fuels tend to have lower greenhouse gas, particulate matter and volatile organic compounds emissions. Over the timeframe of 2007 through 2011, the percent of newly purchased light duty vehicles in the State vehicle fleet that are hybrid or alternative fueled vehicles has ranged from just below a quarter to nearly a third. After dropping in 2008 and 2009 to a low of 23% (3.9 percentage points/14.5% from 2007), the percent of newly purchased light duty vehicles in the State vehicle fleet that were hybrid or alternative fueled vehicles returned to the 2007 level in 2010. In 2011, the proportion of newly purchased alternative fueled and hybrid vehicles in the State vehicle fleet was at its highest level (31.5%) since 2007. The State vehicle fleet has a small number of hybrid and alternative fueled vehicles because of higher purchase prices and Federal mandates for vehicles that are not satisfied by hybrids.

69 Maryland Energy Administration
70 Maryland Energy Administration
**Indicator 1.15:** Number registered and percent change from the prior year in number of alternative fueled vehicles (AFV) and hybrid-electric vehicles registered in Maryland

**Target:** Reduced petroleum consumption

**How are we doing?** Combined, the number of alternative fueled and hybrid-electric vehicles registered in Maryland was on a steep upward trend from 2007 to 2009, increasing by 67.7% over that timeframe. Overall, this increase has been driven by, among other factors, increased gasoline prices in 2007 through 2009, increased availability of flex-fueled vehicles, movement toward use of new technologies, and environmental concerns. The number of alternative fueled and hybrid-electric vehicles registered in Maryland declined by 14% in 2010, followed by an increase to 2009 levels in 2011. National trends show 2007 as the peak year for hybrid sales. The Maryland Energy Administration theorizes that the subsequent reduction in the number of hybrid vehicle sales reflects initial experience of under-powered hybrids by early adopters, the purchase of less expensive vehicles due to the recession, and the stabilization of gas prices following the steep fuel increase that began in 2007 and ended in 2009.

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**Alternative Fueled and Hybrid-Electric Vehicles Registered in Maryland**

![Graph showing number of alternative fueled and hybrid-electric vehicles registered in Maryland from 2007 to 2011, with data points for 2007 actual at 145.0, 2008 actual at 173.1, 2009 actual at 243.1, 2010 actual at 209.6, and 2011 actual at 243.7. Percent changes are indicated: 71% increase in 2007, 19% increase in 2008, 40% decrease in 2009, -14% decrease in 2010, and 16% increase in 2011.](image-url)

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71 Actual data for 2010 has been revised.  
72 Maryland Energy Administration, fiscal year 2012 MFR
A SAFETY NET FOR MARYLAND’S FAMILIES

MARYLAND FAMILIES FIRST – PROMOTING THE HEALTH AND WELL BEING OF ALL MARYLANDERS

GOAL: Children, adolescents, and adults will lead healthy and active lives and achieve their full potential.

Maryland will focus on providing access to needed social support systems, including affordable and quality health care.
A SAFETY NET FOR MARYLAND’S FAMILIES

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Indicators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorable Performance (Change &gt; 10%)</td>
<td>9</td>
<td>28.1%</td>
</tr>
<tr>
<td>Favorable Performance (3% to 10% Change)</td>
<td>7</td>
<td>21.9%</td>
</tr>
<tr>
<td>Stable Performance (0% - 2% Change)</td>
<td>7</td>
<td>21.9%</td>
</tr>
<tr>
<td>Unfavorable Performance (3% to 10% Change)</td>
<td>6</td>
<td>18.8%</td>
</tr>
<tr>
<td>Unfavorable Performance (Change &gt; 10%)</td>
<td>3</td>
<td>9.4%</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most Recent Data

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Most Recent Data</th>
<th>4 Years Prior</th>
<th>4 Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of live births for which prenatal care was initiated during the first trimester (2005 - 2009)</td>
<td>80.2%</td>
<td>81.3%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Percent of babies born at low birth weight and very low birth weight (2005 - 2009)</td>
<td>9.2%</td>
<td>9.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Infant mortality rate for all races (per 1,000 live births) (2006 - 2010)</td>
<td>6.7</td>
<td>7.9</td>
<td>-15.2%</td>
</tr>
<tr>
<td>Maryland’s average annual uninsured rate over a 2 year period among the nonelderly (under age 65; estimated) (2000-2001 - 2008-2009)</td>
<td>14.5%</td>
<td>12.1%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Percent of Maryland children fully immunized (by 24 months) (2006 - 2010)</td>
<td>73.3%</td>
<td>78.1%</td>
<td>-6.1%</td>
</tr>
<tr>
<td>Number of children under 6 years of age with elevated blood lead levels (&gt;10ug/dl) (2006 - 2010)</td>
<td>531</td>
<td>1,274</td>
<td>-58.3%</td>
</tr>
<tr>
<td>Cumulative percent change from the calendar year 2000 baseline for underage high school students smoking cigarettes (no survey in 2004) (2002 - 2010)</td>
<td>-49.9%</td>
<td>-21.3%</td>
<td>134.3%</td>
</tr>
<tr>
<td>Overall cancer mortality rate per 100,000 persons (age adjusted to 2000 U.S. Standard Population) (2005 - 2009)</td>
<td>177.7</td>
<td>187.9</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Heart disease mortality rate for all races per 100,000 population (age adjusted) (2005 - 2009)</td>
<td>193.9</td>
<td>209.8</td>
<td>-7.6%</td>
</tr>
<tr>
<td>Rate of age adjusted new HIV diagnoses (per 100,000 population) (2006 - 2010)</td>
<td>38.6</td>
<td>39.6</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Rate of primary/secondary syphilis incidence (cases per 100,000 population) (2006 - 2010)</td>
<td>5.7%</td>
<td>5.4%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>
## A SAFETY NET FOR MARYLAND’S FAMILIES

<table>
<thead>
<tr>
<th>Agency/Data Source</th>
<th>Indicator</th>
<th>Most Recent Data Available</th>
<th>4 Years Prior</th>
<th>4 Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDC</td>
<td>Number of reported cases of vaccine preventable communicable diseases - hepatitis A (2007 - 2011)</td>
<td>25</td>
<td>72</td>
<td>-65.3%</td>
</tr>
<tr>
<td>CDC</td>
<td>Number of reported cases of vaccine preventable communicable diseases - pertussis (2007 - 2011)</td>
<td>114</td>
<td>117</td>
<td>-2.6%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Number of reported cases of vaccine preventable communicable diseases - measles (2006 - 2010)</td>
<td>0</td>
<td>2</td>
<td>-100.0%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Number of reported cases of vaccine preventable communicable diseases - mumps (2006 - 2010)</td>
<td>12</td>
<td>11</td>
<td>9.1%</td>
</tr>
<tr>
<td>Children’s Cab. Inter-agency Fund</td>
<td>Rate of injury-related deaths due to accidents to children and youth between 0 and 19 years of age (per 100,000 children) (2005 - 2009)</td>
<td>7.4</td>
<td>9.3</td>
<td>-20.4%</td>
</tr>
<tr>
<td>GOC</td>
<td>Rate of homicide deaths of children and youth ages 0 to 19 (per 100,000 population) (2005 - 2009)</td>
<td>4.5</td>
<td>5.7</td>
<td>-21.1%</td>
</tr>
<tr>
<td>DJS</td>
<td>Number of DJS youth who are the victims of a homicide (2007 is partial data) (2008 - 2011)</td>
<td>5</td>
<td>11</td>
<td>-54.5%</td>
</tr>
<tr>
<td>DHR</td>
<td>Percent of children with no recurrence of maltreatment within 6 months of first occurrence (2009 - 2011, comparable data not available for prior years)</td>
<td>95.5%</td>
<td>96.8%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>Children’s Cab. Inter-agency Fund</td>
<td>Percent of related children and youth under age 18 whose families have incomes below the poverty level (estimated) (2006 - 2010)</td>
<td>12.7%</td>
<td>9.3%</td>
<td>36.6%</td>
</tr>
<tr>
<td>USDA</td>
<td>Maryland prevalence of household-level very low food security (3 year average) (2004-2006 - 2008-2010)</td>
<td>5.1%</td>
<td>3.9%</td>
<td>30.8%</td>
</tr>
<tr>
<td>Children’s Cab. Inter-agency Fund</td>
<td>Rate of live births to adolescents between 15 and 19 years of age (per 1,000 women) (2005 - 2009)</td>
<td>31.2</td>
<td>31.8</td>
<td>-1.9%</td>
</tr>
<tr>
<td>DHR</td>
<td>Statewide percent of current child support paid (2007 - 2011)</td>
<td>64.7%</td>
<td>63.77%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Children’s Cab. Inter-agency Fund</td>
<td>Rate of children placed in out-of-home care (per 100,000 children) (2008 - 2010)</td>
<td>10.8</td>
<td>10.2</td>
<td>5.9%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Percent decrease in substance abuse by adults during treatment (2007 - 2011)</td>
<td>80%</td>
<td>76%</td>
<td>5.3%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Percent decrease in substance abuse by adolescents during treatment (2007 - 2011)</td>
<td>80%</td>
<td>67%</td>
<td>19.4%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Percent increase in employment of adults at completion of substance abuse treatment (2007 - 2011)</td>
<td>30%</td>
<td>28%</td>
<td>7.1%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Percent of adults who report mental health services have allowed them to deal more effectively with daily problems (2007 - 2011)</td>
<td>78%</td>
<td>81%</td>
<td>-3.7%</td>
</tr>
<tr>
<td>MSDE</td>
<td>One-year retention of employment by people with disabilities who were assisted by the Department of Education’s Division of Rehabilitation Services (2007 - 2011)</td>
<td>85.6%</td>
<td>80.5%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Agency/Data Source</td>
<td>Indicator</td>
<td>Most Recent Data Available</td>
<td>4 Years Prior</td>
<td>4 Year Change</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------</td>
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</tr>
<tr>
<td>DHMH</td>
<td>Percent of Developmental Disabilities Administration Community Service respondents of the “Ask ME Survey” who expressed satisfaction with physical well-being (2010-2011)</td>
<td>95.6%</td>
<td>96.3%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Percent of Developmental Disabilities Administration Community Service respondents of the “Ask ME Survey” who expressed satisfaction with personal development (2010-2011)</td>
<td>87.6%</td>
<td>88.7%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>DHMH</td>
<td>Percent of Developmental Disabilities Administration Community Service respondents of the “Ask ME Survey” who expressed satisfaction with self-determination (2010-2011)</td>
<td>75.3%</td>
<td>81.4%</td>
<td>-7.5%</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

BABIES BORN HEALTHY

Indicator 1.1: Percent of live births for which prenatal care was initiated during the first trimester

Target: At least 90% of births with prenatal care in the first trimester

How are we doing? The availability and utilization of prenatal care is believed to improve the outcome of pregnancy for both mother and infant. The components of prenatal care include: risk assessment, treatment for medical conditions or risk reduction, and education. Many complications of pregnancy can be diagnosed and/or avoided by healthcare supervision early and periodically throughout pregnancy. Lack of prenatal care and late prenatal care are related to both low birth weight and infant mortality. Health care risks such as late prenatal care increase infant mortality by 40%. The percent of live births for which prenatal care was initiated during the first trimester has remained stable, declining by only 1.4% from 2005 through 2009. Eighty point two percent (80.2%) of live births in 2009 were to Maryland residents who began prenatal care during the first trimester of pregnancy, whereas 4.7% of live births were to women who received late (third trimester) or no prenatal care. “Public health perinatal systems building efforts, in collaboration with HealthChoice insurance coverage for low income pregnant women, are contributing to a first trimester prenatal care percentage better than the national average.” Other strategies have been implemented to increase early prenatal care including the Babies Born Healthy Initiative, Improved Pregnancy Outcome Program, and the Governor’s Delivery Unit action plan. Reproductive health, pre-conceptional health, and family planning efforts have contributed to a general overall improvement in infant health indicators over the past 10 years.

Percent of Live Births for Which Prenatal Care Was Initiated During the First Trimester

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</thead>
<tbody>
<tr>
<td>81.3%</td>
<td>80.4%</td>
<td>79.5%</td>
<td>80.2%</td>
<td>80.2%</td>
</tr>
</tbody>
</table>

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1 Fiscal year 2012 MFR Data Definition, Department of Health and Mental Hygiene; National Vital Statistics Reports, Volume 58, Number 24, Births: Final Data for 2007, August 2010
2 Maryland’s Results for Child Well-Being 2009
4 Fiscal year 2012 MFR Performance Discussion, Department of Health and Mental Hygiene
5 Department of Health and Mental Hygiene, October 2010
6 Department of Health and Mental Hygiene fiscal year 2013 MFR Performance Discussion
**Indicator 1.2:** Percent of babies born at low birth weight (less than 2,500 grams – about 5.5 pounds), and very low birth weight (less than 1,500 grams – about 3.3 pounds)

**Target:** No more than 8.5% of births that are low birth weight and no more than 1.6% of very low birth weight babies by 2014\(^7\)

**How are we doing?** Infant birth weight is associated with infant survival, health, and overall development. Infants weighing less than 2,500 grams are more likely to have physical and developmental problems including learning difficulties, intellectual disability, visual and hearing deficits, and chronic respiratory problems. Lack of prenatal care or late prenatal care is related to low birth weight.\(^8\) Low and very low birth weight is a significant factor driving infant mortality rates. “Overall, the infant mortality rate for very low birth weight infants (those with birth weights of less than 1,500 grams or 31/2 pounds) is 240/1,000, more than 100 times the mortality rate for normal birth weight infants.”\(^9\) The percent of babies born at low and very low birth weight has remained steady, hovering around 9.2% from calendar year 2005 through 2009. The percent of black babies born at low and very low birth weight has been substantially higher than the percent of white infants over the last five years. Reducing the percent of babies born at low and very low birth weight is an objective included in the State Health Improvement Process (SHIP). Maryland’s SHIP provides a framework for continual progress toward a healthier Maryland, and includes 39 measures in six focus areas that represent what it means for Maryland to be healthy.\(^10\) Reducing low birth weight and very low birth weight births is included in the focus area of Healthy Babies.

