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

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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.

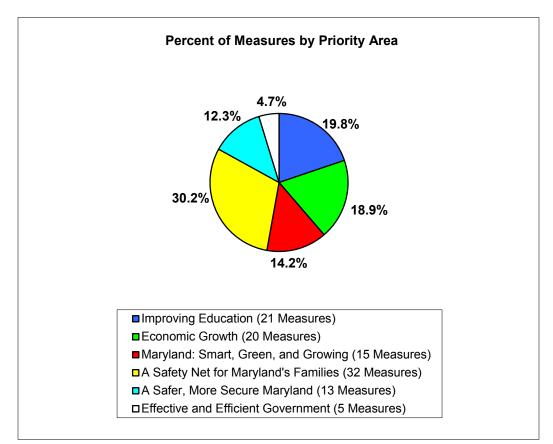


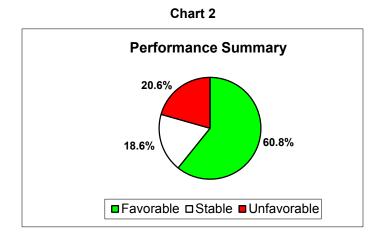
Chart 1

SUMMARY OF PERFORMANCE

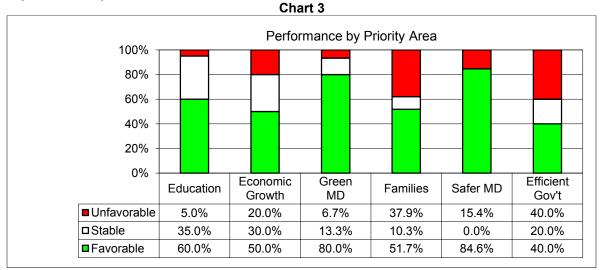
As shown in the following table, performance for each measure has been categorized as favorable, stable, or unfavorable based on the most recent five years that data are available, unless a different number of years of data is specified.¹

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 (60.8%), and 20.6% of measures are moving in an unfavorable direction. Performance is stable for 18.6% of measures. When combined, 79.4% of measures are either moving in a favorable direction or are stable.



A summary of performance by priority area is shown in **Chart 3.** Safer Maryland and Green Maryland have the highest percentages of measures moving in a favorable direction. Each of those two has 80% or more of the measures moving favorably, with Safer Maryland at the top with 84.6%. With the exception of Efficient Government, each priority area has 50% or more measures moving in a favorable direction. Efficient Government has the highest percentage of measures moving in an unfavorable direction. Education and Green Maryland have the greatest percentages of measures moving favorably and remaining stable. A detailed presentation of performance for each priority area is included in the following pages. Unless otherwise indicated, data is by State fiscal year.



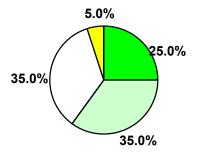
¹ Five years of comparable data are not available for all measures. For determining trends when the beginning value is zero, the difference between zero and the ending value is calculated rather than a percent change.

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.



Status	Number of Indicators	Percent
Favorable Performance (Change >10%)	5	25.0%
Favorable Performance (3% to 10% Change)	7	35.0%
Stable Performance (0% - 2% Change)	7	35.0%
Unfavorable Performance (3% to 10% Change)	1	5.0%
Unfavorable Performance (Change > 10%)	0	0.0%
Total	20	100%

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-	

Agency/ Data		Most Recent Data	4 Years	4 Year
Source	Indicator	Available	Prior	Change
MSDE	Percent of students entering Kindergarten demonstrating Full Readiness on the Work Sampling System Kindergarten Assessment (2008 - 2012)	83%	68%	22.1%
MSDE	Percent of students scoring proficient or better in Reading – Grade 3 – Total all groups (2008 - 2012)	85.0%	83.0%	2.4%
MSDE	Percent of students scoring proficient or better in Reading – Grade 8 – Total all groups (2008 - 2012)	80.8%	72.8%	11.0%
MSDE	Percent of students scoring proficient or better in English (The 2009 data begins a new trend and is not comparable to prior years. Therefore the variance is from 2009 to 2012.)	86.4%	83.1%	4.0%
MSDE	Percent of students scoring proficient or better in Math – Grade 3 – Total all groups (2008 - 2012)	87.8%	82.6%	6.3%
MSDE	Percent of students scoring proficient or better in Math – Grade 8 – Total all groups (2008 - 2012)	69.3%	61.9%	12.0%
MSDE	Percent of students scoring proficient or better in Algebra (The 2009 data begins a new trend and is not comparable to prior years. Therefore the variance is from 2009 to 2012)	87.9%	85.9%	2.3%
MSDE	High School Graduation Rate (2010 - 2011)	82.82	81.97	1.0%

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
MSDE	Percent of children in grades 9 through 12 who drop out of school in an academic year (2010 - 2011)	11.22%	11.93%	-6.0%
MSDE	School Progress Index - data not yet available			
MSDE	Percent of core academic subject classes staffed with highly qualified teachers (2008 - 2012)	93.1%	84.6%	10.0%
MSDE	Percent of Maryland schools that are safe as defined by COMAR 13A.08.01.18B(5) (2008 - 2012)	99.7%	99.5%	0.2%
MHEC	Six year graduation rate of first-time, full-time students at public four-year colleges and universities (all groups) (2008 - 2012)	64.3%	64.2%	0.2%
MHEC	Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities (2008 - 2012)	32.7%	31.6%	3.5%
MHEC	Number of community college students who transfer to a Maryland public four-year campus (2008 - 2012)	9,301	8,646	7.6%
MHEC	Percent of Maryland median family income required to cover tuition and fees at Maryland public four-year institutions (2008 - 2012)	9.4%	10.0%	-6.0%
MHEC	Percent of Maryland median family income required to cover tuition and fees at Maryland community colleges (2008 - 2012)	4.3%	4.4%	-2.3%
MHEC	Number of graduates in science, technology, engineering, and math (STEM) from Maryland's public and private higher educational institutions (2008 - 2012)	11,592	10,065	15.2%
MHEC	Number of graduates in teaching from Maryland's public and private higher educational institutions (2008 - 2012)	2,617	2,716	-3.6%
MHEC	Number of graduates in nursing from Maryland public and private higher educational institutions (2008 - 2012)	3,748	2,810	33.4%
MHEC	Percent of teacher candidates from Maryland public and private higher educational institutions who pass Praxis II (2008 - 2012)	97.0%	97.0%	0.0%

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 2012-2013 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 Assessment¹ that evaluates what each child knows and is able to do in seven Domains of Learning². 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.³ "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."⁴ MMSR data now show a strong link between kindergarten readiness and grade 3 reading and math scores on the Maryland School Assessment.⁵ 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.⁶ Maryland, like a number of other states, is implementing a Quality Rating and Improvement System (QRIS) on a pilot basis. QRIS is a systematic approach to assess, improve, and communicate the level of quality in early and school-age care and education programs.⁷ Maryland Excels, Maryland's QRIS pilot program, was launched in late 2011, and is scheduled for statewide implementation by July 2013. The Early Learning Challenge Grant awarded to Maryland in December 2011 funds a number of projects to improve school readiness including revising the current Early Learning Framework. New content standards will be developed for pre-kindergarten and kindergarten based on the same Common Core State Standards being used to refocus the rest of Maryland's curriculum.

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 2012, 83% of kindergarten students in Maryland were evaluated by their teachers as "fully ready," up 2.5% from 81% the previous year, and an increase of 22.1% since 2008. Progress in kindergarten readiness has been made across subgroups and domains since 2001-2002.⁹

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

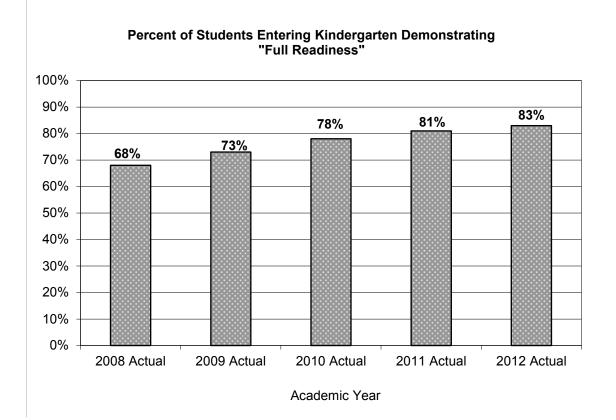
⁵ Getting Ready, The 2010-2011 Maryland School Readiness Report, Maryland State Department of Education

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; 2011 Maryland's Results for Child Well-Being, Governor's Office for Children

⁸ Maryland State Department of Education MFR Performance Discussion fiscal year 2014

⁹ FY 2014: 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

CHILDREN SUCCEEDING IN SCHOOL

Percent of students scoring proficient¹⁰ 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: By 2016-2017, the percentage of non-proficient students will be reduced by 50 percent or better in English/language arts and mathematics on the Maryland School Assessment (MSA) and the High School Assessments (HSA).