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\(^7\) State Health Improvement Process
\(^8\) Maryland’s Results for Child Well Being 2009
**KEY PERFORMANCE AREA 1**

**PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND**

**Indicator 1.3:** Infant mortality rate for all races (per 1,000 live births)

**Target:** Reduce infant mortality by 10% by end of 2012

**How are we doing?** Infant mortality is often used to measure the overall health of a population. Risk factors for infant mortality are multiple and include behavioral and environmental risks, health care risks, and sociodemographic risks. Factors contributing to Maryland’s high infant mortality rate include family history, personal health history, diet, environment, lifestyle, and poor access to quality health and social services. The three leading causes in Maryland in 2010 were disorders relating to short gestation and unspecified low birth weight (the number one cause), followed by congenital abnormalities, and sudden infant death syndrome (SIDS). Despite its economic status as one of the richest states in the United States, Maryland’s infant mortality rate remains higher than the national average. Excess numbers of preterm and low birth weight infants account for Maryland’s infant mortality rate exceeding the national rate. America's Health Rankings 2010 cited infant mortality as one of Maryland's challenges to improving overall health for the State, and placed Maryland 42nd among states in infant mortality. Over the past decade, the average infant mortality rate in Maryland has fallen by only 4%, with a more rapid decline for white infants than for black infants. Infant mortality remained at 8.0 for 2007 and 2008, and declined by 10% (0.8 infant deaths per thousand) to 7.2 in 2009. The infant mortality rate in Maryland fell to 6.7 per 1,000 live births in 2010, the lowest rate ever recorded in Maryland, and a decline of 0.5 infant deaths per thousand. A decline in the black infant mortality rate was responsible for the 2010 overall decline. There is a significant racial disparity in infant mortality in both Maryland and the nation. In 2009, the rate was 4.1 among whites and 13.6 among blacks. In 2010, the rate continued at 4.1 among whites and was 11.8 among blacks. Maryland continues to address infant mortality through a number of strategies including the Babies Born Healthy Initiative, the Improved Pregnancy Outcome Program, and the Governor's Delivery Unit Reduction Plan. The Plan includes proven interventions that will be concentrated at different points along the life span – before pregnancy, during pregnancy and after delivery. Strategies will include the development of comprehensive women’s health centers, expediting Medicaid eligibility for prenatal care and establishing standardized hospital discharge protocols for ensuring risk-appropriate follow up to mothers and infants. Jurisdictions with the highest infant mortality rates have been targeted.

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11 Governor’s Strategic Goal #14, Governor’s Delivery Unit
12 Department of Health and Mental Hygiene, Family Health Administration, Joint Chairmen’s Report on the Status of Maryland’s Infant Mortality Programs, November 2009
13 Department of Health and Mental Hygiene, Babies Born Healthy, October 2011: http://dhmh.maryland.gov/babiesbornhealthy/
14 SIDS is the sudden death of an infant under one year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history. Child Death Report, 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration; Maryland Vital Statistics, Infant Mortality in Maryland, 2010
15 Department of Health and Mental Hygiene, Report to the Joint Chairmen, Status of Infant Mortality Programs, Jan. 2009.
16 Child Death Report, 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration
17 America’s Health Rankings 2010, United Health Foundation
18 State Health Improvement Process (SHIP) Vision Area 1 Healthy Babies, Department of Health and Mental Hygiene: http://dhmh.maryland.gov/ship/visionsvision1/visionarea1.html
19 Maryland Vital Statistics, Infant Mortality in Maryland, 2010
20 The change from 2008 to 2009 was not statistically significant - Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration
21 Maryland Vital Statistics, Infant Mortality in Maryland, 2010
22 Maryland Vital Statistics Annual Report 2009
24 Governor O’Malley and Lt. Governor Brown Announce Maryland Infant Mortality Rate Drops for Second Year in a Row, Press Release, August 24, 2011
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Infant Mortality Rate for All Races
(Less Than 1 Yr Old, Per 1,000 Live Births)

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</thead>
<tbody>
<tr>
<td>7.9</td>
<td>8.0</td>
<td>8.0</td>
<td>7.2</td>
<td>6.7</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

HEALTHY CHILDREN, ADOLESCENTS, AND ADULTS

Indicator 1.4: Maryland's average annual uninsured rate over a 2 year period among the nonelderly (under age 65; estimated)

Target: By 2014, 92.8% of nonelderly will have health insurance

How are we doing? This measure captures the percent of Maryland's population under 65 years of age who did not have health insurance privately, through their employers, or the government. Most persons over 65 are covered by Medicare. "People without health insurance are more likely to be in poor health than the insured. A lack of health insurance can result in increased visits to the emergency department and decreased routine care visits with a primary care provider." The Maryland Health Care Commission’s report “Health Insurance Coverage in Maryland” is the data source for this measure, and is issued every other year providing averages based on 2 years of data. The most recent report was issued in January 2011 and covers 2008-2009. A significant increase of 19% in Maryland’s average annual uninsured rate over a 2 year period among the nonelderly occurred from 2000-2001 to 2002-2003. The rate changes between the following 2 year intervals were modest, but the total increase of 27.3% over the period of 2000-2001 to 2006-2007 is significant. The average annual uninsured rate declined by 5.8% to 14.5% from 2006-2007 to 2008-2009. “An examination of annual insurance coverage rates from 2004 to 2009 – applying a 90% confidence interval range around each estimate – indicates considerable stability in Maryland’s uninsured rate, despite fluctuating economic conditions over this time period.” “Maryland’s nonelderly uninsured rate is consistently lower than the comparable national average - 18.0% in 2008-2009–primarily due to a higher rate of employment-based coverage (68% versus 58%).” Employer-sponsored and direct purchase insurance covered three fourths of Maryland’s nonelderly residents. Over the last several years, the O’Malley-Brown administration has made important strides in providing health care coverage to the uninsured through a variety of strategies. The Working Families and Small Business Health Coverage Act passed in the 2007 Special Session, expanded eligibility for Medicaid benefits and created incentives for small businesses to offer employees health insurance. Maryland has also created a high-risk pool for individuals unable to secure insurance because of their health conditions, and improved access to commercial insurance for young adults. Maryland has extended coverage to more than 310,000 Marylanders since 2007 through these strategies. A key strategy included in the Maryland Health Improvement Process (SHIP) is the development of a health insurance exchange that increases access to health care and critical preventive services.

Maryland’s Average Annual Uninsured Rate Over a Two Year Period (Under Age 65, Estimated)

25 State Health Improvement Process objective, Maryland Department of Health and Mental Hygiene
26 State Health Improvement Process objective, Maryland Department of Health and Mental Hygiene
27 Health Insurance Coverage in Maryland Through 2009, Maryland Health Care Commission, January 2011
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD health AND WELL-BEING of the People who live,
work, and play in MARYLAND

Indicator 1.5: Percent of Maryland children 19 to 35 months fully immunized (immunization series 4:3:3:3:1)

Target: 80% vaccination coverage for recommended vaccines among young children (19-35 months) by 2014

How are we doing? The immunization status of young children is a good predictor of avoidance of death, disability, or developmental delays associated with immunization preventable diseases. Current Centers for Disease Control (CDC) guidelines call for children to be immunized using the 4:3:3:3:1 series. Data presented in this report is based on this series. In 2007, the percent of Maryland children aged 19 to 35 months who are fully immunized increased by 13.2 percentage points above the 2006 level, but lost most of its gains in 2008, declining by 11.1 percentage points. Data for 2009 is not comparable to other years due to a shortage of Haemophilus Influenzae B (Hib) vaccine resulting in CDC modifying the National Immunization Survey for that year. There was a decline of 5.3 percentage points in the percent fully immunized in Maryland from 2008 to 2010, and an overall reduction of 4.8 percentage points from 2006 to 2010. Maryland's immunization rate was essentially the same as the national rate in both 2006 and 2010, and near the national rate in 2008. In 2007 and 2009, Maryland compared favorably to the national rate, exceeding it by 13.9 and 10 percentage points respectively. The Center for Immunization, Department of Health and Mental Hygiene, protects the public from vaccine preventable diseases by providing free vaccines to health providers and local health departments through the Vaccines for Children program; conducts disease surveillance activity and monitoring; and provides immunization health education and resources through the Maryland Partnership for Prevention. The Center for Immunization offers ImmuNet (patient record database) to Maryland Immunization Providers. ImmuNet is helpful in tracking children in need of vaccination, and assists in vaccine management.

Percent of Maryland Children 19 to 35 months Fully Immunized (Series 4:3:1:3:3:1) Estimated

29 Measure changed to include children 19-35 months because age specific data for children up to 24 months is not available for 2008, 2009, and 2010. Data appears to be consistently available for ages 19-35 months. Per DHMH all states and CDC use the 19-35 month age group and the 4:3:3:3:1 immunization series.
30 4 or more doses of DTaP (diphtheria, tetanus, pertussis), 3 or more doses of poliovirus vaccine, 1 or more doses of any MMR (measles, mumps, rubella), 3 or more doses of Hib (Haemophilus influenza type b), 3 or more doses of HepB (hepatitis B), and 1 or more doses of varicella vaccine
31 State Health Improvement Process (SHIP) objective
32 Maryland’s Results for Child Well-Being 2010
33 Maryland Department of Health and Mental Hygiene, Infectious Disease and Environmental Health Administration: http://ideha.dhmh.maryland.gov/IMMUN/Default.aspx

85
Indicator 1.6: Number of children under 6 years of age with elevated blood lead levels (>10ug/dl)

Target: By 2012, no more than 230 children under 6 years of age have elevated blood lead levels
By 2014, no more than 39.6 children with high blood lead levels per 100,000 population

How are we doing? Lead is one of the most significant and widespread environmental hazards for children in Maryland. The major source of exposure is lead paint dust from deteriorated lead paint or from home renovation. Therefore the most effective prevention of childhood lead poisoning is to reduce or eliminate exposure. Children are at greatest risk from birth to age six, a time that their neurological systems are developing. Sustained exposure to lead can cause neurological damage or death. Elevated blood lead levels are associated with a number of detrimental effects including behavioral and neuro-developmental effects in childhood such as learning and behavioral problems and lowered intelligence, and seizures and death depending on the levels of blood lead. There is increasing evidence of effects in adulthood such as hypertension related to earlier blood lead exposure. The number of children with elevated blood lead levels (above 10 ug/dl) continued a steady and significant decline, dropping by a total of 58.3% over the timeframe of 2006 through 2010, with the dramatic decline beginning in 2007. The decline slowed in 2010, dropping by 4% between 2009 and 2010. The decline in blood lead levels is expected to continue due to the multiplicity of intervention strategies as well as the gradual reduction in the number of residences with lead paint hazards. Strengthened collaboration with the Maryland Department of the Environment, the Department of Housing and Community Development, and local health departments has contributed to an increase in childhood lead testing, as well as decrease in the prevalence of elevated childhood blood levels and childhood lead poisoning.

More children were tested in 2009 for lead poisoning and fewer were poisoned by lead than in any year since the State began collecting this data in 1993 when 23.9% had blood lead levels greater than 10ug/dl. According to the Department of the Environment’s annual statewide Childhood Lead Registry, the percent of children tested who had elevated blood lead levels dropped to one half of one percent statewide. The Maryland Plan to Eliminate Childhood Lead Poisoning by 2010, modified July 2008, enabled Maryland to apply for Federal funding that supports reduction in childhood lead poisoning. The Plan’s five components (Primary Prevention – Control of Hazardous Source and Outreach and Education, Surveillance of Blood Lead Levels, Case Management, Targeting, and Coordination and Leveraging of Resources) guide Maryland’s efforts. A primary prevention strategy that is responsible for much of the decline in blood lead levels is the implementation and enforcement of Maryland’s “Reduction of Lead Risk in Housing” law. The Maryland Department of the Environment reported that children with elevated blood lead levels are more likely to live in homes not covered by Maryland’s lead Law. MDE is providing staff support for the work of a study group that is evaluating ways to fight lead poisoning in owner-occupied properties and rental properties not covered by Maryland’s law and that were built before lead-based paint was banned in the late 1970’s. Continuing the public health screening and case management components of the Governor's Childhood Lead Poisoning Prevention Initiative is another primary strategy to address blood lead poisoning. The Maryland Department of the Environment's Lead Poisoning Prevention Program serves as the coordinating agency of statewide efforts to eliminate childhood lead poisoning.

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34 State Health Improvement Process objective, Maryland Department of Health and Mental Hygiene
36 Fiscal year 2013 MFR Data Definition, Family Health Administration, Department of Health and Mental Hygiene; Lead Poisoning Prevention Program, Maryland Department of the Environment
37 Family Health Administration, Department of Health and Mental Hygiene; Lead Poisoning Prevention Program, Maryland Department of the Environment
38 Maryland Department of the Environment, Lead Poisoning Prevention Program, fiscal year 2013 MFR Performance Discussion
40 Maryland Plan to Eliminate Childhood Lead Poisoning by 2010
41 Maryland Department of the Environment, Lead Poisoning Prevention Program Childhood Blood Lead Surveillance in Maryland, Annual Report 2010, August 2011
42 Maryland Department of the Environment MFR Performance Discussion, fiscal year 2013 MFR submission
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Number of Children With Elevated Blood Lead Levels (>10ug/dl)

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</thead>
<tbody>
<tr>
<td>1,274</td>
<td>892</td>
<td>713</td>
<td>553</td>
<td>531</td>
</tr>
</tbody>
</table>
**Indicator 1.7:** Cumulative percent change from the calendar year 2000 baseline for underage high school students who ever smoked a whole cigarette

**Target:** By end of calendar year 2012, 70% reduction from the calendar year 2000 baseline

**How are we doing?** This measure is an estimate of the proportion of underage high school students who have ever smoked a whole cigarette. Data for this measure is collected through a biennial survey. The 2004 survey was not funded. The percent change from the calendar year 2000 baseline for underage high school students who ever smoked a whole cigarette has been on a steady downward trend since the base year of 2000, with a decline of 28.6 percentage points from 2002 to 2010. The percent change for underage high school students who ever smoked a whole cigarette declined by 17.7 percentage points from 2002 to 2006, remained close to the 2006 level in 2008, and declined an additional 10.9 percentage points from 2006 to 2010. The percent change is expected to decline by another 4.7 percentage points from 2010 to 2012. The Maryland Cigarette Restitution Fund Tobacco Use Prevention and Cessation Program utilizes a comprehensive tobacco-use prevention strategy that includes “school-based programs, community-based programs, youth access enforcement, tobacco-use cessation programs, media messages promoting the availability of cessation assistance and the health benefits of cessation generally, surveillance (tobacco surveys) of under-age tobacco use behaviors, and ongoing evaluation of programmatic efforts.” Reducing tobacco use among adolescents is one of the focus areas of the State Health Improvement Process.

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43 The Maryland Youth Tobacco Survey is a random, two-stage cluster survey of tobacco use behaviors, knowledge, and attitudes that uses Centers for Disease Control and Prevention (CDC) protocols and data analysis, Data Definition and Control Procedures, fiscal year 2012 and fiscal year 2013 MFR submission, Cigarette Restitution Fund – Tobacco Use Prevention and Cessation Program - Family Health Administration

44 Strategies and Discussion of Program Performance, fiscal year 2012 MFR submission, Cigarette Restitution Fund – Tobacco Use Prevention and Cessation Program - Family Health Administration;
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Indicator 1.8: Overall cancer mortality rate per 100,000 persons (age adjusted to 2000 U.S. Standard Population)

Target: By calendar year 2012, no more than 168.3 cancer deaths per 100,000 persons

How are we doing? Mortality data is important in targeting areas of need and in developing programs that reduce the burdens of cancer. Cancer is the second leading cause of death in Maryland and the nation\textsuperscript{45}, and was responsible for nearly one quarter of all deaths in Maryland in 2009.\textsuperscript{46} The overall cancer mortality rate in Maryland declined by 5.4\% from 2005 to 2009, a reduction of 10.2 deaths per 100,000 persons. The overall cancer mortality rate in Maryland remained at the 2005 level in 2006, declined by 3.5\% from 2006 to 2007, and remained stable from 2007 through 2009. Maryland's cancer mortality rate was above the national rate in 2005, 2006, and 2008.\textsuperscript{47} “Improvements in the prevention, early detection, and treatment of many types of cancer have led to a decline in cancer incidence and death rates in Maryland and the nation. Despite these declines, the cancer burden in Maryland remains large when measured by human suffering, loss of life, loss of quality of life, and expenditure for medical care.”\textsuperscript{48} The Maryland Comprehensive Cancer Control Plan published in 2011 by the Maryland Department of Health and Mental Hygiene sets goals and objectives to be met by 2015 and presents a multitude of strategies to reduce cancer incidence and death. Reduction of chronic disease incidence and mortality including cancer, is also one of the areas of focus of the State Health Improvement Process. Primary strategies to address cancer mortality include continuing strong public health surveillance, education, prevention, screening, diagnosis, and treatment efforts, and strong cancer research.\textsuperscript{49}

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Overall Cancer Mortality Rate Per 100,000 Persons
(Age Adjusted to 2000 U.S. Standard Population)

\begin{center}
\begin{tabular}{lcccc}
187.9 & 186.5 & 180.0 & 180.6 & 177.7 \\
184.7 & 181.1 & 178.7 & 175.8 & \\
\end{tabular}
\end{center}

\textbf{Maryland} \hspace{1cm} \textbf{U.S.}


\textsuperscript{46} Maryland Vital Statistics Annual Report 2009, Department of Health and Mental Hygiene

\textsuperscript{47} National data is not yet available for 2009 from the National Cancer Institute

\textsuperscript{48} The Maryland Comprehensive Cancer Control Plan, Executive Summary, 2011: http://fha.maryland.gov/cancer/cancerplan/publications.cfm

\textsuperscript{49} Fiscal Year 2013 MFR Strategies, Cigarette Restitution Fund-Cancer Prevention, Education, Screening and Treatment Program-Family Health Administration, Department of Health and Mental Hygiene
**Indicator 1.9:** Heart disease mortality rate for all races per 100,000 population (age adjusted)

**Target:** By calendar year 2012, no more than 164.1 per 100,000 persons

**How are we doing?** Heart disease mortality refers to the death of an individual by acute rheumatic fever, chronic rheumatic heart disease, hypertensive heart disease, hypertensive heart and renal disease, or ischaemic heart disease. Heart disease continued to be the leading cause of death in Maryland in 2009. The age adjusted heart disease mortality rate was 193.9 per 100,000 population in 2009, 25% below the rate a decade ago. From 2005 through 2009, the heart disease mortality rate declined by 7.6%. The rate declined by 3.1% from 2007 to 2008, the largest decline during the period of 2005 through 2009. Mortality from heart disease in those under age 85 is declining more rapidly than cancer mortality. Since 1991, heart disease mortality has declined at an annual average of 3.4%, compared to a decline of 1.9% per year in cancer mortality. Reduction of chronic disease incidence and mortality including heart disease, is one of the areas of focus of the State Health Improvement Process. Public health efforts contribute to Maryland’s comprehensive approach in addressing heart disease mortality including surveillance, screening, diagnosis, and treatment efforts.

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50 Fiscal year 2012 MFR Data Definition and Control Procedures, Family Health Administration, Department of Health and Mental Hygiene
51 Maryland Vital Statistics Annual Report 2009, Department of Health and Mental Hygiene
53 Fiscal year 2013 MFR Strategies and Discussion of Program Performance, Family Health Administration, Department of Health and Mental Hygiene
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Indicator 1.10: Rate of diagnoses and the percent change from the prior year level in the number of age adjusted new HIV diagnoses (per 100,000 population)

Target: Reduced age adjusted rate of new HIV diagnoses

How are we doing? The rate of HIV diagnoses jumped by 11.6% from 2006 to 2007, and thereafter declined 13.3% by 2009. The number of new HIV diagnoses remained at the 2009 level in 2010. Following the transition from code-based to name-based HIV reporting required by the Maryland HIV/AIDS Reporting Act of 2007, there was a significant increase in the number of HIV cases reported. This may reflect a temporary change in HIV case reporting as well as an increased number of diagnoses due to additional testing efforts. Strategies to reduce the rate of new HIV diagnoses include increased collaboration among State agencies and community based organizations to enhance access to and use of needed prevention services by disproportionately affected populations; reduced drug and alcohol use associated with HIV risk behaviors among adults and youth by expanding work with substance abuse providers; among the current providers, increased skills and support to deliver quality HIV interventions; increased supply of free and sterile needles among injection drug users; and access to condoms among sexually active youth and adults engaging in HIV risk behaviors. A strategy of the State Health Improvement Process is to implement the Maryland HIV Comprehensive Plans to achieve progress on the National HIV/AIDS Strategy goals and objectives by 2015.

Age Adjusted Rate of New HIV Diagnoses (Per 100,000 Population) and the Percent Change From the Prior Calendar Year

- CY 2006 Est.
- CY 2007 Est.
- CY 2008 Est.
- CY 2009 Est.
- CY 2010 Est.

Age Adjusted Rate of New HIV Diagnoses

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
<th>Percent Change</th>
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<tbody>
<tr>
<td>CY 2006 Est.</td>
<td>39.6</td>
<td></td>
</tr>
<tr>
<td>CY 2007 Est.</td>
<td>44.2</td>
<td>11.6%</td>
</tr>
<tr>
<td>CY 2008 Est.</td>
<td>41.9</td>
<td>-5.2%</td>
</tr>
<tr>
<td>CY 2009 Est.</td>
<td>38.3</td>
<td>-8.6%</td>
</tr>
<tr>
<td>CY 2010 Est.</td>
<td>38.6</td>
<td>0.8%</td>
</tr>
</tbody>
</table>


54 HIV estimates were produced using 2001 through 2009 trends in data obtained through June 30, 2011 (data is by date of diagnosis, not the date of reporting) – Data Definition and Control Procedures, fiscal year 2012 MFR and fiscal year 2013 MFR submission, Department of Health and Mental Hygiene, Infectious Disease and Environmental Health Administration
55 Fiscal year 2012 MFR budget book submission, Infectious Disease and Environmental Health Administration, Department of Health and Mental Hygiene
56 Fiscal year 2013 MFR Strategies and Discussion of Program Performance, Infectious Disease and Environmental Health Administration, Department of Health and Mental Hygiene
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Indicator 1.11: Rate of primary/secondary syphilis incidence (cases per 100,000 population)

Target: Through calendar year 2012, the rate of primary and secondary syphilis will decline from the calendar year 2009 rate of 5.5

How are we doing? Syphilis causes significant complications if untreated and facilitates the transmission of HIV. Untreated early syphilis in pregnant women results in perinatal death in up to 40% of cases and, if acquired during the four years preceding pregnancy, may lead to infection of the fetus in 80% of cases. The rate of syphilis incidence provides a measure of disease prevention, success of promoting healthy behaviors, and public health surveillances. Cases of syphilis tend to be under reported as the disease goes undiagnosed in some individuals and unreported by some providers. Other reasons that syphilis data are likely to underestimate the impact of the disease include infected persons not accessing health care and persons not screened. Maryland’s rate of primary/secondary syphilis cases per 100,000 population exceeded the national rate from 2006 through 2009. In 2009, the 13 states with the highest rates of primary and secondary syphilis accounted for 75% of all U.S. cases. The rate of primary and secondary syphilis in these 13 states exceeded the national rate of 4.6 cases per 100,000 population. Of these states, 10 were in the South, including Maryland at twelfth highest. Maryland’s rate of syphilis incidence in 2009 was essentially the same as the rate in 2006. From 2006 to 2008, the rate of syphilis incidence increased significantly by 24.1%, dropped by 17.9% in 2009, and stayed close to that level in 2010 (increased by 3.6%). In 2006 the Centers for Disease Control, in consultation with state, local, and community partners, updated the national plan to eliminate syphilis. The 2006 Plan provides a dynamic, evidence-based framework to guide current and future syphilis elimination efforts and promotes culturally competent prevention and control services. Maryland has focused efforts to reduce the syphilis epidemic on collaborative public health efforts.

58 Fiscal year 2013 MFR Data Definitions and Control Procedures, Infectious Disease and Environmental Health Administration, Department of Health and Mental Hygiene; CDC Sexually Transmitted Diseases in the United States, 2008, November 2009
60 Fiscal year 2013 MFR budget book submission, Infectious Disease and Environmental Health Administration, Department of Health and Mental Hygiene; Sexually Transmitted Disease Surveillance Supplements for 2006, and 2007, Syphilis Surveillance Reports, Division of STD Prevention, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention
63 Fiscal year 2013 MFR Strategies and Discussion of Program Performance, Infectious Disease and Environmental Health Administration, Department of Health and Mental Hygiene
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Rate of Primary/Secondary Syphilis Cases
Per 100,000 Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate of Primary/Secondary Syphilis Cases (Per 100,000 Population)</th>
<th>Maryland</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2006 Actual</td>
<td>3.3</td>
<td>5.4</td>
<td>9.3</td>
</tr>
<tr>
<td>CY 2007 Actual</td>
<td>3.8</td>
<td>6.1</td>
<td>6.7</td>
</tr>
<tr>
<td>CY 2008 Actual</td>
<td>4.5</td>
<td>6.7</td>
<td>5.5</td>
</tr>
<tr>
<td>CY 2009 Actual</td>
<td>4.6</td>
<td>5.5</td>
<td>5.7</td>
</tr>
<tr>
<td>CY 2010 Actual</td>
<td>4.6</td>
<td>5.5</td>
<td>5.7</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

**Indicator 1.12:** Number of reported cases of vaccine preventable communicable diseases - hepatitis A

**Indicator 1.13:** Number of reported cases of vaccine preventable communicable diseases - pertussis

**Target:** Reduced cases of vaccine-preventable communicable diseases - hepatitis A and pertussis

**How are we doing?** Reported cases of hepatitis A remained on a downward trend, declining by 65.3% from 2007 through 2011. Reported cases of pertussis increased significantly by 39.3% from 2007 to 2008. Pertussis cases began to decline in 2009 (by 14.1%), and declined further by 18.6% over the next two years. The number of pertussis cases in 2011 was close to the number of cases in 2007.
**Indicator 1.14:** Number of reported cases of vaccine preventable communicable diseases - measles

**Indicator 1.15:** Number of reported cases of vaccine preventable communicable diseases - mumps

**Target:** Reduced cases of vaccine-preventable communicable diseases - measles and mumps

**How are we doing?** The number of reported cases of measles in Maryland has remained low – between zero and four during the period of 2006 through 2010, with no cases during 2007, 2008, and 2010. The number of reported cases of mumps increased by 9.1% from 2006 to 2007. Between 2007 and 2009, the number of reported cases of mumps declined by 33.3%, and then increased to the 2007 level (12) in 2010, a 50% increase.
PROTECTING THE WELL BEING OF CHILDREN

**Indicator 1.16:** 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)

**Target:** Reduced rate of injury-related deaths due to accidents

**How are we doing?** Injury-related deaths due to accidents is associated with social, economic, and environmental threats to a child’s life, including risk and exposure to violence, lack of access to medical resources, and mental health risks. Injury-related deaths due to accidents include unintentional injury, and exclude assault (homicide) and intentional self-harm (suicide). Accidents include motor vehicle and other types. Unintentional injuries to Maryland children ages 1 to 17 were the leading cause of death from 2006 to 2009. Of the unintentional injuries, motor vehicle crashes caused the most deaths to children (approximately one third of injury deaths). Adolescents between the ages of 15 and 17 years have the highest rates of injury deaths for nearly all types of injuries. The child rate of injury-related deaths due to accidents increased by 8.1% between 2006 and 2007. Injury related deaths due to accidents declined by 19.6% between 2007 and 2008, with 2.1 fewer deaths per 100,000 children in 2008. The rate further declined by 17.4% (1.5 fewer deaths per 100,000 children) from 2008 to 2010. The Maryland State Child Fatality Review (CFR) Team works to prevent child deaths by reviewing the causes and incidence of child deaths, developing plans for and implementing changes within the agencies represented on the State CFR team to prevent child deaths, and advising the Governor, General Assembly, and the public on changes to law, policy, and practice to prevent child death.