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. 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 guality of instruction," This flexibility will build on efforts already under way. In May 2012, Maryland received a waiver from NCLB mandates. In order to qualify for a waiver, states are required to demonstrate their ability to prepare students for college or a career, develop accountability systems to monitor students' progress toward the goal of college and career readiness, and set basic guidelines for teacher and principal evaluation and support systems. Obtaining the waiver will allow Maryland to funnel resources into those classrooms with the most troubling issues.¹⁴ Under the flexibility plan, the State will "reset the annual progress goals for the next six years on a trajectory toward 2017, at which time each individual school is expected to reduce its percentage of non-proficient students by half - for each subgroup as well as for all students."15

The percent of third grade students scoring proficient or better in reading remained stable from 2008 to 2012. After improving by 10.2% from 2008 to 2009, performance from 2009 through 2012 for eighth grade reading remained stable. From 2008 through 2012, third grade math performance improved by 6.3%, while eighth grade math performance increased by 12%. Although the increase in the percent of eighth grade students scoring proficient or better in math was nearly double the increase for third graders, the actual percent proficient or better is far less for eighth grade students. Factors contributing to student improvement on MSAs since 2003 include increasing levels of pre-kindergarten available for four year olds from "economically disadvantaged

¹⁰ Proficient is a realistic and rigorous level of achievement indicating proficiency in meeting the needs of students.

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 Council of State Governments, Capitol Ideas E-Newsletter, "Eight More States Released from NCLB Mandates", May-June 2012; Positive Response to Obama's NCLB Waiver Plan, Dylan Scott, Governing, September 23, 2011

¹⁵ Maryland Gains Flexibility From No Child Left Behind Requirements, Press Release, Maryland State Department of Education, May 29, 2012

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

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.¹⁷ 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.¹⁸ Beginning in 2008, Maryland used a status model¹⁹ 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 2008 is not comparable to data for 2009 and beyond.²⁰ There was a slight decline of 2.9 percentage points in the percent of students passing English from 2009 to 2010. By 2012, the percent passing English had regained the 2009 level. Proficiency in algebra has remained stable from 2009 through 2012.

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.²¹ Maryland was one of the first states in the nation to adopt the Common Core State Standards in math and reading/English Language Arts.²² 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.²³ The new tests will be rolled out in the 2014-2015 school year. One of Maryland's Race to the Top funded primary reforms is to build a Maryland statewide technology infrastructure that links all data elements with analytic and instructional tools to monitor and promote student achievement.

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 Counts²⁴, 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.²⁵

¹⁶ 2011 Maryland Report Card

¹⁷ Maryland Results for Child Well Being 2009, 2010, 2011

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

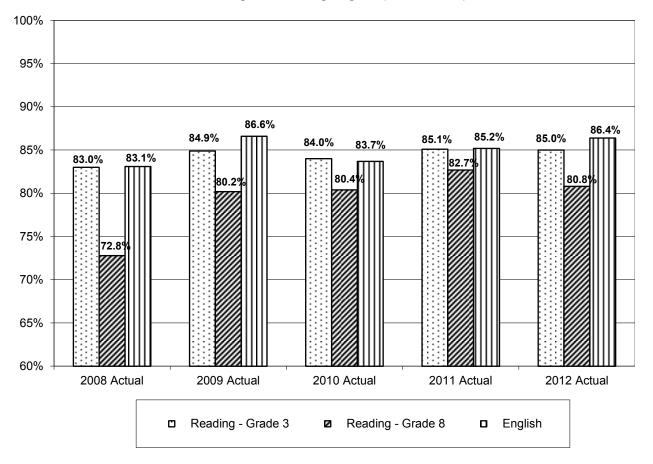
²¹ Classroom Focused Improvement Process found at: <u>http://mdk12.org/process/cfip/index.html</u>

²² The State Board of Education adopted the standards in June 2010

²³ School Improvement in Maryland, MD Common Core Curriculum Frameworks, Maryland's New State Curriculum, <u>http://mdk12.org/instruction/commoncore/index/html;</u> Common Core State Standards Initiative, Frequently Asked Questions, <u>http://www.corestandards.org/frequently-asked-questions</u>

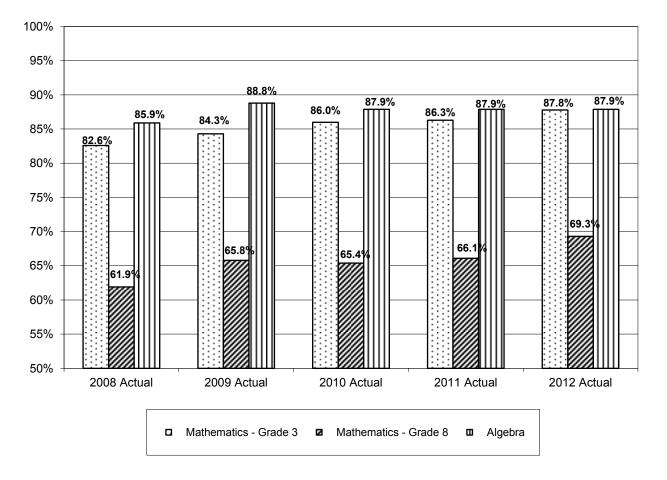
²⁴ Additional information is provided on Quality Counts on pages 15-17.

²⁵ News Releases – Maryland State Department of Education: Maryland Public High Schools Rank Number One for Third Straight Year, Four in a Row for Maryland Public Schools – National Education Newspaper Places State's System at the



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

Very Top for Fourth Straight Year, January 12, 2012; Washington Post Challenge Index Has Maryland With the Highest Percentage of Rigorous High Schools, Maryland State Department of Education, June 1, 2011



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

CHILDREN COMPLETING SCHOOL

Indicator 1.8: High School Graduation Rate (Cohort Rate)²⁶

Target: By 2016-2017, schools, school systems, and the State will improve student performance in accordance with No Child Left Behind and the approved Maryland ESEA (Elementary and Secondary Education Act) Flexibility Request.

How are we doing? The graduation rate is an indicator of school progress. 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.²⁷ 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.²⁸ 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.²⁹

Completion of high school program requirements indicates students' potential readiness for post-secondary education and/or employment.³⁰ 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.³¹ Data used for this report are based on the 4 Year Adjusted Cohort Rate. Historical 4 year Adjusted Cohort Graduation Rate data are not be available. Applying the new calculation methodology (4 year Adjusted Cohort Rate), and considering the federal changes in the racial subgroup categories, 2010 is the new base year.³² The four year high school graduation rate for 2010 was 81.97%. That rate improved slightly to 82.82% in 2011.

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 Implementing Graduation Counts, State Progress to Date 2010, National Governors' Association Center for Best Practices, December 2010

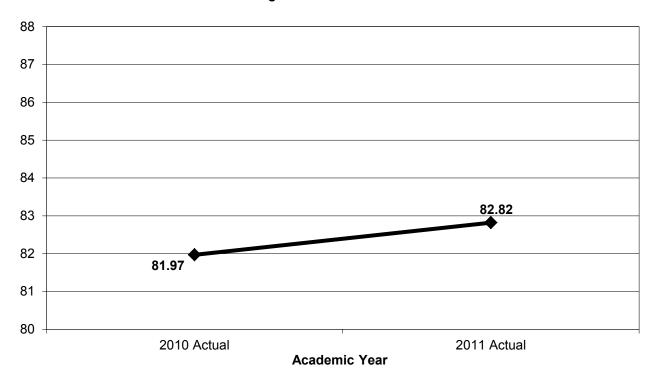
²⁸ 2011 Maryland Report Card and fiscal year 2013 MFR Data Definitions and Control Procedures, Maryland State Department of Education

²⁹ States Begin Reporting Uniform Graduation Rate, Reveal More Accurate High-School Completion Outcomes, U.S. Department of Education Press Release, July 27, 2011

³⁰ Maryland Results for Child Well Being 2009

³¹ Education Week, Diplomas Count 2011, Beyond High School, Before Baccalaureate; Analysis Finds Graduation Rates Moving Up, May 31, 2011

³² MFR Performance Discussion, fiscal year 2013, Maryland State Department of Education



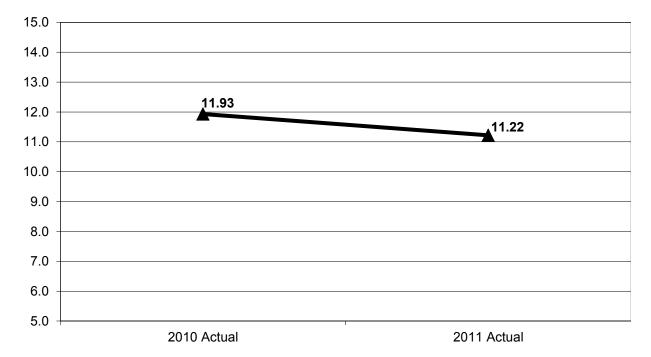
High School Graduation Rate

Indicator 1.9: Percent of high school dropouts (Cohort Rate)

Target: By 2016-2017, schools, school systems, and the State will improve student performance in accordance with No Child Left Behind and the approved Maryland ESEA Flexibility Request

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).³³ The Cohort Rate is a more precise measurement that accounts for students who may "drop out" 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.³⁴ Maryland began reporting the Cohort dropout rate in 2011 for the 2010 academic year which will be the new base year.