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64 Maryland’s Results for Child Well Being 2009
65 Child Death Report, 2008 and Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration;
66 Department of Health and Mental Hygiene, Family Health Administration - [http://www.fha.state.md.us/mch/cfr_home.cfm](http://www.fha.state.md.us/mch/cfr_home.cfm)
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Indicator 1.17: Rate of homicide deaths (assaults) of children and youth ages 0 to 19 (per 100,000 population)

Target: Reduced rate of homicide deaths of children and youth ages 0 to 19

How are we doing? This measure is associated with risk and exposure to violence. The rate of homicide deaths of children and youth ages 0 to 19 was on an upward trend from 2006 to 2008, increasing by 6.3%. The rate of homicide deaths of children and youth ages 0 to 19 declined dramatically by 33.8% between 2008 and 2009. Homicide was the second leading cause of death of children and youth ages 1-17 years during the 2006 to 2009. The rate of homicides among African American children was substantially higher (six times greater risk) than among white non-Hispanic children. The rate of homicide deaths of children and youth ages 0 to 17 was greater in infancy (7.1 per 100,000 during 2005-2007; 5.7 per 100,000 during 2007-2009) than for any childhood age group until age 15-17 years (12.2 per 100,000 during 2005-2007; 9.4 per 100,000 during 2007-2009).

From 2005-2007 the rate for children over 15 years was substantially higher than the national rate in 2006, and during the timeframe of 2007-2009 the rate was substantially higher than the national rate for 2007. Child deaths due to homicide are not distributed evenly throughout the State. For the period 2005-2007, 75% of the homicides among children aged 0-17 years were for residents of three jurisdictions: Baltimore City (46.9%), Prince George’s County (19.3%), and Baltimore County (8.3%). This pattern held true during the timeframe of 2007-2009.

Rate of Homicide Deaths of Children and Youth Ages 0 to 19
(Per 100,000 Population)

<table>
<thead>
<tr>
<th>Year</th>
<th>CY 2006 Actual</th>
<th>CY 2007 Actual</th>
<th>CY 2008 Actual</th>
<th>CY 2009 Actual</th>
<th>2010 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>6.4</td>
<td>6.6</td>
<td>6.8</td>
<td>4.5</td>
<td>3.7</td>
</tr>
</tbody>
</table>

67 Maryland’s Results for Child Well Being 2009; Child Death Report, 2008 and Child Death Report 2009, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration
68 Child Death Report, 2008 and Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration
69 Child Death Report, 2008 and Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration
70 Child Death Report, 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration
Indicator 1.18: Number of DJS youth who are the victims of a homicide

Target: By fiscal year 2012, no youth victims of homicide while under DJS supervision

How are we doing? This measure focuses on homicide deaths of youth who are under active supervision by the Department of Juvenile Services. Data shown below for fiscal year 2007 is for six months, January 2007 through June 2007. In 2009, there were 8 more DJS youth who were victims of homicide than in 2008, followed by a decline to nine less homicides in 2010 than in 2009, and a further drop of 50% in the number of homicide deaths from 2010 to 2011. Overall, the number of DJS youth who were the victims of a homicide declined by 54.5% from 2008 through 2011.
Indicator 1.19: Percent of children with absence of recurrence of maltreatment within 6 months of a first occurrence

Target: By fiscal year 2013, 94.6 percent of victims of maltreatment are without recurrence of maltreatment within six months of a first occurrence

How are we doing? Reliable and valid conclusions about data trends prior to 2009 cannot be made due to incomplete data in the MD CHESSIE system for this indicator. Fiscal year 2007 data is not available due to incomplete MD CHESSIE data. The Department of Human Resources reports that as of 2009, the accuracy of CHESSIE data is greatly improved. In 2009 and 2010, 96.8% of children had no recurrence of maltreatment within six months of a first occurrence. The percent of children with no recurrence of maltreatment remained at essentially the same level in 2011. The percent of children with the absence of maltreatment recurrence has exceeded the national standard of 94.6% for each year 2009 through 2011. Reducing child maltreatment is an objective in the Maryland Health Improvement Process, with a focus on engaging communities in strategies to reduce child maltreatment.

Percent of Children With No Recurrence of Maltreatment Within Six Months of a First Occurrence

96.8% 96.8% 95.5%
2009 Actual 2010 Actual 2011 Actual

Fiscal Year 2012 and 2013 MFR Performance Discussions, Department of Human Resources
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

STABLE AND ECONOMICALLY INDEPENDENT FAMILIES

Indicator 1.20: Percent of related children and youth under age 18 whose families have incomes below the poverty level (estimated)

Target: Reduced child poverty

How are we doing? The percent of children in poverty is perhaps the most global and widely used indicator of child well-being. Children who grow up in poverty are more likely to have unmet nutritional needs, live in substandard housing, experience crime and violence, lack basic health care, and have unequal access to educational opportunities. They are also more likely to become teen parents and earn less or be unemployed as adults. Such factors are barriers to future economic success and stability. The percent of related children and youth under age 18 whose families have incomes below the poverty level in Maryland has been significantly lower than the U.S. level for each year 2006 through 2010. The percent of related children and youth under age 18 whose families have incomes below the poverty level in Maryland has been significantly lower than the U.S. level for each year 2006 through 2010. The percent of related children and youth under age 18 whose families have incomes below the poverty level increased by 7.5% from 2006 to 2007, remained constant in 2007 and 2008, increased by 15.3% in 2009, and by 12.4% in 2010. The current recession is a significant factor contributing to child poverty. Maryland’s rate of unemployment, after several years of relatively low joblessness, is a major contributor.

Percent of Related Children and Youth Under Age 18 Whose Families Have Incomes Below the Poverty Level (Estimated)

73 Maryland’s Results for Child Well Being 2010
75 Data is from the U.S. Census Bureau’s American Community Survey
76 Maryland’s Results for Child Well Being 2010
**Indicator 1.21:** Maryland prevalence of household-level very low food security (3 year average)

**Target:** End childhood hunger by 2015; All Marylanders will be food secure

**How are we doing?** “Food security—access by all people at all times to enough food for an active, healthy life—is one of several conditions necessary for a population to be healthy and well nourished.” Very low food security is defined as households in which food intake of one member or more was reduced, and eating patterns were disrupted because of insufficient money and other resources for food. Data for this indicator is derived from responses to a survey conducted by the U.S. Census Bureau. In most households with very low food security, the survey respondent reported that he/she was hungry at some time during the previous twelve months but did not eat because there was not enough money for food. Prevalence rates of food insecurity vary widely state to state. Therefore, a 3-year average is used to provide more reliable statistics at the state level.

Over the 3-year periods shown below, with the exception of 2004-2006 during which time the Maryland prevalence of household-level very low food security was equal to the U.S. level, Maryland compared favorably to the U.S. prevalence. The Maryland prevalence dropped in 2005-2007 from the prior three year period by 12.8%, and remained at the 2005-2007 level during the three year period of 2006-2008. While Maryland’s prevalence held steady during that time, the U.S. prevalence increased by 15%. Maryland was one of nine states with prevalence of very low food security lower than the U.S. rate in 2006-2008. During that same timeframe, the prevalence of very low food security was higher than the national average in eight states, and not significantly different from the national average in thirty-three states and the District of Columbia. From 2006-2008 to 2007-2009, Maryland’s prevalence of very low food security dramatically increased by 26.5%, whereas the U.S. prevalence rose at half that rate (13%). Although Maryland’s prevalence grew at a faster pace during 2007 to 2009, Maryland’s prevalence at 4.3% ranked 41st among states and the District of Columbia in prevalence of household-level very low food security. From the three year period of 2007-2009 to the period of 2008-2010, the prevalence of very low food security in Maryland increased by 18.6%. Between these same timeframes, national very low food security increased at a slower rate of 7.7%, closing the gap between Maryland and the U.S. to nearly the same as it was during 2005-2007. During 2008-2010, the prevalence of very low food security was higher than the national average in nine states and lower than the national average in thirteen states and the District of Columbia. Maryland was one of twenty-eight states where the prevalence was not significantly different from the national average. During 2008-2010, prevalence rates of very low food security ranged from 2.7% to 7.5%, with Maryland falling in the middle of the pack at 5.1%.

In November of 2008, Governor Martin O’Malley established the Partnership to End Childhood Hunger in Maryland with Share our Strength and the Governor’s Office for Children. The partnership is a growing coalition of State and Federal agencies, non-profit organizations, advocacy groups, the private sector, and food programs that work to serve children at risk of hunger, and ensure they have nutritious food where they live, learn and play. The O’Malley-Brown administration is also addressing hunger through a variety of food supplement programs such as the Women, Infants, and Children’s Program, school breakfast and afterschool supper programs, summer meal programs, and expanded utilization of the Earned Income Tax Credit and other programs to enhance working families’ economic security. The Food Research and Action Center (FRAC) created Maryland Hunger Solutions in late 2007 to fight hunger and improve the nutrition, health and well-being of children and families in Maryland. FRAC works with State and community partners to maximize participation in all Federal nutrition programs; educate the public and key stakeholders both to the stark reality of hunger’s existence in Maryland and to solutions that are already at hand; and improve public policies to end hunger, reduce poverty, and promote nutrition.

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77 One of Governor O’Malley’s fifteen strategic policy goals
78 Household Food Security in the United States in 2010, ERR-125, Economic Research Service/USDA
79 The Economic Research Service, U.S. Department of Agriculture, compiles and analyzes data for this indicator from an annual survey conducted by the U.S. Census Bureau as a supplement to the monthly Current Population Survey (CPS).
81 Food Research and Action Center
82 Household Food Security in the United States in 2010, ERR-125, Economic Research Service/USDA
83 One Maryland, A Message from the Governor, Governor O’Malley Celebrates Two-Year Anniversary of the Partnership to End Childhood Hunger, November 9, 2010; Campaign to End Childhood Hunger in Maryland Strengthened Through New Corporate Commitment, Share Our Strength press release, January 31, 2011
85 http://frac.org/state-news/maryland-hunger-solutions/
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Estimated Prevalence of Household-Level Very Low Food Security (3 Year Average)

<table>
<thead>
<tr>
<th>Year</th>
<th>Maryland</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2006</td>
<td>3.9%</td>
<td></td>
</tr>
<tr>
<td>2005-2007</td>
<td>3.4%</td>
<td></td>
</tr>
<tr>
<td>2006-2008</td>
<td>3.4%</td>
<td></td>
</tr>
<tr>
<td>2007-2009</td>
<td>4.3%</td>
<td>5.2%</td>
</tr>
<tr>
<td>2008-2010</td>
<td>5.1%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Indicator 1.22: Rate of live births to adolescents between 15 and 19 years of age (per 1,000 women)

Target: By calendar year 2012, no more than 25.8 teen births per 1,000 women

How are we doing? Adolescent mothers are more likely to drop out of high school, experience unemployment, or if employed earn lower wages than women who begin childbearing after age 20. Children born to teen mothers face increased risks of low birth weight and being pre-term, developmental problems, and poverty. Adolescents' birth mothers are more likely to continue childbearing after age 20. Births to teen mothers accounted for 8.3% of all births in 2009, of which 2.6% were to mothers under the age of 18. Maryland’s rate of live births to adolescents between 15 and 19 years of age has compared favorably to the U.S. rate for each year 2005 through 2009. Final 2010 data is not yet available. Maryland’s teen birth rate increased by 5.7% from 2005 to 2006, remained relatively stable from 2006 to 2007, declined nearly 5% in 2008 and an additional 4.6% in 2009. The teen birth rate in 2009 is essentially the same as the rate in 2005. The U.S. teen birth rate increased 3.5% from 2005 to 2006, and remained relatively stable from 2006 to 2008. The U.S. teen birth rate declined by 5.8% from 2008 to 2009. The U.S. 2009 rate of 39.1 births per 1,000 women aged 15-19 years was the lowest ever reported in the nearly seven decades for which a consistent series of rates is available. Maryland’s 2009 rate was 25.3% lower than the U.S. rate. Maryland has used a multifaceted approach to prevent teen pregnancy including health education and counseling, access to health care, outreach, and public awareness. Public health reproductive health and family planning services are contributing to a downward trend in teen birth rates in Maryland.