Failure to complete high school is closely linked with decreased employment opportunities, low pay and limited paths to advancement.³⁵ Recent studies show that between the ages of 18 and 64, dropouts on average earn some \$400,000 less than high school graduates.³⁶ High school dropouts have unemployment rates that are nearly three times higher than individuals with bachelor's degrees.³⁷ The 4 Year Adjusted Cohort dropout rate for 2010 is 11.93. The rate declined by 6% in 2011. This data is not comparable to the previously reported Annual Event dropout rate.



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

³³ 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

³⁴ Maryland Report Card, Maryland State Department of Education; Maryland State Department of Education fiscal year 2013 MFR Data Definitions and Control Procedures

³⁵ Maryland Results for Child Well Being 2009

³⁶ KIDS COUNT Indicator Brief, Reducing the High School Dropout Rate, Annie E. Casey Foundation, July 2009

³⁷ Alliance for Excellent Education, Issue Brief, May 2011 – Saving Now and Saving Later: How High School Reform Can Reduce the Nation's Wasted Remediation Dollars; data source Bureau of Labor Statistics, "Education Pays" accessed January 5, 2011

SCHOOLS PROMOTING HIGH LEVELS OF LEARNING

Indicator 1.10: Percent of schools that improved performance according to the State's Federally approved and updated accountability system (School Progress Index)³⁸

Target: By 2016-2017, schools, school systems, and the State will improve student performance in accordance with No Child Left Behind and the approved Maryland Elementary and Secondary Education Act (ESEA) Flexibility Request.³⁹

How are we doing? "The Elementary and Secondary Education Act of 1965 (ESEA, P.L. 80-10) was last reauthorized in 2001 under No Child Left Behind (NCLB, P.L. 107-110). NCLB included a number of new accountability provisions for states and local education agencies (LEAs), including measures of adequate yearly progress (AYP). In recent years, schools and LEAs have struggled to meet these AYP standards. In fact, the Center for Education Policy estimates that 49% of schools failed to make AYP in school year (SY) 2010-2011. Because Congress has yet to restructure these accountability provisions through a comprehensive reauthorization of ESEA, the administration created a waiver process by which states could request flexibility around these NCLB requirements."⁴⁰ As discussed earlier in this report, Maryland has been granted this waiver. Maryland has a new accountability system that replaces AYP, and takes into account growth, gap reduction, college and career readiness, and achievement to give a more accurate picture of a school's performance and progress. In the new system, these core values provide a School Progress Index which is used to identify schools that need support as well as deserve recognition.⁴¹ Under Maryland's new "School Progress" plan, each school is measured against its own targets, and must work to strengthen achievement across all subgroups of students. The data generated by the School Progress Index are designed to help the school leaders gain a better understanding of how the school is progressing towards its targets and to better direct resources and support to the school. The 2011-2012 school year begins a new baseline, and schools and systems will work to cut in half over the next six years the percentage of students not scoring at proficient levels on the assessment exams. Schools and systems must work to hit improvement targets developed for each school.⁴² Data is not yet available for the School Progress Index (SPI). The 2012 SPI will be the base year for the new accountability measure.

Maryland has performed favorably under other rating systems. For the fifth 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+ exceeded the national average of C+.⁴³ Maryland, graded at B+, ranked sixth 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.⁴⁴ Maryland

³⁸ The School Progress Index is a continuous scale based on indicators of adequacy. Each indicator is individually weighted based on importance in assessing overall school progress. Measures within indicators are also individually weighted. Within these measures are annual measureable objectives (AMO) that set performance targets to assess the progress of schools and subgroups. Every Maryland public school must address the needs of any subgroup of students that fails to meet the AMO's, which are set by school rather than against a statewide target.

³⁹ Under the flexibility plan approved by the U.S. Department of Education, the State will reset the annual progress goals for the next six years on a trajectory toward 2017, at which time each individual school is expected to reduce its percentage of non-proficient students by half – Maryland Gains Flexibility From No Child Left Behind Requirements, Press Release, Maryland State Department of Education, Mary 29, 2012

⁴⁰ Federal Funds Information for States, Issue Brief 12-23, ED Continues to Approve NCLB Waivers, June 8,2012

⁴¹ 2012 Maryland Report Card, Maryland State Department of Education

⁴² Maryland Continues to Make Progress on Graduation, News Release, October 31, 2012, Maryland State Department of Education

 ⁴³ Education Week Press Release January 10, 2013, "State and National Grades Issued for Education Performance, Policy;
 U.S. Earns a C-Plus, Maryland Ranks First for Fifth Straight Year"; Education Week Quality Counts 2012
 ⁴⁴ Meior states a C-Plus, Maryland Ranks First for Fifth Straight Year"; Education Week Quality Counts 2012

⁴⁴ Major stages of life include early childhood, the period encompassing formal K-12 education, and adulthood and career.

achieved a B and stood at number three in the nation in K-12 Achievement⁴⁵, surpassing U.S. performance of C-. Maryland has been one of the top three scorers in this category since the index was first graded in 2008. Maryland ranked number two in the nation on Transitions and Alignment⁴⁶ with a grade of A, surpassing the average U.S. grade of B-. Ranked number three with a grade of B in Teaching Profession, Maryland exceeded the national average score of C. Maryland ranked eighth 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 fourth 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 29% percent in 2011, 2.6 percentage points better than 2010 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.⁴⁷ The 2012 Enterprising States report rated Maryland as home to the nation's tenth most educated young workforce, and second for sending high school students to advanced placement exams.⁴⁸ 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 (RTTT), a competitive four year 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.⁴⁹ Maryland is in its third wave of reform under RTTT. The Maryland Department of Education will "fully implement the innovative Maryland Breakthrough Center approach for transforming low-performing schools and school systems. The Center is providing ongoing job-embedded professional development in English/language arts and mathematics to a cohort of 446 classroom and school resource teachers and administrators in 16 turnaround schools."⁵⁰

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.⁵¹ These record investments will be further enhanced by the \$250 million Race to the Top Federal grant.

http://ncf.uschamber.com/enterprising-states/

⁴⁵ 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"

⁴⁶ 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

⁴⁷ 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

⁴⁸ Enterprising States, a project of the U.S. Chamber of Commerce and the National Chamber Foundation,

⁴⁹ Maryland State Department of Education news release, Maryland Named Finalist for Race to the Top, July 27, 2010; MFR Performance Discussion fiscal year 2014, Maryland State Department of Education, October 5, 2012

⁵⁰ MFR Performance Discussion fiscal year 2014, Maryland State Department of Education, October 5, 2012

⁵¹ Maryland State Department of Education News Release – Maryland Named Finalist for Race to the Top Program, July 27, 2010; Major Issues Review 2007-2010, Department of Legislative Services; Governor O'Malley: Maryland's Race to the Top Plan, Speech in Washington, D.C., August 11, 2010

Indicator 1.11: Percent of core academic subject classes staffed with highly qualified teachers

Target: 100% by June 30, 2013

How are we doing? Under NCLB, states are required to measure the extent to which all students have highly gualified teachers. As defined by NCLB, highly gualified 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.⁵² Research shows that teacher effectiveness has a greater impact on student achievement than any other reform under a school's control.⁵³ There was a steady upward trend in the percent of core academic subject classes staffed with highly qualified teachers, increasing 8.4% between 2008 and 2010. The percent staffed with highly gualified teachers leveled off between 92% and 93% in 2011 and 2012. "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, sponsors 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."⁵⁴ Maryland ranked third in the nation (up from fifth last year) with a grade of B in the 2012 Teaching Profession segment of Education Week's Quality Counts rating system.⁵⁵ 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.⁵⁶ 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 gualify for tenure. Governor O'Malley signed an Executive Order in June 2010 creating the Maryland Council for Educator Effectiveness that developed 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. For the 2012-2013 academic year, school systems will participate in a statewide field test of the new teacher and principal evaluations which include student growth as fifty percent of the measure.⁵⁷