Rate of Live Births to Adolescents Between 15 - 19 Years of Age
(Per 1,000 Women)

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Maryland</td>
<td>U.S.</td>
<td>Maryland</td>
<td>U.S.</td>
<td>Maryland</td>
</tr>
<tr>
<td>31.8</td>
<td>40.5</td>
<td>33.6</td>
<td>41.9</td>
<td>42.5</td>
</tr>
<tr>
<td>34.4</td>
<td>32.7</td>
<td>41.5</td>
<td>39.1</td>
<td></td>
</tr>
</tbody>
</table>

88 Births: Final Data for 2009, National Vital Statistics Reports, Volume 60, Number 1, November 2011, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention
89 Fiscal year 2013 MFR Strategies and Discussion of Program Performance, Family Health Administration, Department of Health and Mental Hygiene

103
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Indicator 1.23: Statewide percent of current child support paid

Target: 1% increase in the percentage of current support paid each Federal fiscal year (FFY) until reaching eighty percent

How are we doing? The percent of child support paid has been stable over the period of Federal fiscal year 2007 through 2011. The economic downturn may have resulted in some families seeking modifications in the amount of monthly support paid, and rising unemployment may have affected the ability of some individuals to pay child support. The Non-Custodial Parent Employment Program assists unemployed or underemployed non-custodial parents to identify and enter employment, thereby helping them to financially support their children. The Maryland Child Support Program has implemented automated garnishment of financial accounts as one strategy to maximize performance in current support and payments on arrears. The Department of Human Resources reported that the Child Support Enforcement Administration has increased collections by $1.4 million. "Based on preliminary FFY 2010 data issued by the Federal Office of Child Support Enforcement, out of 50 states, Washington DC and three US Territories, Maryland ranked 16th in current support paid."91

Percent of Current Child Support Paid

<table>
<thead>
<tr>
<th>FFY 2007 Actual</th>
<th>FFY 2008 Actual</th>
<th>FFY 2009 Actual</th>
<th>FFY 2010 Actual</th>
<th>FFY 2011 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>64.58%</td>
<td>64.89%</td>
<td>64.46%</td>
<td>64.70%</td>
</tr>
<tr>
<td>55%</td>
<td></td>
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</tr>
<tr>
<td>60%</td>
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<tr>
<td>65%</td>
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<tr>
<td>70%</td>
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<tr>
<td>75%</td>
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<td></td>
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<tr>
<td>80%</td>
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</tr>
</tbody>
</table>

90 The data for this measure is collected by Federal fiscal year (FFY)
91 Fiscal year 2013 MFR Performance Discussion, Department of Human Resources, Child Support Enforcement Administration
**KEY PERFORMANCE AREA 1**
**PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND**

**Indicator 1.24:** Rate of children placed in out-of-home care (per 100,000 children)

**Target:** Children placed in out-of-home care only when necessary and placed close to their homes

**How are we doing?** Out-of-home placements include Family Foster Care, Community-Based Residential Placement, Non-Community-Based Residential Placement, and Hospitalization. Abuse and neglect, crime and violence contribute to the need to place children in alternative care. Out-of-home placements are used when less restrictive interventions have failed and the safety and well-being of the child requires an out-of-home placement. Therefore, children placed in out-of-home care are those with the most intensive needs. Outcomes for children in out-of-home placements are associated with lower educational and economic success, as well as correlated to higher disconnection from their communities and high-risk behavior. Due to revised data collection methodologies used for 2007 and 2008, data for 2007 is not comparable to data for prior or subsequent years. The rate of placement in out-of-home care increased by 5.9% from 2008 to 2010. The rate remained at the 2009 level in 2010. The Department of Human Resources has several strategies including Place Matters which aims at maintaining children in their homes through intensive in-home services, and placing children in their home jurisdictions when possible. Out-of-State placement has been decreasing since 2009, largely due to the efforts of local and statewide teams that try to get children the services they need within the State of Maryland. DHR has implemented the Family Centered Practice initiative, which is designed to encourage caseworkers to engage families early in the change process and promote family involvement in decisions regarding placement of children outside of their homes. The Department of Juvenile Services uses evidence-based therapies and the Maryland Comprehensive Assessment and Service Planning tool which was designed to place children more effectively in programs to suit their individual needs.
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

Rate of Children Placed in Out-Of-Home Care
(Per 1,000 Children)

2006 Actual 2007 Actual 2008 Actual 2009 Actual 2010 Actual
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

SUBSTANCE ABUSE TREATMENT

Indicator 1.25: Percent decrease in substance abuse by adults during treatment

Indicator 1.26: Percent decrease in substance abuse by adolescents during treatment

Target: By 2013, 82% decrease in the number of adults and adolescents using substances at completion/transfer/referral from non-detox treatment compared to the number of adults/adolescents who were using substances at admission to treatment

How are we doing? This measure addresses the success of non-detox treatment programs provided by the Alcohol and Drug Abuse Administration (ADAA) of the Department of Health and Mental Hygiene. During the period of 2007 through 2011 there was a 5.3% improvement in the percent decrease in substance abuse by adults during treatment. Improvement slowed by 6.3% from 2009 to 2010, but bounced back to the 2009 level in 2011. With the exception of 2007 during which there was a -10 percentage point difference, the percent decrease in substance abuse by adolescents during treatment has mirrored the percent decrease in substance abuse by adults during treatment. The most significant improvement (16.4%) in the percent decrease in substance abuse by adolescents during treatment occurred between 2007 and 2008. Although the positive movement of the percent decrease in substance abuse by adolescents during treatment slowed by 9.9% from 2009 to 2010, improvement bounced back to the 2009 level in 2011. Since fiscal year 2006, the ADAA has been utilizing regional interdisciplinary technical assistance teams to help decision makers and providers in funded programs improve treatment outcomes.102

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102 Alcohol and Drug Abuse Administration, Department of Health and Mental Hygiene fiscal year 2013 MFR Performance Discussion
Indicator 1.27: Percent increase in employment of adults at completion of substance abuse treatment

Target: By 2013, 33% increase in employment

How are we doing? From 2007 to 2011, the percent increase in employment of adults at completion of treatment was at its lowest (21%) in 2008 and at its highest (32%) in 2010, a 52.4% increase between 2008 and 2010. The greatest year to year improvement (38.1%) occurred between 2008 and 2009. The percent increase in employment increased an additional 10.3% from 2009 to 2010, and then declined by 6.3% to near the 2009 level in 2011. The ADAA utilizes regional interdisciplinary technical assistance teams to help providers in funded programs improve treatment outcomes.

103 Fiscal year 2013 MFR Performance Discussion, Alcohol and Drug Abuse Administration, Department of Health and Mental Hygiene
KEY PERFORMANCE AREA 1
PROMOTING AND SUPPORTING GOOD HEALTH AND WELL-BEING OF THE PEOPLE WHO LIVE, WORK, AND PLAY IN MARYLAND

MENTAL HEALTH SERVICES

Indicator 1.28: Percent of adults who report that Maryland’s public mental health services have allowed them to deal more effectively with daily problems

Target: By 2013, 79% of adults report that they deal more effectively with daily problems

How are we doing? During the period of 2007 through 2011, the percent of adults who report that Maryland’s public mental health services have allowed them to deal more effectively with daily problems fluctuated between 76% and 81% (declines of 5% to increases of 4%). The Mental Hygiene Administration in the Department of Health and Mental Hygiene reviews needs and gaps in services through annual statewide client perception of care surveys, regular focus groups, dialogue with consumer representatives, review of standard data reports, and local needs assessment and planning through its Core Service Agencies.104

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104 Mental Hygiene Administration, Department of Health and Mental Hygiene fiscal year 2012 and 2013 MFR Strategies and Program Performance Discussions
SERVICES TO THE DISABILITY COMMUNITY

Indicator 2.1: One year retention of employment by people with disabilities who were assisted by the Department of Education’s Division of Rehabilitation Services (DORS)

Target: By June 2012, 2,950 people with disabilities assisted by DORS will obtain and retain employment for at least one year

How are we doing? The percent of people with disabilities who retained employment for one year increased by 6.5% from 2007 to 2008, and stayed around the 2008 level (85.7%) through 2011. DORS continues a multi-year effort to align resources to support the delivery of vocational rehabilitation services to young people with disabilities transitioning from public education to careers and post-secondary education. DORS was one of six state programs selected by the U.S. Department of Education to participate in Employment First, a national demonstration project of evidence-based transition practices. DORS is partnering with the Maryland Developmental Disabilities Administration, other State agencies, and community non-profit organizations to determine the most effective model for implementing Employment First in Maryland. Maryland’s project, the Seamless Transition Collaborative, will assure that individuals with intellectual/developmental disabilities consider employment on a “preferred basis” in life planning. Through Maryland’s project, DORS is working with eleven local education agencies. Other efforts to increase participation of individuals with disabilities in the workforce include the “Think Beyond the Label” campaign which was created to encourage employers to change attitudes about recruiting, hiring and retaining qualified individuals with disabilities. The Maryland Department of Disabilities (MDOD) was an influential partner in the creation of this national marketing campaign. MDOD also staffs the Work Matters Business Partnership, which provides employers with technical assistance and connectivity to a myriad of resources and information about employing individuals with disabilities. MDOD, working to address the high unemployment of people with disabilities, partnered with the Department of Labor, Licensing and Regulation to create and sponsor “No Spare Marylander” workshops across the State to assist Marylanders with disabilities with job seeking skills and strategies. DORS is a partner in the Skills2Compete Initiative through programs at its Workforce and Technology Center and throughout Maryland communities.

One-Year Retention of Employment by People With Disabilities Who Were Assisted by the Department of Education’s Division of Rehabilitation Services Programs

100%
95%
90%
85%
80%
75%
70%
65%
60%
80.5% 85.7% 85.0% 85.2% 85.6%

2007 Actual 2008 Actual 2009 Actual 2010 Actual 2011 Actual
Federal Fiscal Year

105 Fiscal year 2012 and 2013 MFR Performance Discussion, Division of Rehabilitation Services, Maryland State Department of Education
106 “State Employees Assuring Inclusion for All Marylanders”, A Message from Governor O’Malley, September 17, 2010
108 “State Employees Assuring Inclusion for All Marylanders”, A Message from Governor O’Malley, September 17, 2010
109 MFR Performance Discussion fiscal year 2013, Maryland State Department of Education

110
KEY PERFORMANCE AREA 2
PROMOTING AND SUPPORTING INDEPENDENCE AND WELL-BEING, AND EQUAL AND FULL ACCESS TO RESOURCES THAT ASSIST INDIVIDUALS WITH DISABILITIES TO LIVE INDEPENDENT AND HEALTHY LIVES

Indicator 2.2: Percent of Developmental Disabilities Administration Community Service respondents of the “Ask ME Survey” who expressed satisfaction with physical well-being

Indicator 2.3: Percent of Developmental Disabilities Administration Community Service respondents of the “Ask ME Survey” who expressed satisfaction with personal development

Indicator 2.4: Percent of Developmental Disabilities Administration Community Service respondents of the “Ask ME Survey” who expressed satisfaction with self-determination

Target: By 2013, the percent of respondents expressing satisfaction will remain the same or improve

How are we doing? The “Ask Me Survey” is a quality of life survey administered by Developmental Disabilities Administration services provider organizations. The percent of those expressing satisfaction remained static for each of the three domains from 2007 through 2009. The 2010 survey questions changed from previous years and are not comparable to prior year survey results. The percent of those expressing satisfaction for physical well-being and personal development remained at the same levels in 2010 and 2011. The percent of those expressing satisfaction for self-determination dropped 7.5% from 2010 to 2011. The Developmental Disabilities Administration provides feedback to community service agencies about the satisfaction of people they serve, and requires agencies to address low satisfaction through their quality assurance/improvement plans. The Administration encourages provider agencies to focus on the domain of personal development as this domain is either influenced by or will influence every other quality of life domain.110

Percent of Developmental Disabilities Community Service Respondents of the "Ask Me" Survey Who Expressed Satisfaction With Their Situation in the Domains Indicated

<table>
<thead>
<tr>
<th>Year</th>
<th>Physical Well-Being</th>
<th>Personal Development</th>
<th>Self Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 Actual</td>
<td>94.6%</td>
<td>83.2%</td>
<td>87.6%</td>
</tr>
<tr>
<td>2008 Actual</td>
<td>94.3%</td>
<td>84.0%</td>
<td>75.3%</td>
</tr>
<tr>
<td>2009 Actual</td>
<td>95.0%</td>
<td>78.7%</td>
<td></td>
</tr>
<tr>
<td>2010 Actual</td>
<td>96.3%</td>
<td>80.5%</td>
<td></td>
</tr>
<tr>
<td>2011 Actual</td>
<td>95.6%</td>
<td>81.4%</td>
<td></td>
</tr>
</tbody>
</table>

110 Fiscal year 2013 MFR Strategies and Discussion of Program Performance, Developmental Disabilities Administration, Department of Health and Mental Hygiene
A SAFER, MORE SECURE MARYLAND

PROTECTING MARYLAND’S CITIZENS AND COMMUNITIES – REDUCING AND SOLVING CRIME

GOAL: Maryland’s citizens will live, work, and play in safe and secure communities where law enforcement resources, data and intelligence are effectively shared to prevent and solve crime.

Maryland will focus on protecting its people and communities and reducing and solving crime.
### Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Indicators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorable Performance (Change &gt;10%)</td>
<td>8</td>
<td>57.1%</td>
</tr>
<tr>
<td>Favorable Performance (3% to 10% Change)</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>Stable Performance (0% - 2% Change)</td>
<td>1</td>
<td>7.1%</td>
</tr>
<tr>
<td>Unfavorable Performance (3% to 10% Change)</td>
<td>2</td>
<td>14.3%</td>
</tr>
<tr>
<td>Unfavorable Performance (Change &gt; 10%)</td>
<td>2</td>
<td>14.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td><strong>100%</strong></td>
</tr>
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</table>

### Agency/ Data Source

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Most Recent Data Available</th>
<th>4 Years Prior</th>
<th>4 Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firearm homicide rate per 100,000 (calendar year) (2006 - 2010)</td>
<td>5.12</td>
<td>7.27</td>
<td>-29.6%</td>
</tr>
<tr>
<td>Traffic fatality rate per 100 million miles traveled (calendar year) (2006 - 2010)</td>
<td>0.88250</td>
<td>1.14985</td>
<td>-23.3%</td>
</tr>
<tr>
<td>Part I crime rate (offenses per 100,000 population) (2006 - 2010)</td>
<td>3,547</td>
<td>4,160</td>
<td>-14.7%</td>
</tr>
<tr>
<td>Recidivism: Percent of offenders returned to Department of Public Safety &amp; Correctional Services supervision for a new offense within one year of their release from the Division of Correction - all releases (2006 - 2010)</td>
<td>17.3%</td>
<td>21.2%</td>
<td>-18.4%</td>
</tr>
<tr>
<td>Total number of inmates who escape (2007 - 2011 - difference shown, not percent change)</td>
<td>3</td>
<td>0</td>
<td>3.0</td>
</tr>
<tr>
<td>Total number of inmates who walk off (2007 - 2011)</td>
<td>50</td>
<td>174</td>
<td>-71.3%</td>
</tr>
</tbody>
</table>
## A SAFER, MORE SECURE MARYLAND

<table>
<thead>
<tr>
<th>Agency/ Data Source</th>
<th>Indicator</th>
<th>Most Recent Data Available</th>
<th>4 Years Prior</th>
<th>4 Year Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPSCS</td>
<td>Percent of all cases closed where the offender was employed at closing (2007 - 2011)</td>
<td>26%</td>
<td>32%</td>
<td>-18.8%</td>
</tr>
<tr>
<td><strong>Children's Cab. Inter-agency Fund</strong></td>
<td>Rate per 100,000 of arrests of youth ages 15 to 17 for violent criminal offenses (2005 - 2009)</td>
<td>902</td>
<td>1,018</td>
<td>-11.4%</td>
</tr>
<tr>
<td><strong>DJS</strong></td>
<td>Youth Recidivism: Percent of youth re-committed/incarcerated within one year of release from all residential placements (2006 - 2010)</td>
<td>14.0%</td>
<td>13.0%</td>
<td>7.7%</td>
</tr>
<tr>
<td><strong>Children's Cab. Inter-agency Fund</strong></td>
<td>Percent of public school students in grades nine through twelve who are current drinkers (2005 - 2009)</td>
<td>37.0%</td>
<td>39.8%</td>
<td>-7.0%</td>
</tr>
<tr>
<td><strong>Children's Cab. Inter-agency Fund</strong></td>
<td>Percent of public school students in grades nine through twelve who reported using heroin one or more times (2005 - 2009)</td>
<td>4.1%</td>
<td>2.6%</td>
<td>57.7%</td>
</tr>
<tr>
<td><strong>Military</strong></td>
<td>Percent of evaluated areas for radiological emergency preparedness exercises rated as successful (annually) (2007 - 2011)</td>
<td>99%</td>
<td>98%</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>DHMH</strong></td>
<td>Percent of Maryland hospitals that are National Incident Management System (NIMS) compliant (2007 - 2011)</td>
<td>100%</td>
<td>90%</td>
<td>11.1%</td>
</tr>
<tr>
<td><strong>State Police</strong></td>
<td>Number of matches of DNA taken during criminal investigations with DNA included in the Combined DNA Index System (CODIS) database (2008 - 2011)</td>
<td>540</td>
<td>312</td>
<td>73.1%</td>
</tr>
</tbody>
</table>
**KEY PERFORMANCE AREA I**
**REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS**

**KEEPING MARYLAND COMMUNITIES SAFE**

**Indicator 1.1:** Firearm Homicide Rate per 100,000 population

**Target:** By 2005 and thereafter, fewer than 6.49 (CY 2002 base) homicides per 100,000-population

**How are we doing?** The rate of firearm homicides remained stable in 2006 and 2007. Thereafter, the firearm homicide rate declined dramatically by 14% per year from 2007 to 2009, and by an additional 5.2% from 2009 to 2010. The O'Malley-Brown Administration, working with Maryland’s regional and local partners, created cross-border law enforcement partnerships to crack down on gun violence and gang activity. The Gun Tracing Task Force (GTTF) was started in May 2007 to track and curb illegal gun sales & gang activity. The GTTF cooperates with the Gun Offender Registry and GunStat (partners with agencies such as the Maryland Department of State Police, Maryland Division of Parole and Probation, Maryland Department of Juvenile Services, Governor’s Office of Crime Control and Prevention, Baltimore City State’s Attorney’s Office, Office of the Attorney General, local law enforcement agencies in Baltimore City and Prince George’s County, and the Bureau of Alcohol, Tobacco, Firearms and Explosives).1

![Firearm Homicide Rate Per 100,000 Estimated Population](image_url)

KEY PERFORMANCE AREA I
REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

Indicator 1.2:  Traffic fatality rate per 100 million miles traveled

Target: By 2005 and thereafter, fewer than 1.23978 (2002 base) deaths per 100 million vehicle miles traveled (VMT)

How are we doing?  Traffic fatalities are a leading cause of death in Maryland for persons aged zero to 34 years.3 Primary factors contributing to traffic fatalities in Maryland include impaired driving, excessive speed, aggressive driving, distracted driving, driver error, running off the road, and traversing intersections.4 Maryland has made significant progress in reducing motor vehicle fatalities and injuries despite increases in population and vehicle miles of travel.5 There has been a long term downward trend in the traffic fatality rate. After increasing slightly in 2006, the rate declined for four consecutive years by a total of 23.2% from 2006 to 2010. Although the U.S. traffic fatality rate has been declining, Maryland’s traffic fatality rate has been consistently lower than the U.S. rate.6 In 2009, Maryland’s fatality rate was 13.2% lower than the national fatality rate. The Federal Highway Administration reports that in 2010, the number and rate of traffic fatalities fell to the lowest levels since 1949, despite a significant increase in the number of miles driven during the year.7 To address traffic safety challenges, the Maryland Department of Transportation worked with multiple agencies and jurisdictions to develop a five-year, statewide coordinated safety plan known as the Maryland Strategic Highway Safety Plan (SHSP), which provides a framework for reducing transportation fatalities and serious injuries on all public roads. The SHSP uses performance data to evaluate key safety areas and to identify life-saving educational programs, enforcement strategies, and engineering solutions, thereby strategically investing in areas where the greatest gains can be achieved.8 A new 2011 – 2015 SHSP is projected to be completed in December 2011 that focuses on a reduced number of emphasis areas as determined by traffic crash data. The six areas of emphasis include pedestrian safety, distracted driving, occupant protection, impaired driving, infrastructure, and aggressive driving. The new plan has added a focus on geographic areas where traffic crashes are most prevalent. Reductions in traffic fatalities are attributable in part to higher seat belt use, enhancements in highway engineering and operations, improvements in vehicle safety design and equipment, and programs to further upgrade traffic safety public information and education, traffic law enforcement and adjudication, driver monitoring and control, commercial vehicle operations surprise inspections and enforcement, and safety audits and implementation of an audit tracking system. Recently enacted legislation has also enhanced traffic safety, including among others utilizing speed cameras in school and work zones, banning text messaging and hand held cell phone use in moving vehicles, providing clearance for bicycles and emergency vehicles, strengthening the graduated licensing process, and combating driving under the influence of alcohol and drugs.9

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3 Per the Centers for Disease Control and Prevention – Performance Discussion, fiscal year 2013 MFR, Maryland Department of Transportation, State Highway Administration
4 Maryland Department of Transportation, e-mail correspondence, September 28, 2010
5 2009 Maryland Transportation Plan
6 U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System
7 Specific national data is not yet available for 2010 on the Fatality Analysis Reporting System; FHWA Announces New Approach to Calculating Vehicle Miles Travelled, September 30, 2011, U.S. Department of Transportation, Federal Highway Administration; The new methodology has no effect on overall fatality numbers.
8 Maryland Department of Transportation, 2010 Annual Attainment Report on Transportation System Performance
9 Maryland Department of Transportation, 2010 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation, e-mail correspondence, September 28, 2010, Maryland Department of Transportation fiscal years 2011, 2012, and 2013 MFR Performance Discussions
KEY PERFORMANCE AREA I
REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

Traffic Fatality Rate Per 100 Million Vehicle Miles Traveled

<table>
<thead>
<tr>
<th>Year</th>
<th>Maryland</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY 2006 Actual</td>
<td>1.14985</td>
<td>1.42</td>
</tr>
<tr>
<td>CY 2007 Actual</td>
<td>1.08339</td>
<td>1.36</td>
</tr>
<tr>
<td>CY 2008 Actual</td>
<td>1.05436</td>
<td>1.26</td>
</tr>
<tr>
<td>2009 Actual</td>
<td>0.98870</td>
<td>1.14</td>
</tr>
<tr>
<td>2010 Actual</td>
<td>0.88250</td>
<td></td>
</tr>
</tbody>
</table>
KEY PERFORMANCE AREA I
REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

Indicator 1.3: Part I crime rate (offenses per 100,000 population)

Target: Below 2002 level of 4,800

How are we doing? The O’Malley-Brown Administration considers public safety to be “the greatest responsibility of government at every level”10; and is therefore committed to delivering safer neighborhoods for every Maryland family. One of the Administration’s public safety policy goals is to reduce violent crime in Maryland by 20% by the end of 2012. Part I crimes include murder, rape, robbery, aggravated assault, breaking or entering, larceny-theft, motor vehicle theft, and arson.11 The Maryland Part I crime rate remained relatively steady from 2006 through 2008, declined by 8.6% in 2009, and an additional 6.4% in 2010. Maryland is fighting and solving crime through a variety of strategies including increasing inter-agency cooperation, aligning State resources with the priorities of local governments at increased levels, enhancing warrant service to swiftly remove offenders from the streets, expanding efforts to reduce illegal gun possession and use, and improving use of technology such as DNA Fingerprinting, License Plate Recognition, Crime Mapping, Crime Analysis, and the Public Safety Dashboard.12 The dashboard implemented by the O’Malley-Brown Administration, integrates a variety of criminal justice data bases and provides a Web-based clearinghouse of state criminal justice data and tools to a variety of users. The dashboard provides users access to 40 different state and national agencies and 110 databases. A strategy of the State Health Improvement Process is to build statewide capacity to prevent violence and injury through the State sponsored Partnership for a Safer Maryland coalition. Maryland’s security integration initiative is one of eight national winners of The Council of State Governments’ (CSG) Innovations Awards that was recognized during the CSG National Conference and North American Summit in October 2011. Maryland is pursuing cooperation with law enforcement agencies in other states and has an agreement with the District of Columbia law enforcement agencies that allows D.C. police access to the database and provides Maryland with D.C. information.13

Part I Crime Rate per 100,000 Population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4,160</td>
<td>4,066</td>
<td>4,146</td>
<td>3,789</td>
<td>3,547</td>
</tr>
</tbody>
</table>

11 Department of State Police, fiscal year 2012 MFR Data Definition and Control Procedures
12 “State Employees Keeping Marylanders Safe”, A Message from Governor O’Malley, October 8, 2010
13 Capitol Ideas E-Newsletter, Maryland Dashboard Brings Information Together for Law Enforcement, September/October 2011, Council of State Governments
Indicator 1.4: Recidivism: Percent of offenders returned to Department of Public Safety & Correctional Services (DPSCS) supervision for a new offense within one year of their release from the Division of Correction - all releases

Target: Not to exceed 2001 level of 23.9% for all releases (parolees - 11.1%, mandatory releases – 19.6%, and expiration of sentence releases – 33.8%)

How are we doing? The percent of offenders returned to DPSCS supervision for a new offense increased by 9.9% from 2006 to 2008 bringing the 2008 level to nearly the same level as in 2001. The percent returned to DPSCS supervision declined significantly in 2009 and 2010, with an overall decline of 25.8%. Performance met the target for each of the 5 years for all types of releases. The O’Malley Brown administration implemented the Violence Prevention Initiative in July 2007 as one strategy to reduce violent crime. A primary strategy of the Department of Public Safety & Correctional Services is to “develop a re-entry preparation system assessing the risks and needs of offenders in an integrated manner, delivering the appropriate programming utilizing evidence-based practices through pre-trial detention, incarceration and post-incarceration monitoring.” The Department also will continue to monitor, review, and evaluate for potential use best practices related to recidivism reduction from among current research and model programs, use risk and needs assessment tools for offender management, and develop operational partnerships with criminal justice agencies, treatment agencies, and other public and private organizations.

Percent of Offenders Returned to DPSCS Supervision for a New Offense Within One Year of Release from the Division of Correction - All Releases

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14 Strategies fiscal year 2013 MFR Submission, Department of Public Safety & Correctional Services
KEY PERFORMANCE AREA I
REDDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

MAINTAINING SECURITY AND SAFETY IN CORRECTIONAL INSTITUTIONS

Indicator 1.5: Number of inmates who escape from all Division of Correction (DOC) Facilities, Patuxent Institution, and Division of Pretrial Detention and Services facilities – aggregate

Target: No escapes

How are we doing? Maintaining security and safety standards in adult correctional facilities contributes to keeping the public safe. The performance target of zero escapes was met in 2007. After 4 inmates escaped in 2008, the number of escapes declined in 2009 and 2010. The number of escapes increased again in 2011 to the 2009 level of 3. The performance target of zero escapes has not been met since 2007. The appropriate units within the Department of Public Safety and Correctional Services perform security assessments for each incident, and implement additional strategies to improve security. Following the escape in 2010, some release policies were modified. In addition, electronic fingerprint scanners that are capable of verifying an inmate’s identity within two minutes are now utilized to verify an inmate’s identity at release hubs.\textsuperscript{15} Among other strategies, security audits will continue, detainees and housing areas will continue to be searched for weapons and other contraband that can be used to breach security, and wardens and facility administrators in collaboration with case management staff, will continue to perform routine institutional audits.\textsuperscript{16}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{number_of_inmate_escapes.png}
\caption{Number of Inmate Escapes (In Aggregate)}
\end{figure}

\textsuperscript{15} Fiscal year 2010 MFR Performance Discussion, Department of Public Safety & Correctional Services
\textsuperscript{16} Fiscal year 2013 MFR Strategies, Department of Public Safety and Correctional Services
Indicator 1.6: Total number of inmates who walk off from Division of Correction and Division of Parole and Probation settings, Patuxent Institution, and the Division of Pretrial Detention and Services - aggregate

Target: No more than 111 Department-wide: Division of Correction/DOC - In FY 2011 and thereafter, at least 10% below the FY 2009 level - 26; Division of Parole and Probation/DPP – Central Home Detention Unit – In FY 2008 and thereafter, at least 10% below the FY 2007 level - 52, Alternative confinement setting – In FY 2008 and thereafter, at least 5% below FY 2007 level - 33; Patuxent Institution – 0; Division of Pretrial Detention and Services/DPDS – 0

How are we doing? The total number of inmate walk-offs while under Departmental supervision decreased dramatically by 71.3% from 2007 to 2011. In 2011, there was a total of 50 walk-offs, 61 below the target of no more than 111 department-wide. Although the overall target was met, individual targets for the Division of Correction and the Division of Pretrial Detention and Services were not met. The Division of Correction within DPSCS is focusing efforts on the facilities with the highest incidence of walk offs, as well as identifying and implementing other strategies to reduce walk offs. Because the majority of the walk offs in 2010 were inmates working outside the facilities, a change in transportation policy requires that all vehicles be secured during inmate transport, regardless of the inmate’s security level. In 2011 the majority of walk-offs for DOC were again inmates working outside the facilities on either supervised road crews and work details or unsupervised work programs in the community. Eligibility criteria for placements on outside detail or work release have been modified to further decrease walk-offs. DPP continues to develop post-incident information gathering to produce analytical reports that are used to develop strategies to minimize future walk-offs.