⁵² 2011 Maryland Report Card; also see

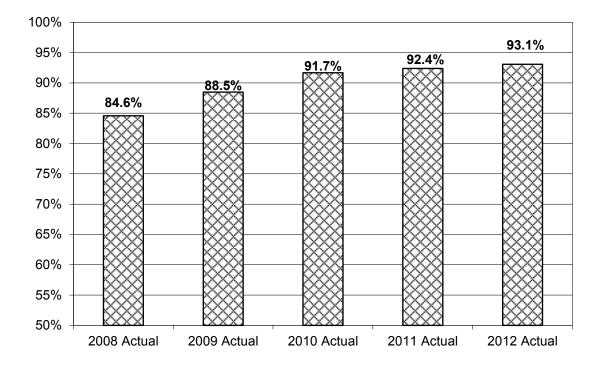
http://www.msp.msde.state.md.us/TeacherQualificationsOverview.aspx?PV=33::99:AAAA:1:N:0:14:1:1:1:1:1:1:1:1:3, Maryland State Department of Education

⁵³ 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 ⁵⁴ Fiscal Year 2014 MFR Performance Discussion, Maryland State Department of Education

⁵⁵ News Release, Four in a Row for Maryland Public Schools, National Education Newspaper Places State's System at the Very Top for Fourth Straight Year, Maryland State Department of Education, January 12, 2012

⁵⁶ 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

⁵⁷ MFR Performance Discussion, fiscal year 2014, Maryland State Department of Education



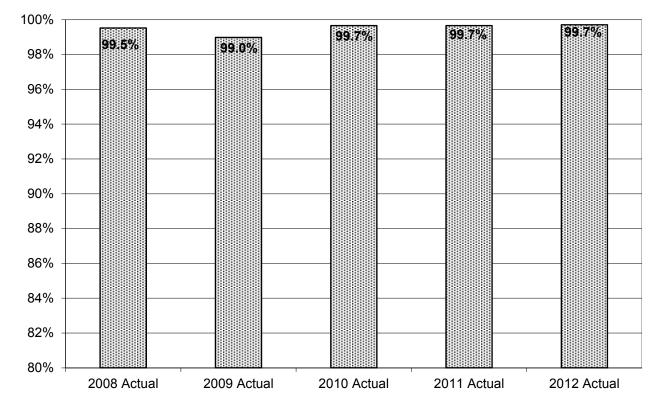
Percent of Core Academic Subject Classes Staffed With Highly Qualified Teachers

SCHOOLS PROVIDING SAFE AND PROFESSIONAL LEARNING ENVIRONMENTS THAT ENHANCE EDUCATIONAL QUALITY

Indicator 1.12: 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.⁵⁸ The percent of Maryland schools that are safe as defined by COMAR has remained constant from 2008 to 2012, ranging from 99% at the lowest to a high of 99.7%. In 2012, 1,449 of 1,454 schools were safe. Two schools are on probationary status and 3 schools are persistently dangerous, the same as in 2011.



Percent of Maryland Schools That Are Safe

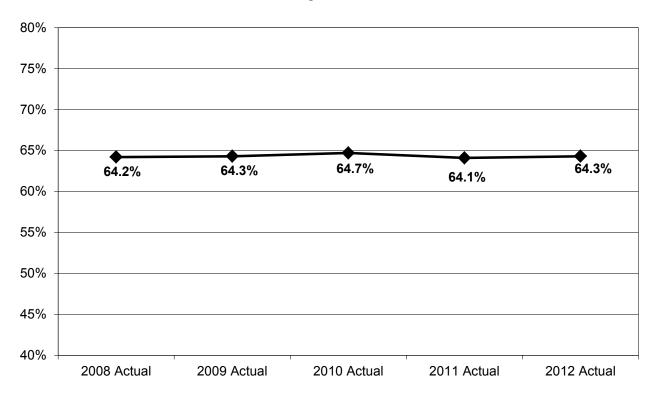
⁵⁸ One Maryland, A Message from the Governor, Governor O'Malley Signs Education Reform Legislation, May 5, 2010

PROMOTING ACCESS AND ACADEMIC SUCCESS IN POSTSECONDARY EDUCATION

Indicator 1.13: 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 2008 through 2012, reaching an all-time high of 64.7% in 2010. The 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 2013.⁵⁹ The recession's impact on college affordability for many students is a factor in achieving the target for the six year graduation rate.⁶⁰



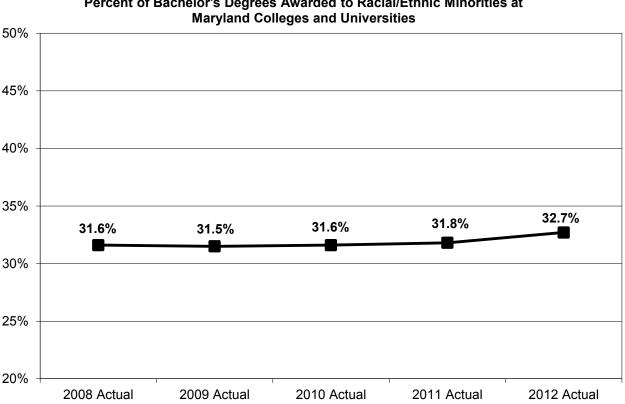
Six Year Graduation Rate of First-Time, Full-Time Students at Public Four Year Colleges and Universities

⁵⁹ Maryland Higher Education Commission(MHEC), MFR Performance Discussion, fiscal year 2013 MFR Submission ⁶⁰ Maryland Higher Education Commission(MHEC), MFR Performance Discussion, fiscal year 2014 MFR Submission

Indicator 1.14: Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities

Target: 34% by 2013

In the past 10 years, the proportion of racial and ethnic minorities enrolled at Maryland How are we doing? postsecondary institutions increased from 33% to 38%.⁶¹ Minority students earned close to one third of all bachelor's degrees awarded at Maryland public and independent campuses in each year from 2008 through 2012. 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 remains large. It continued to increase, and widened sharply over five years from 15.1 percentage points for the 1999 cohort of students to 23.0 percentage points for the 2004 cohort of students.⁶² There is some evidence that the gap is beginning to slowly decrease. The gap decreased from 23 points in 2009 to 21.1 points in 2012.63



Percent of Bachelor's Degrees Awarded to Racial/Ethnic Minorities at

⁶¹ Fiscal year 2013 and 2014 MFR Performance Discussions. Maryland Higher Education Commission

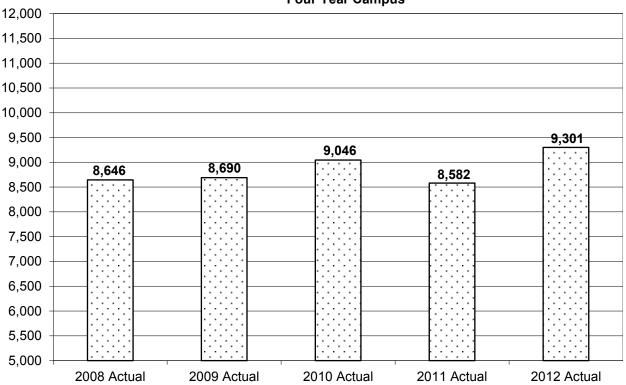
⁶² Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission

⁶³ Fiscal vear 2014 MFR Performance Discussion, Maryland Higher Education Commission

Indicator 1.15: 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 remained stable between 2008 and 2009, increased by 4.1% in 2010, lost that gain in 2011, and increased 2.8% over the 2010 level in 2012. The overall increase from 2008 to 2012 is 7.6%. 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.⁶⁴



Number of Community College Students Who Transfer to a Maryland Public Four Year Campus

⁶⁴ Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission

Indicator 1.16: Percent of Maryland median family income required to cover tuition and fees at Maryland public four-year institutions

Indicator 1.17: 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

The State is committed to ensuring that more Marylanders have access to its How are we doing? postsecondary institutions, and keeping colleges and universities affordable is a major part of this effort. Maryland continues to be one of the lowest ranked states with regard to tuition and fees. Over the five years from 2007-08 to 2012-13, inflation adjusted tuition and fees at Maryland's public four-year institutions increased by only 2%, the lowest increase in the nation.⁶⁵ The College Board's Rankings by State ranks Maryland's public four-year institutions 27th most affordable for academic year 2012-2013. This is primarily due to the Governor's multi-year tuition freeze at public four-year colleges and universities, and the State's commitment to enhancing its need-based financial aid awards.⁶⁶ Despite budget pressures, Governor O'Malley provided over \$9 million in additional State funding in the fiscal year 2013 budget to hold the tuition increase for in-state undergraduates at USM institutions to a modest 3%, only the third increase in seven years. 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.⁶⁷ 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.⁶⁸ The Commission has increased outreach efforts to inform Marylanders about the availability of financial aid. From 2008 to 2011, the percentage of median family income required to cover tuition and fees at public four-year institutions declined significantly by 13.0%, while the percentage of median family income required at community colleges declined by 9.1%. Year to year from 2008 to 2012, 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. Despite the end of the tuition freeze, the percentage remained steady for both public four-year institutions and community colleges between 2010 and 2011. From 2011 to 2012 the percent of median family income required to cover tuition and fees increased 8.0% for public four year institutions, and 7.5% for community colleges. This is due to an increase in tuition and a decrease in the median family income.⁶⁹