Number of Inmates Who Walk Off (In Aggregate)

17 This measure includes the Division of Pretrial Detention and Services beginning with fiscal year 2006 data. For data comparability, 2006 through 2008 data was revised.
**KEY PERFORMANCE AREA I**
**REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS**

**PROVIDING EFFECTIVE REHABILITATION AND SUBSTANCE ABUSE TREATMENT SERVICES TO OFFENDERS**

**Indicator 1.7:** Percent of all cases closed where the offender was employed at closing

**Target:** At least 31% of cases closed with offender employed at closing

**How are we doing?** Since the development of the Proactive Community Supervision (PCS) approach to supervision in the early 2000's, PCS principles have been modified using evidence-based practices to gradually become part of the supervisory environment and standards in all Division of Parole and Probation offices responsible for supervision of offenders across Maryland. Therefore, this measure includes all active case closures at all DPP offices. Data for 2007 has been adjusted to include all cases. After increasing by 6.3% from 2007 to 2008, the percent of cases closed where the offender was employed at closing fell by 23.5% from 2008 to 2011. Most likely, the economic climate is contributing to the decline in employment. Considering the more intense competition for jobs due to the increased unemployment rate, it is difficult for the offender population to obtain jobs for which many others without criminal records are applying.\(^{18}\) The Department of Public Safety and Correctional Services works to develop partnerships and referral procedures with community-based employment and educational organizations to increase the employability of offenders.\(^{19}\)

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\(^{18}\) Performance Discussion fiscal year 2013 MFR Submission, Department of Public Safety and Correctional Services

\(^{19}\) Strategies fiscal year 2013 MFR Submission, Department of Public Safety and Correctional Services
**KEY PERFORMANCE AREA 2**
**REDUCING AND PREVENTING CRIME COMMITTED BY JUVENILES**

**STRENGTHENING SERVICES TO JUVENILES AND FOCUSING ON EARLY INTERVENTION TO PREVENT JUVENILE CRIME**

**Indicator 2.1:** Rate of arrests for violent criminal offenses per 100,000 youth ages 15 through 17

**Target:** Reduced juvenile violent offense arrest rate

**How are we doing?** Involvement in violent offenses increases the risk of injury or death, and continued criminal activity into adulthood. Risk factors for juvenile delinquency include a lack of educational and job training opportunities, poverty, family violence, and inadequate supervision. Poor school performance, including absence from school, and falling behind in one or more grade levels increases the likelihood of involvement in delinquent activity. Root causes of juvenile criminal behavior include early adolescent problems, lack of protective factors such as adult involvement and family engagement, gang involvement, and severe unmet mental health and/or educational needs. Success in assessing the needs of juveniles (physical and mental health services, drug abuse services, improved education, or social services), and treating troubled juveniles for their needs are important factors in preventing juvenile crime. There was a small decline of 2.9% in 2007 in the violent offense arrest rate for youth. This decline may be due to a change in the source for population data for 2007. Between 2007 and 2008 the rate increased by 10.5%, and thereafter declined by 7.7% in 2009, and an additional 10.5% in 2010. DJS is collaborating with other child serving local and State agencies to improve outcomes for youth, including implementation of initiatives such as Operation Safe Kids which provides community-based case management for at-risk youth.

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**Rate of Arrests for Violent Criminal Offenses Per 100,000 Youth Ages 15 Through 17**

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY2006</td>
<td>1,018</td>
</tr>
<tr>
<td>CY2007</td>
<td>988</td>
</tr>
<tr>
<td>CY2008</td>
<td>1,092</td>
</tr>
<tr>
<td>CY2009</td>
<td>1,008</td>
</tr>
<tr>
<td>2010</td>
<td>902</td>
</tr>
</tbody>
</table>

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**Footnotes:**

20 Maryland’s Results for Child Well-Being 2009
21 Maryland’s Results for Child Well-Being 2008
22 2008 actual data reported last year has changed from 1,117 to 1,092 (source – Maryland’s Results for Child Well-Being 2009).
Indicator 2.2: Recidivism: Percent of youth re-committed/incarcerated within one year of release from all residential placements

Target: Less than 10% of youth released from DJS residential programs are re-committed/incarcerated within one year after release

How are we doing? The percent of youth re-committed/incarcerated within one year of release has held steady at 13% - 14% over the last five years. In fiscal year 2008, DJS began expanding its use of Evidenced Based Programs (EBP) to reduce youth violence through prevention, intervention and suppression strategies. DJS intends to use three of eleven evidence based program models identified by the University of Colorado’s Center for the Study and Prevention of Violence, a leader in EBP research.

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23 Data reported previously by the Department of Juvenile services for 2005 through 2008 have been updated using a revised logic model.

24 Department of Juvenile Services fiscal year 2011 MFR Performance Discussion
KEY PERFORMANCE AREA 2
REDUCING AND PREVENTING CRIME COMMITTED BY JUVENILES

REDUCING AND PREVENTING ALCOHOL AND SUBSTANCE ABUSE BY YOUTH

Indicator 2.3: Percent of public school students in grades nine through twelve who are current drinkers (at least one drink of alcohol on at least one day during the 30 days before the survey)

Indicator 2.4: Percent of public school students in grades nine through twelve who reported using heroin one or more times

Target: Reduced substance abuse by youth

How are we doing? Data for these measures come from the Maryland Youth Risk Behavior Survey (YRBS) which is part of the Youth Risk Behavior Surveillance System (YRBSS) developed by the Centers for Disease Control to monitor health-risk behaviors among youth. Beginning in 2005, MSDE administers the survey every two years. Early use of alcohol and heroin is associated with later drug use and the prevalence of high-risk behaviors by youth. Alcohol is the most commonly used drug among Maryland youth. While the percent of public school students in grades nine through 12 who are current drinkers is far higher than the percent who reported using heroin one or more times, heroin use increased by 57.7% from 2005 through 2009, while alcohol use declined by 7% over that same timeframe. Between 2005 and 2009, males reported a significant increase in ever having used heroin. While substance abuse prevention must be addressed by all stakeholders, the Maryland State Department of Education (MSDE) continues to assist local school systems in developing, implementing, and sustaining scientifically-based research programs to prevent and reduce ATOD (alcohol, tobacco, and other drug) use in and around schools. Substance abuse prevention education is also taught as part of comprehensive health education in Kindergarten through 12th grade in all Maryland public schools.

Alcohol and Heroin Use by Public School Students in Grades 9 Through 12

<table>
<thead>
<tr>
<th></th>
<th>AY 2005 Actual</th>
<th>AY 2007 Actual</th>
<th>AY 2009 Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of public school students in grades nine through twelve who are current drinkers (at least one drink of alcohol on at least one day during the 30 days before the survey)</td>
<td>2.6%</td>
<td>2.4%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Percent of public school students in grades nine through twelve who reported using heroin one or more times</td>
<td>39.8%</td>
<td>42.9%</td>
<td>37.0%</td>
</tr>
</tbody>
</table>

25 The last Maryland Adolescent Survey was conducted in 2007 and reported in 2008 (AY 2008). MSDE no longer conducts the MAS survey due to insufficient funding. Therefore, the measures previously reported upon have been replaced by the indicators shown.

26 Maryland’s Results for Child Well-Being 2010, Governor’s Office for Children and the Children’s Cabinet

27 Maryland’s Results for Child Well-Being 2010, Governor’s Office for Children and the Children’s Cabinet

28 Maryland State Department of Education Data Definitions and Controls, fiscal year 2013 MFR
STRENGTHENING CAPACITY AND READINESS OF ALL REGIONS IN THE STATE TO RESPOND TO CRIMINAL ACTIVITY, EMERGENCIES, AND TERRORIST INCIDENTS

Indicator 3.1: Percent of evaluated areas for radiological emergency preparedness exercises rated as successful (annually)

Target: Rating of “success” in 90% of evaluated areas

How are we doing? The Maryland Emergency Management Agency is federally evaluated through radiological emergency preparedness exercises. The exercise ratings are based on objectives for annually evaluated exercises for the Calvert Cliffs and Peach Bottom nuclear power plants, and are indicators of probable performance in an actual emergency.29 Data for 2007 through 2011 show a high degree of emergency preparedness, with a rating of 99% for the last three years.

Percent of Evaluated Areas for Radiological Emergency Preparedness (REP) Exercises Rated as Successful (Annually)

29 Fiscal year 2013 MFR budget book submission, Maryland Emergency Management Agency, Military Department
Indicator 3.2: Percent of Maryland hospitals that are National Incident Management System (NIMS) compliant

Target: 100% of hospitals are NIMS compliant

How are we doing? Staff supported by Federal preparedness grants are required to demonstrate compliance with the National Incident Management System (NIMS). Data for this indicator is not available prior to fiscal year 2007. Data for 2007 through 2011 show a high degree of readiness to address health threats and emergencies. The percent of Maryland hospitals that are NIMS compliant increased 8 percentage points (8.9%) from 2007 to 2009, remained at that level in 2010, and met the target of 100% in 2011. One of Governor O’Malley’s fifteen strategic policy goals is to make Maryland the national leader in homeland security preparedness by the end of 2012. Goals directly targeted to hospital preparedness such as those related to biosurveillance, mass casualty hospital surge planning, and maximized medical technology and information sharing are included among Maryland’s twelve core homeland security goals. In the eighth annual “Ready or Not? Protecting the Public from Diseases, Disasters, and Bioterrorism” report which provides assessments of states’ readiness, Maryland was one of eleven states that achieved nine out of ten key indicators of public health emergency preparedness. The Office of Preparedness and Response (OP&R) in the Maryland Department of Health and Mental Hygiene provides easy access to the on-line NIMS training as well as works with other State agencies, local health departments, hospitals, and other partners to provide on-site training. In addition, the Office of Preparedness and Response provides training to public health and healthcare staff in hospitals and other entities that is compliant with NIMS requirements.

![Percent of Maryland Hospitals That Are National Incident Management System (NIMS) Compliant](chart.png)

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30 Strategies and Discussion of Program Performance, fiscal year 2013 MFR, Office of Preparedness and Response, Department of Health and Mental Hygiene


32 Strategies and Discussion of Program Performance, fiscal year 2013 MFR, Office of Preparedness and Response, Department of Health and Mental Hygiene
Indicator 3.3: Number of matches of DNA taken during criminal investigations with DNA included in the Combined DNA Index System (CODIS) database (DNA evidence hits per year to CODIS)

Target: Increased number of solved crimes

How are we doing? “The use of DNA technology to identify offenders and solve criminal cases quickly is a vital instrument in Maryland’s mission to provide safe and sustainable communities for every Maryland resident.”

The Department of State Police, Forensic Sciences Division coordinates the collection and analysis of DNA database samples from individuals required by law to provide DNA. The known DNA profiles generated from the database samples are entered into the CODIS database, and searched against the unknown DNA profiles generated from crime scene samples. CODIS is comprised of local, state, and national levels allowing for searches across jurisdictions.

Beginning in 2007 under Governor O’Malley’s leadership, the Department of State Police worked with other agencies to clear a backlog of 24,000 DNA samples that had been collected from convicted offenders but never processed and entered into the FBI’s CODIS DNA database. As a result of this effort, the number of matches of DNA to the CODIS database dramatically increased. There are currently 97,683 CODIS samples in Maryland's database; 5,190 of these have been added in 2011. Overall, there have been 2,396 hits resulting from the Maryland CODIS databank. From March 2007 through July 2010, there were 267 arrests throughout Maryland for a variety of crimes that have resulted from the convicted offender samples, removing felons from Maryland’s streets.

In 2009, Governor O’Malley signed legislation authorizing collection of DNA samples from people charged with violent crimes and burglaries, expanding Maryland’s ability to use DNA as a crime fighting tool. The data shown below now includes matches of DNA taken from convicted offenders and individuals arrested/charged. Data for 2007 was reported on a calendar year basis. Since 2007, data has been reported on a fiscal year basis. Therefore there is overlap in data reported for calendar year 2007 and fiscal year 2008. There was a 43.9% increase in DNA matches from 2008 to 2009, and a subsequent 4.2% decline in 2010. DNA matches increased again in 2011 (25.6%), exceeding the all-time high in calendar year 2007.

DNA Evidence Hits Per Year To The Combined DNA Index System (CODIS) Database

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34 MFR Definitions and Control Procedures, fiscal year 2013, Department of State Police, Criminal Investigation Bureau
36 Fact Sheet, Governor’s Office of Crime Control and Prevention, DNA: Improving Public Safety, August 5, 2010
EFFECTIVE AND EFFICIENT GOVERNMENT

MAKING GOVERNMENT WORK AGAIN

GOAL: Maryland State government will meet the needs of Maryland’s citizens in a financially prudent way, and maintain its standing as a fiscally well-managed state.