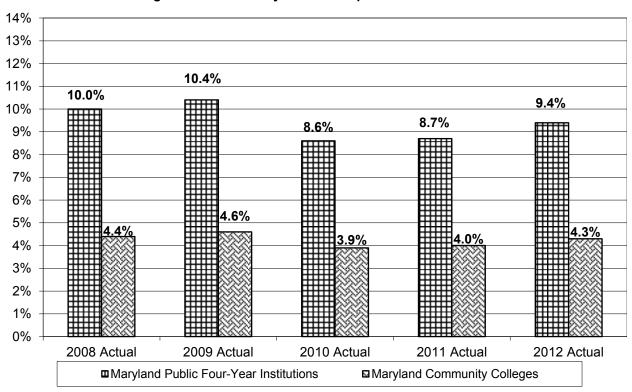
⁶⁵ Trends in Higher Education, In-State Tuition and Fees by State and Sector, 2012-2013 and 5 Year Percentage Change, College Board Advocacy and Policy Center; O'Malley-Brown Administration 2012 Year in Review Resource Guide, December 18, 2012

⁶⁶ Fiscal year 2013 and 2014 MFR Performance Discussions, Maryland Higher Education Commission

⁶⁷ One Maryland, A Message from the Governor, Governor O'Malley Signs Education Reform Legislation, May 5, 2010

⁶⁸ Fiscal year 2013 and 2014 MFR Performance Discussions, Maryland Higher Education Commission

⁶⁹ Fiscal year 2014 MFR Performance Discussions, Maryland Higher Education Commission;



Percentage of Median Family Income Required to Cover Tuition and Fees

PRODUCING A HIGHLY EDUCATED AND SKILLED WORKFORCE THAT MEETS THE NEEDS OF MARYLAND'S GROWING ECONOMY

Number of graduates from Maryland's public and private higher educational institutions in Indicator 1.18: science, technology, engineering and math (STEM)

Indicator 1.19: Number of teacher candidates prepared by Maryland's public and private higher educational institutions

Indicator 1.20: Number of graduates from Maryland's public and private higher educational institutions in nursing

By 2013, 10,578 STEM graduates Targets: 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.⁷⁰ 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.⁷¹ 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.⁷² The number of STEM graduates remained flat from 2008 to 2010, followed by a 12.1% (1,251) increase from 2010 to 2012. "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."⁷³ 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."⁷⁴ One focus of the initiative is increasing the number of STEM teachers graduating from USM institutions and pursuing teaching careers in Maryland.⁷⁵ 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 highest growth rate over the five year period of 2008 through 2012 occurred in nursing graduates with the number increasing by 33.4% (938) from 2008 to 2012. The growth in nursing graduates was twice the growth in STEM graduates over this five year period. 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.⁷

⁷⁰ One Maryland, A Message from the Governor, Governor O'Malley Signs Education Reform Legislation, May 5, 2010 ⁷¹Fiscal year 2013 and 2014 MFR Performance Discussions, Maryland Higher Education Commission

⁷² Fiscal year 2013 MFR Performance Discussion, Maryland Higher Education Commission

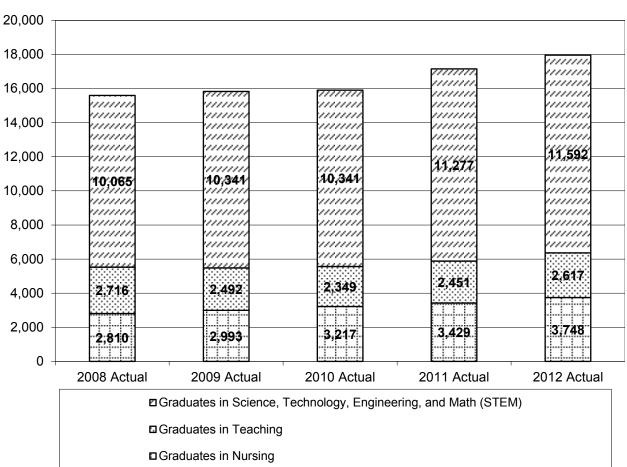
⁷³ National Education Association (NEA) Press Release, NEA names Maryland's Martin O'Malley America's Greatest Education Governor, July 6, 2010

NEA Press Release, NEA names Maryland's Martin O'Malley America's Greatest Education Governor. July 6. 2010

⁷⁵ Enterprising States, May 2010, U.S. Chamber of Commerce and the National Chamber Foundation

⁷⁶Fiscal vear 2013 MFR Performance Discussion, Maryland Higher Education Commission

The number of teacher candidates declined by 13.5% between 2008 and 2010. Although lower than the 2008 level, there was a rebound to near the 2009 level in 2011, with a subsequent increase of 11.4% from 2010 to 2012. Over the five year period of 2008 through 2012, graduates in teaching have had a net loss of 3.6%.

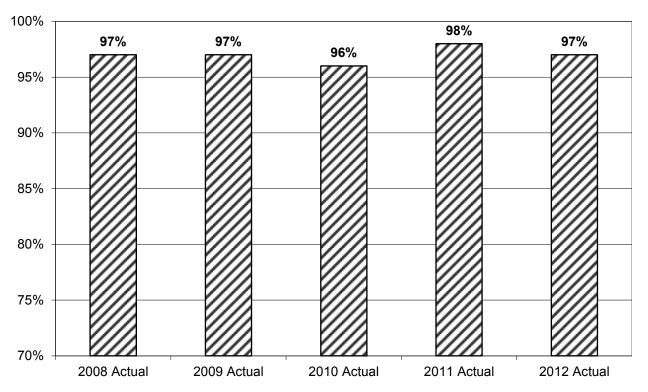


Numbers of Graduates in Shortage Professions from Maryland's Higher Educational Institutions

Indicator 1.21 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 2012. The percent of teacher candidates who passed the Praxis II certification exam increased by two percentage points to 98% in 2011⁷⁷, and subsequently dropped by one percentage point to 97% in 2012.



Percent of Teacher Candidates from Maryland Public and Private Higher Educational Institutions Who Pass Praxis II

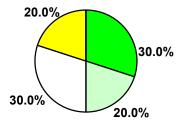
⁷⁷ Data reported in the 2012 Performance Report changed for 2011.

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.



Status	Number of Indicators	Percent
Favorable Performance (Change >10%)	6	30.0%
Favorable Performance (3% to 10% Change)	4	20.0%
Stable Performance (0% - 2% Change)	6	30.0%
Unfavorable Performance (3% to 10% Change)	4	20.0%
Unfavorable Performance (Change > 10%)	0	0.0%
Total	20	100%

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
U.S. Commerce BEA	Maryland's growth in total real gross domestic product (in millions of chained [2005] dollars) (2007 - 2011)	\$264,373	\$255,351	3.5%
FFIS	State Economic Momentum Index (2008 - 2012)	0.29	-0.46	163.0%
MDOT	Maryland Port Administration total general cargo tonnage, (thousands) (2008 - 2012)	9.3	9.1	2.2%
MDOT	Annual BWI Marshall passenger growth rate (2007 - 2011)	2.08%	1.67%	24.6%
MDOT	Number of non-stop markets served by BWI Marshall Airport (2008 - 2012)	76	69	10.1%
DBED Comptroller	Total State sales tax revenue attributable to tourism (millions) (data for 2008 is not shown because it is based on 5% sales tax and is not comparable to subsequent years; 6% tax rate reflected in data beginning with fiscal year 2009) (2009 - 2012)	\$377.5	\$346.3	9.0%
DBED	Average employment in bioscience establishments in MD (2007 - 2011)	34,001	31,928	6.5%
DBED	Number of bioscience establishments operating in MD (2007 - 2011)	1,838	1,464	25.5%
MDOT	Percent of State system roadway mileage with acceptable ride quality (2007 - 2011)	86%	85%	1.2%

ECONOMIC GROWTH

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
MDOT	Percent of bridges on Maryland State Highway Administration portion of the National Highway System that will allow all legally loaded vehicles to safely traverse (2007 - 2011)	99%	99%	0.0%
MDOT	Percent of MD State Highway Administration Network in overall preferred maintenance condition (2007 - 2011)	82.2%	85.1%	-3.4%
MDOT	Total number of passenger trips per service mile traveled for bus and rail transit (2008 - 2012)	2.8	2.4	16.7%
U.S. DOL/BLS	Ratio between Maryland's unemployment rate and the U.S. rate (2008 - 2012)	0.8205	0.7334	11.9%
DLLR	Percent change in Maryland employment from 2001 baseline (12 month average) (2008 - 2012)	5.77%	6.02%	-4.2%
DLLR	Rate that adult employment trainees enter employment (2008 - 2012)	81.5%	83.2%	-2.0%
DLLR	WIA adult program participant employment retention rate (2008 - 2012)	87.5%	81.8%	7.0%
U.S. Commerce BEA	Annual Percent change in Maryland per capita personal income (2007 - 2011)	4.45%	4.72%	-5.7%
U.S. Census	Home ownership (2007 - 2011)	69.7	71.7	-2.8%
MDP	Percent of "other" investment leveraged by the State Rehabilitation Tax Credit in the rehabilitation of historic commercial properties (2008 - 2012)	80%	80%	0.0%
MDP	Percent of private investment leveraged by the State Rehabilitation Tax Credit for restoration and preservation of historic residential properties (2008 - 2012)	80%	80%	0.0%

STIMULATING ECONOMIC DEVELOPMENT AND CREATING JOBS

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

Total real GDP by state is an inflation-adjusted measure of each state's production, How are we doing? 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 2000.¹ Year over year growth in millions of chained (2005) dollars slowed from 1.6% in 2007 to 1.3% in 2008. The total Real GDP in Maryland declined by 1.6% from 2008 to 2009 in contrast to a decline of 3.8% in the total U.S. Real GDP by State. Maryland's 2010 real GDP increased by 2.9% over 2009, closely following the U.S. growth rate of 3.1% during that same time frame. "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."² Growth continued but slowed significantly from 2010 to 2011 for both Maryland and the nation. Real GDP increased in 43 states and the District of Columbia in 2011. Professional, scientific, and technical services was the leading contributor to the .9% growth of the real GDP in Maryland in 2011.³ Over the period of 2007 to 2011. Maryland's total real gross domestic product grew by 3.5%, compared to zero growth nationwide. Maryland's growth was the twelfth fastest growth among states over that period. Professional and technical services driven by computer systems design services, and manufacturing driven by computer and electronic equipment manufacturing demand were the two sectors making key contributions to Maryland's GDP growth.⁴

"By several economic measures, the U.S. made little or no progress during the last decade (1999-2009). 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."⁵ 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 the 2010, 2011, and 2012 studies.⁶ 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 2012, and fourth in 2010 on all seven metrics used to measure growth performance.⁷ Maryland ranked as one of the top performers in Talent Pipeline in 2011 and 2012 which provides a top-line review of

(http://knowledgecenter.csg.org/drupal/system/files/GDP_East.pdf)

¹Bureau of Economic Analysis, U.S. Department of Commerce

² The book of States 2011, Trends in State GDP 2010, Council of State Governments, July 2011

³ Advance Statistics of GDP by State 2011, Bureau of Economic Analysis; actual data for 2007 – 2010 were updated; Revised statistics incorporate improvements in source data and statistical methods to more accurately portray state economies.

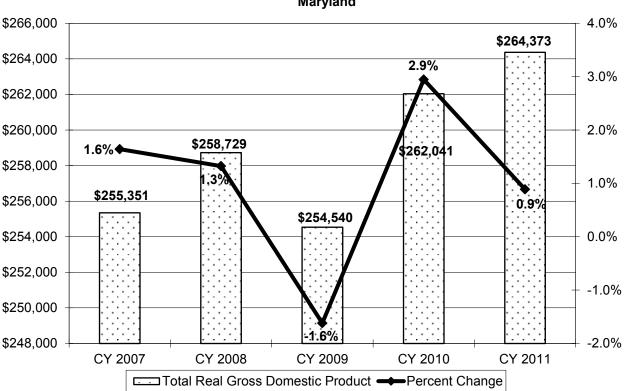
⁴ Economic Pulse, An Overview of Maryland's Economic Indicators, June 21, 2012, Maryland Department of Business and Economic Development

⁵ Economic Pulse, An Overview of Maryland's Economic Indicators, January 29, 2010, DBED

 ⁶ 2010, 2011, and 2012 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
 ⁷ 2010, 2011, and 2012 Enterprising States, a project of the U.S. Chamber of Commerce and the National Chamber Foundation,

http://ncf.uschamber.com/enterprising-states/

the talent within each state based on general measures of secondary and higher education and workforce training systems.⁸



Total Real Gross Domestic Product - Millions of Chained (2005) Dollars -Maryland

⁸ 2010, 2011, and 2012 Enterprising States, a project of the U.S. Chamber of Commerce and the National Chamber Foundation, <u>http://ncf.uschamber.com/enterprising-states/</u>

Indicator 1.2: Maryland State Economic Momentum Index⁹

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.¹⁰ 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.¹¹ Maryland's economy continued to improve in 2009 to 0.28% above the national average (19th in the nation). Maryland benefited from the initial flow of Federal stimulus funds¹², 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,¹³ 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.¹⁴ 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.¹⁵ 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"¹⁶ 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. By March 2012, Maryland's economic momentum significantly improved by .61 percentage points (190.6%) over March 2011, with a rank of 11th in the nation. Maryland exceeded the national average by .29%, compared to a rank of 40 and momentum .32 below the national average in March 2011. Of the three measures of economic vitality, Maryland ranked highest in "change in employment" - rising to a rank of 9 from a rank of 33 in a twelve month period. Maryland ranked 11th in the nation in "change in personal income", signaling that the economic recovery was building steam at the end of calendar year 2011.¹⁷ Maryland placed 21st in "change in state population" with a growth rate of .7%. The 2012 Continuum of State Fiscal Stress shows that state economies have stabilized and state revenues are growing. "The big unknown is whether revenue growth can be sustained at a rate sufficient to replace the federal stimulus funding that is now part of history."¹⁸

A number of economic indices indicate that Maryland fares well compared to other states in the nation. The State New Economy Indices¹⁹ 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

⁹ 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

¹⁰ State Policy Reports, Federal Funds Information for States

¹¹ State Policy Reports, Vol. 26, Issue 6, March 2008, Index of State Economic Momentum

¹² State Policy Reports, Vol. 27, Issue 6, March 2009, Index of State Economic Momentum

¹³ State Policy Reports, Vol. 28, Issue 6, March 2010, Index of State Economic Momentum

¹⁴ State Policy Reports, Vol. 28, Joint Issue 23-24, December 2010, Index of State Economic Momentum

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; State Policy Reports, Vol. 30, Issue 11, July 2012, Continuum of State Fiscal Stress

¹⁶ State Policy Reports Volume 29, Issue 11, June 2011, Continuum of State Fiscal Stress

¹⁷ State Policy Reports, Vol. 30, Issue 6, April 2012, Index of State Economic Momentum

¹⁸ State Policy Reports, Vol. 30, Issue 11, July 2012, Continuum of State Fiscal Stress

¹⁹ 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 Laggers 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

"New Economy".²⁰ 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 least a two-year degree.²¹ 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.²²

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."²³

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.²⁴ 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.

As part of Maryland's support of businesses from inception through stability and growth, the Department of Business and Economic Development recently launched the "Maryland Business Properties" website to provide businesses with easy access to Maryland's commercial and industrial properties. For businesses looking to relocate to or expand in Maryland, this online tool saves time by providing easy access to search by property type, site size, zoning and rail service for over 1,800 buildings and sites.²⁵

InvestMaryland is a key initiative that will provide funding to spur growth and innovation through a tax credit program (auction of tax credits to insurance companies) designed to create thousands of jobs and revitalize venture capital funding in Maryland. The Maryland Venture Fund was approved by the general assembly during the 2011 session, and is the largest venture capital investment initiative in Maryland's history.²⁶

http://www.kauffman.org/research-and-policy/2008-state-new-economy-index.aspx;

Transformation in the States, The Information Technology & Innovation Foundation with financial assistance by the Kauffman Foundation

²⁰ The Kauffman Foundation and the Information Technology and Innovation Foundation (ITIF),

²¹ 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.