Maryland will focus on restoring and maintaining effective financial stewardship while making prudent investments in the priority areas of public safety, public education, workforce creation and economic growth, environmental sustainability, and child and family well-being.
EFFECTIVE AND EFFICIENT GOVERNMENT

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Indicators</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favorable Performance (Change &gt;10%)</td>
<td>1</td>
<td>20.0%</td>
</tr>
<tr>
<td>Favorable Performance (3% to 10% Change)</td>
<td>1</td>
<td>20.0%</td>
</tr>
<tr>
<td>Stable Performance (0% - 2% Change)</td>
<td>1</td>
<td>20.0%</td>
</tr>
<tr>
<td>Unfavorable Performance (3% to 10% Change)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Unfavorable Performance (Change &gt; 10%)</td>
<td>2</td>
<td>40.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agency/ Data Source</th>
<th>Indicator</th>
<th>Most Recent Data</th>
<th>4 Years Prior</th>
<th>4 Year Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBM</td>
<td>Annual General Fund closing balance as of June 30th available for new fiscal year operations (millions) (2007 - 2011)</td>
<td>$990.1</td>
<td>$284.7</td>
<td>247.8%</td>
</tr>
<tr>
<td>Treasurer's Office</td>
<td>Bond rating from all three nationally recognized bond rating agencies for each issuance of State General Obligation Bonds (maintain AAA rating) (2007 - 2011)</td>
<td>AAA</td>
<td>AAA</td>
<td>no change</td>
</tr>
<tr>
<td>CDAC</td>
<td>Capital debt as a percent of State revenue (2007 - 2011)</td>
<td>6.59%</td>
<td>5.40%</td>
<td>22.0%</td>
</tr>
<tr>
<td>State Retirement and Pension System</td>
<td>Asset to liability ratio for the MD State Retirement and Pension System (funded ratio) (2007 - 2011)</td>
<td>64.70%</td>
<td>80.36%</td>
<td>-19.5%</td>
</tr>
<tr>
<td>Governor's Office and DBM</td>
<td>Percent of the total legislative appropriation for Executive departments covered by StateStat (2008 - 2012)</td>
<td>73%</td>
<td>68%</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

Although the debt ratio is below the affordability benchmark of 8%, the trend shows an increase in debt compared to revenues. Therefore, the trend is considered unfavorable.
**Indicator 1.1:** Annual General Fund closing balance as of June 30th available for new fiscal year operations (in millions)

**Target:** A positive General Fund closing balance for each fiscal year

**How are we doing?** Each fiscal year from 2007 through 2011 closed with a positive General Fund balance. The General Fund closing balance was at the lowest level of the last decade ($87.2 million) at the close of fiscal year 2009. For only the third time in the last four decades, on-going revenues declined in 2009. The decline in revenues is one of many measures that indicate the severity of the recent recession. “Adjusted for law changes, 2009 was the worst year on record for the modern income tax.”\(^1\) The balance increased by $256.8 million between the close of fiscal year 2009 and the close of fiscal year 2010. Although several major revenue sources declined in 2010 reflecting the continuing impact of the recession, most revenue sources exceeded their estimates.\(^2\) The General Fund closing balance for fiscal year 2011 was $646.1 million more than the fiscal year 2010 closing balance, a significant positive change.\(^3\) Maryland was one of twenty-five states that reported growing balances between fiscal years 2010 and 2011.\(^4\) Economic conditions among other factors have an impact on the closing balance. The Continuum of State Fiscal Stress provides a “snapshot of state fiscal conditions” based on state responses to 4 survey items addressing general fund balances equaling or exceeding 5% of general fund expenditures, total balances as a percent of spending between fiscal year 2010 and fiscal year 2011, cuts to enacted fiscal year 2011 budgets, and tax collections.\(^5\) Maryland was one of seven states that received the top score on the fiscal year 2011 Continuum of State Fiscal Stress. The majority of states fell on the middle of the Continuum – fiscal conditions “could be better, could be worse.”\(^6\)

<table>
<thead>
<tr>
<th>Year</th>
<th>General Fund Closing Balance (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 Actual</td>
<td>$284.7</td>
</tr>
<tr>
<td>2008 Actual</td>
<td>$487.1</td>
</tr>
<tr>
<td>2009 Actual</td>
<td>$87.2</td>
</tr>
<tr>
<td>2010 Actual</td>
<td>$344.0</td>
</tr>
<tr>
<td>2011 Actual</td>
<td>$990.1</td>
</tr>
</tbody>
</table>

\(^1\) General fund revenues declined in fiscal years 2002 and 2003; Letter from David F. Roose, Director, Bureau of Revenue Estimates concerning Fiscal Year 2009 Revenues, September 1, 2009
\(^2\) Letter from David F. Roose, Director, Bureau of Revenue Estimates concerning Fiscal Year 2010 Revenues, September 1, 2010
\(^3\) Letter from David Roose, Director, Bureau of Revenue Estimates concerning Fiscal Year 2011 Revenues, September 1, 2011
\(^4\) Fiscal year 2011 General Fund revenues grew modestly principally due to increases in individual income taxes - State Policy Reports Volume 29, Issue 11, June 2011- Continuum of State Fiscal Stress
\(^5\) Data used to compile the Continuum of State Fiscal Stress come from The Fiscal Survey of States published jointly by the national Association of State Budget Officers and the National Governors Association
\(^6\) Continuum of State Fiscal Stress, State Policy Reports Volume 29, Issue 11, June 2011, Federal Funds Information for States
Indicator 1.2: Bond ratings from three nationally recognized bond rating agencies for each issuance of State General Obligation Bonds

Target: Triple A bond ratings from all three nationally recognized bond rating agencies for each issuance of State General Obligation Bonds

How are we doing? Maryland uses the proceeds from the issuance of General Obligation Bonds to finance necessary capital projects such as schools, community colleges, university projects, and hospitals. A triple A rating, the highest possible rating, means that the State has an extremely strong capacity to meet financial commitments. Maryland has consistently maintained triple A bond ratings from all three nationally recognized rating agencies, each of which has acknowledged Maryland’s strong financial management, diverse, wealthy economy, strong debt oversight, and moderate debt burden.7. Poors has rated the bonds AAA since 1961. Moody’s Investors has assigned a rating of Aaa since 1973, and Fitch Ratings has rated the bonds AAA since 1993.8 Maryland is one of only eight states in the nation to hold the coveted triple A bond ratings from all three nationally recognized rating agencies. Marylanders benefit from necessary capital projects, and retention of the triple A rating allows the State to save millions of taxpayer dollars resulting from the low interest rates achieved because of these ratings.

U.S. government debt was downgraded by Standard & Poor’s in 2011, making state and local governments vulnerable to downgrade if they rely too heavily on certain types of Federal payments (such as Federal procurement contracts, Federal employment salaries, and Medicaid funding).9 Although states’ bond ratings have not automatically been affected, the linkage between state reliance on Federal spending for procurement and/or salaries is most important for states that have AAA bond ratings, of which Maryland is one. Moody’s assigned a negative outlook to five states including Maryland based on their “vulnerability” to the U.S. rating.10 However, Maryland has a strong record of honoring debt commitments and to maintaining a balanced budget. State Treasurer Nancy K. Kopp stated in July 2011, “Considering the uncertainty at the federal level over debt ceilings and deficit reductions we are pleased the rating analysts recognize Maryland’s strong, stable and prudent financial management.”

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</tr>
</thead>
<tbody>
<tr>
<td>Fitch Ratings</td>
<td>AAA</td>
<td>AAA</td>
<td>AAA</td>
<td>AAA</td>
<td>AAA</td>
</tr>
<tr>
<td>Moody’s Investors Service</td>
<td>Aaa</td>
<td>Aaa</td>
<td>Aaa</td>
<td>Aaa</td>
<td>Aaa</td>
</tr>
<tr>
<td>Standard &amp; Poors</td>
<td>AAA</td>
<td>AAA</td>
<td>AAA</td>
<td>AAA</td>
<td>AAA</td>
</tr>
</tbody>
</table>

7 Moody’s cited an “above average debt burden in its February 2011, July 2011, and September 2011 rating reports
8 News Releases, Maryland Retains AAA Bond Rating, State Treasurer’s Office, July 14, 2010 and July 14, 2011
9 This stems from a bond rating convention that typically caps state and local government bond ratings at or below the rating for the Federal government. Fitch and Moody’s have not downgraded U.S. government debt, and “considerable sovereignty” provides some distance between states and the Federal government; State Reliance on Federal Spending, State Policy Reports, Volume 29, Issue 14, July 2011
10 State Reliance on Federal Spending, State Policy Reports, Volume 29, Issue 14, July 2011
Indicator 1.3: Capital debt service as a percent of State revenue

Target: Capital debt service as a percent of State revenue is at or below 8%

How are we doing? Capital debt service as a percent of State revenue is a measure of affordability - tax supported debt - tracked by the Capital Debt Affordability Committee. Affordability not only measures whether the State can pay the debt service, it also considers the ability of the State to manage debt over time to achieve goals. Debt service on State tax-supported debt may not require more than 8.0% of revenues under criteria imposed by the Capital Debt Affordability Committee. Each year during the period of 2007 through 2011, the capital debt service as a percent of State revenue was below the affordability benchmark of 8%. This has contributed to the continued triple A bond ratings for Maryland’s General Obligation bond issues given by the nationally recognized bond rating agencies. The gap between Maryland’s capital debt service as a percent of State revenue and the affordability benchmark ranged from -2.6 to -1.15 percentage points over the period of 2007 to 2011.

Capital Debt Service As A Percent of State Revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Capital Debt Service As A Percent of State Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007 Actual</td>
<td>5.40%</td>
</tr>
<tr>
<td>2008 Actual</td>
<td>5.55%</td>
</tr>
<tr>
<td>2009 Actual</td>
<td>6.21%</td>
</tr>
<tr>
<td>2010 Actual</td>
<td>6.85%</td>
</tr>
<tr>
<td>2011 Actual</td>
<td>6.59%</td>
</tr>
</tbody>
</table>

11 Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations for Fiscal Year 2013, September 2011
KEY PERFORMANCE AREA 1
EFFECTIVE AND EFFICIENT RESOURCE MANAGEMENT

Indicator 1.4: Asset to liability ratio for the MD State Retirement and Pension System (funded ratio)

Target: June 30, 2000 actuarial accrued liability fully funded by 2020; and new unfunded liabilities or surpluses arising during the fiscal year 2001 or thereafter will be amortized over a 25-year period from the end of the fiscal year in which the liability or surplus arose.

How are we doing? The funded ratio measures the MD State Retirement and Pension System of Maryland’s (the System) ability to pay all projected benefits as they become due (actuarial value of assets expressed as a percentage of the actuarial accrued liability). The funded ratio is the primary measure of funding progress. The System is fully funded if the funded ratio is greater than or equal to 100%. An increase in the funded ratio indicates improvement in the ability of the System to pay all projected benefits as they become due. When analyzing the overall funded status, it is important to keep in mind that a funding plan is over a long time horizon, in which fluctuations in the market are expected. The funded ratio steadily declined from 2007 through 2010, by an overall 16.2 percentage points (20.2%). The largest year to year decline occurred in 2009. The declines in funded status in fiscal years 2008 and 2009 are principally attributable to investment losses and increases in the System’s actuarial accrued liabilities. The funded ratio remained relatively stable from 2009 to 2011. Pension reform legislation was passed during the 2011 legislative session with the goal of improving the funded ratio of the System, achieving 100% funding by 2030.

Asset to Liability Ratio for the MD State Retirement and Pension System
(Funded Ratio)

12 Comprehensive Annual Financial Report (CAFR) 2011 for the Maryland State Retirement and Pension System
13 Comprehensive Annual Financial Reports 2005 through 2011 for the Maryland State Retirement and Pension System
14 CAFR’s 2008 and 2009
15 The unfunded liability is mitigated by the corridor funding method and the smoothed value basis for measuring plan assets.
Indicator 2.1: Percent of the total legislative appropriation for Executive departments\textsuperscript{16} covered by StateStat

Target: 73% of the total legislative appropriation for Executive departments covered by StateStat

How are we doing? StateStat is a performance measurement and management tool implemented in fiscal year 2007 by Governor O’Malley to make our State government more accountable and more efficient. StateStat drives continuous improvement in efficiency and effectiveness of State government programs. To facilitate this improvement, Governor O’Malley has established a Delivery Unit to act as an extension of StateStat, with a focus on aligning State and Federal resources around the Administration’s fifteen strategic goals for improving the quality of life in Maryland. There are 20 Executive departments,\textsuperscript{17} and as of January 2011 14 of them participate in StateStat\textsuperscript{18} and account for nearly three quarters of the total legislative appropriation for fiscal year 2012. From 2008 to 2012, the percent of the total legislative appropriation for Executive departments covered by StateStat increased by 7.4%.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Percent_of_the_Total_Legislative_Appropriation_for_Executive_Departments_Covered_by_StateStat.png}
\caption{Percent of the Total Legislative Appropriation for Executive Departments Covered by StateStat}
\end{figure}

\textsuperscript{16} Executive departments are generally the largest State departments that perform services and functions most closely related to the Administration’s core mission and goals, and also have the most budgetary impact.

\textsuperscript{17} Dept. of Aging, Dept. of Disabilities, Dept. of Planning, Dept. of Veterans Affairs, Dept. of Budget & Mgmt., Dept. of Information Technology, Dept. of General Services, Dept. of Transportation, Dept. of Natural Resources, Dept of Agriculture, Dept. of Health & Mental Hygiene, Dept. of Human Resources, Dept. of Labor, Licensing, & Regulation, Dept. of Public Safety & Correctional Services, Dept. of Education, Dept. of Housing & Community Development, Dept. of Business & Economic Development, Dept. of the Environment, Dept. of Juvenile Services, State Police

\textsuperscript{18} The departments participating in StateStat include those listed in the note above with the exception of the Dept. of Education, Dept. of Budget & Mgmt., Dept. of Information Technology, Dept. of Disabilities, Dept. of Aging, and the Dept. of Veterans Affairs.