²² The 2010 State New Economy Index, Benchmarking Economic Transformation in the States, The Information Technology & Innovation Foundation with financial assistance by the Kauffman Foundation

²³ 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

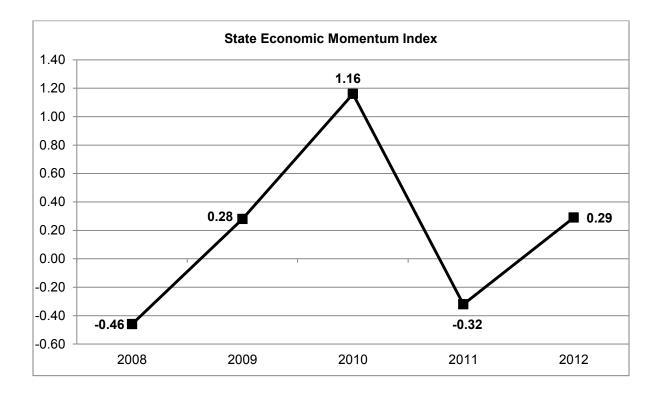
²⁴ Business in Maryland Made Easy, <u>http://easy.maryland.gov:8081/wordpress/about/</u>

One Maryland, Public Safety, Local Businesses, and New Technologies, Governor Martin O'Malley, June 2012

²⁶ InvestMaryland, Fueling Innovation + Creating Jobs found at:

www.choosemaryland.org/businessresources/Pages/InvestMaryland.aspx

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: Grow MPA General Cargo by 3% per year

General cargo includes foreign and domestic waterborne cargo - it does not include How are we doing? bulk commodities, container tare weight, empty containers, or domestic non-waterborne cargo.²⁷ "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."²⁸ 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 2009.²⁹ 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.³⁰ An increase of 14.5% in total general cargo tonnage from 2010 to 2011 indicates that recovery from the recession is progressing. The increase in cargo overall from 2010 to 2011 marked the greatest increase of growth by any major U.S. port in 2011.³¹ Total general cargo beat the 2008 high at 9.3 in 2012, an increase of a 6.9 percent over 2011, and a 22.4% increase over 2010. 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 remained the number one port in the nation for handling roll on/roll off cargo, imported forest products, imported gypsum, and imported sugar. Baltimore is second in the nation in handling international automobiles.³² The Port is an economic engine in Maryland, generating about 16,700 direct jobs, and about 120,000 jobs that are linked to Port activities.³³

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, significant growth in imported and exported automobiles, exposure and recognition as one of the nations top auto ports by hosting the Journal of Commerce's Auto Logistics Conference, and an increase in forest products, and construction and agricultural equipment. The primary reasons for negative changes in general cargo tonnage in 2009 and 2010 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.³⁴

Ports America, under a 50 year contract with MPA, constructed a 50 foot berth for the Port that will result in increased business opportunities, and allow larger vessels to dock in Baltimore.³⁵

²⁷ Maryland Department of Transportation 2010 - 2012 Annual Attainment Reports on Transportation System Performance, and Maryland Port Administration fiscal year 2012 MFR Performance Measure Profile

²⁸ Maryland Department of Transportation, Maryland Port Administration, FY 2014 MFR budget book submission; Maryland Department of Transportation 2012 Annual Attainment Report on Transportation System Performance

²⁹ Maryland Department of Transportation, Maryland Port Administration, FY 2011 MFR Performance Discussion

³⁰ Maryland Department of Transportation, Maryland Port Administration, FY 2012 MFR Performance Discussion

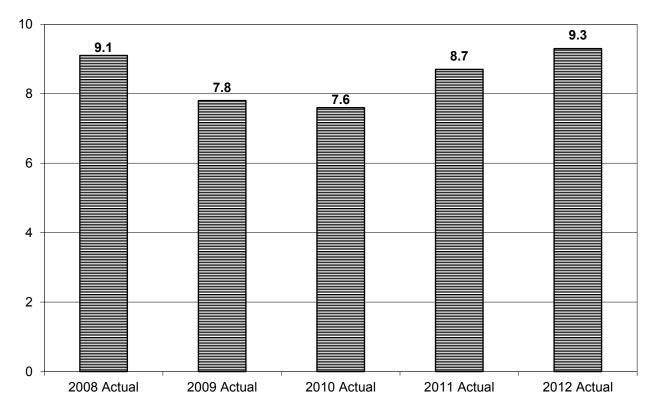
³¹ Port of Baltimore saw largest growth among all major U.S. Ports in 2011, Port's Nearly 38 Million Tons of Cargo was 15

Percent Increase From 2010; Many Other Records Set - Maryland Port Administration Press Release, April 23, 2012 ³² Maryland Department of Transportation 2012 Annual Attainment Report on Transportation System Performance

³³ Maryland Department of Transportation 2012 Annual Attainment Report on Transportation System Performance

³⁴ Maryland Department of Transportation 2010 - 2012 Annual Attainment Reports on Transportation System Performance

³⁵ Maryland Department of Transportation, Maryland Port Administration, FY 2012 MFR Performance Discussion; Maryland Department of Transportation 2010 - 2012 Annual Attainment Reports on Transportation System Performance; 9/20/12 email from MPA - construction of the berth is completed and the four new cranes are in place.

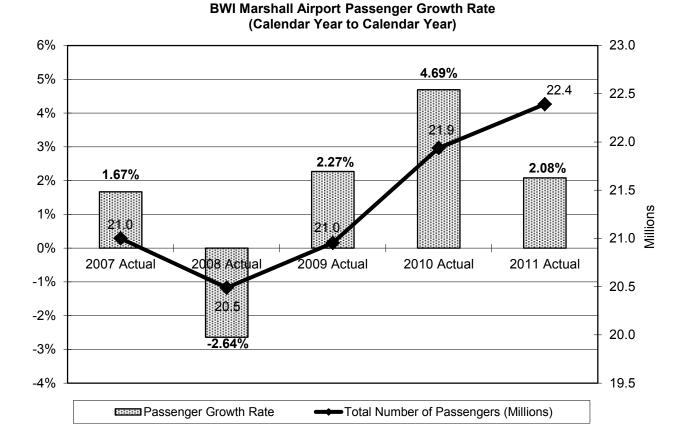


Maryland Port Administration Total General Cargo Tonnage (Millions)

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.³⁶ After dropping by 3.2 percentage points in 2007, the passenger growth rate 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%.³⁷ 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 2009.³⁸ 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. The rate of growth slowed by 2.6 percentage points in 2011, with 22.4 million passengers travelling through BWI Marshall Airport which will streamline security check-ins, eliminate a major passenger bottleneck, and give its number one carrier room to grow.



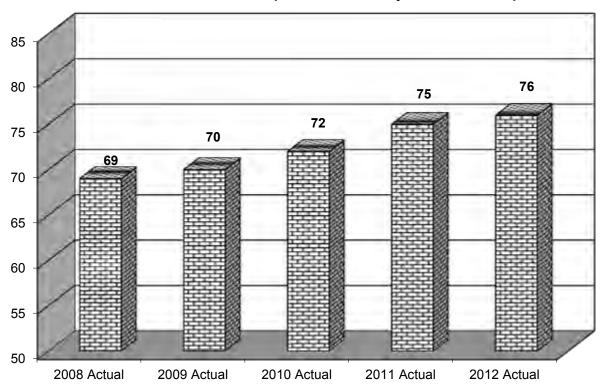
³⁶ 2010 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

 ³⁷ 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation
 ³⁸ 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."³⁹ 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.⁴ The number of non-stop markets served by BWI Marshall steadily increased by an overall 10.1% from 2008 to 2012, bringing the number to 76 - 7 more non-stop markets served than in 2008. 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. Condor Airlines started service to Frankfurt, Germany in 2012, and Vision Airlines began service to Freeport, Bahamas, BWI Marshall will continue to focus marketing and awareness campaigns on the advantages of using the airport including easy parking, attractive concessions, and accessible ground transportation options, meet with targeted airlines to promote air service opportunities to BWI Marshall, and promote BWI Marshall as a convenient gateway to Washington, D.C.⁴



Number of Non-Stop Markets Served by BWI Marshall Airport

³⁹ 2011 and 2012 Annual Attainment Reports on Transportation System Performance, Maryland Department of Transportation

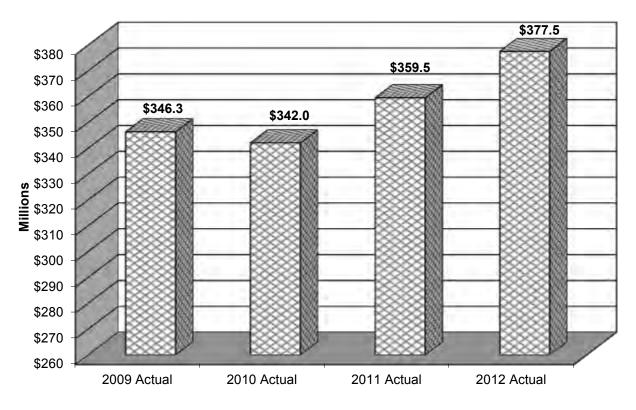
⁴⁰ 2010 Attainment Report on Transportation System Performance, Maryland Department of Transportation

⁴¹ 2011 and 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

Indicator 1.6: Total State sales tax revenue attributable to tourism (millions)

Target: Increased economic impact from tourism

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%. Data for fiscal year 2008 is not comparable to subsequent years and therefore is not shown. Total State sales tax revenue attributable to tourism remained stable between 2009 and 2010,⁴² increased by 5.1% in 2011, and an additional 5% in 2012 (10.4% from 2010 to 2012).⁴³ Adjusted tourism codes performed twice as well as overall sales taxes during fiscal year 2011.⁴⁴ Transportation and food account for the largest share of visitor spending, followed by spending on lodging, shopping, and entertainment.⁴⁵ Maryland stands to gain from its local cuisine, waterfront destinations, cultural heritage, and driving tours within short range of many top-rated tourism attractions.⁴⁶



State Sales Tax Revenue Attributable to Tourism (Millions)

⁴² Fiscal year 2010 data was corrected from what was reported in the 2011 report.

⁴³ 2012 revenues were adjusted to account for the increase in the alcohol tax.

⁴⁴ 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)

⁴⁵ Tourism Marketing & Development Plan, Fiscal Year 2012, Maryland Tourism Development Board and the Office of Tourism Development

⁴⁶ Tourism Marketing & Development Plan, Fiscal Year 2013, Maryland Tourism Development Board and the Office of Tourism Development

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.⁴⁷ "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."⁴⁸ 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,⁴⁹ 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.⁵⁰ Maryland's position as a leading state (third in the nation) for STEM job concentration was confirmed by the 2012 Enterprising States rankings, showing that Maryland is home to a strong concentration of technology-based industries, which have helped Maryland become a center for academic and private-sector research and development.⁵¹The 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.52

Ninety-four percent of all private life sciences jobs in Maryland are in the sub-sectors of Research, Testing 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 25.5%, and private employment in this sub-sector has increased 6.5% over the period of 2007 to 2011. Although the number of Drugs and Pharmaceuticals firms declined by 4.3% from 2007 to 2011, employment in that sub-sector increased 10.3%. The average size of Drugs and Pharmaceuticals establishments in 2011 is 104 workers, much larger than the total sector's average of 18.5 workers per establishment. On the other hand, over the past five years, employment has declined 18% in the Medical Devices and Equipment sub-sector, but the number of establishments has increased 17.9 percent. This could represent more efficient manufacturing practices. The Agricultural Feedstock and Chemicals sub-sector is small

⁴⁷ 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 nonacademic 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.

⁴⁸ Life Sciences Maryland: Jobs Analysis & Economic Impact Report 2011, Maryland Department of Business & Economic Development

⁴⁹ Economic Pulse, An Overview of Maryland's Economic Indicators, November 30, 2011; The Best Cities for Technology Jobs, Forbes magazine, November 18, 2011

⁵⁰ Enterprising States, May 2010, U.S. Chamber of Commerce and the National Chamber Foundation

⁵¹ 2012 Enterprising States

⁵² Economic Pulse, An Overview of Maryland's Economic Indicators, November 30, 2011; Deloitte's 2011 Technology Fast 500 summary found at: <u>http://www.deloitte.com/assets/Dcom-</u>

UnitedStates/Local%20Assets/Documents/TMT_us_tmt/us_tmt_2011fast500rankings_111411.pdf

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

but growing. Although there was job loss over the five year periods ending in 2008 and 2009, employment increased 83.9% over the last 5 years – 2007 to 2011. The number of firms also increased 15%. 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 6.5% from 2007 to 2011, and the number of establishments has increased 25.5%. The data shows that Maryland's growth in Life Sciences has been on a downward trend but has continued even during down economic times.

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.⁵³ Maryland 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 proposes 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.⁵⁴ 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."55 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 succeed⁵⁶; and *Invest*Maryland that is aimed at creating a public-private partnership to fuel venture capital investment in Maryland's "Innovation Economy" such as bioscience companies⁵⁷

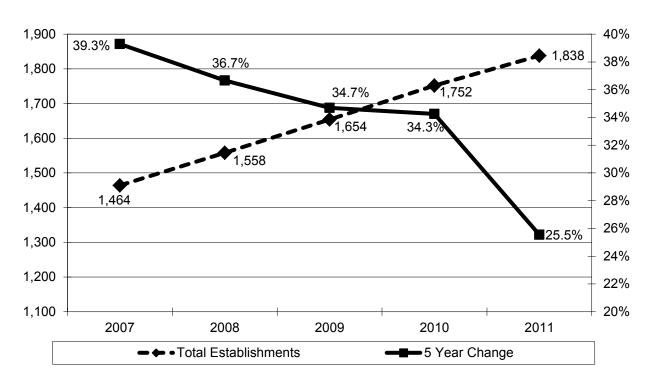
⁵⁵ Maryland Biotechnology Center Web site, <u>http://marylandbiocenter.org/Pages/Homepage.aspx</u>

⁵³ 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

⁵⁴ Department of Business and Economic Development Web site: <u>http://www.choosemaryland.org/industry/Health/default.aspx</u>

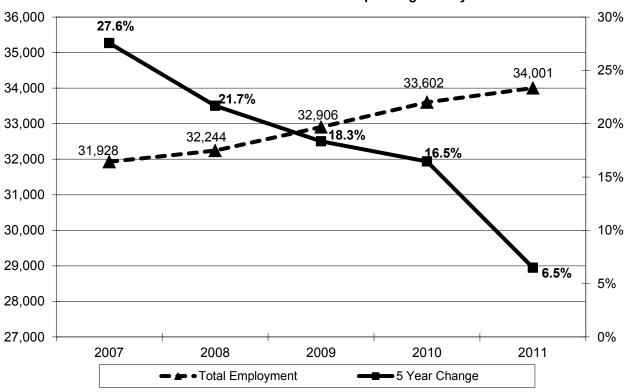
⁵⁶ http://www.mtech.umd.edu/

⁵⁷ Press release, June 1, 2010, "Governor Martin O'Malley Announces *Invest*Maryland Proposal to Spur Jobs, Investments in Maryland's Innovation Economy"



Percent Change in Number of Bioscience Establishments Operating in Maryland

Percent Change in Average Employment in Bioscience Establishments Operating in Maryland



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 quality⁵⁸

Target: At least 84% with acceptable ride quality

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"The traveling public has identified acceptable ride quality (smoothness or roughness of How are we doing? the pavement) as a priority. Ride quality facilitates mobility, efficiency, and safe movement of people and goods within Maryland."59 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."⁶⁰ 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.⁶¹ During the period of calendar years 2007 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 guality declined by one percentage point to 86% in 2010, and remained at that level in 2011. State system roadway mileage with acceptable ride guality 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 when American Recovery and Reinvestment Act (ARRA) funds were available.⁶² Future strategies include implementing the SHA and Federal Highway Administration approved Pavement Preservation Program that will strategically utilize system preservation activities; and expanding the use of recycled materials.⁶³

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Percent of Maryland State System Roadway Mileage With Acceptable Ride Quality

CY 2007 Actual CY 2008 Actual CY 2009 Actual CY 2010 Actual CY 2011 Actual

⁵⁸ 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).

⁵⁹ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

⁶⁰ State Comparative Performance Measurement, Transportation, a national report from the Council of State Governments, 2009

⁶¹ Maryland Department of Transportation, State Highway Administration FY 2013 MFR Performance Discussions

⁶² Maryland Department of Transportation, State Highway Administration FY 2012 and FY 2013 MFR Performance Discussions

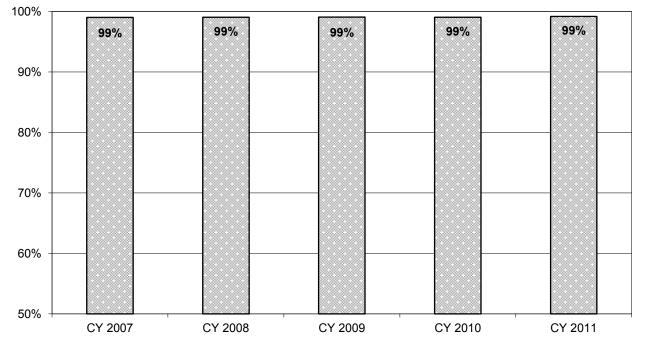
⁶³ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

Indicator 1.10: Percent of bridges along the MDOT highway network that will allow all legally loaded vehicles to safely traverse⁶⁴

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.⁶⁵ 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.⁶⁶ Improving the condition of bridges across the State is a priority area of investment for SHA and the Maryland Transportation Authority. SHA coordinates an aggressive maintenance program which employs up to twelve contractor construction crews working continuously throughout the year to keep bridges safe. Critical links in Maryland's transportation system, including four major bridges, are included in plans to undergo preservation and maintenance activities in the fiscal year 2012 through 2017 Consolidated Transportation Program (CTP).⁶⁷ Over the period of 2007 through 2011, 99% of Maryland's bridges allowed all legally loaded vehicles to safely traverse. In 2011, 2,866 of the 2,890 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." 68





⁶⁵ State Comparative Performance Measurement, Transportation, a national report from the Council of State Governments. ⁶⁶ Maryland Department of Transportation fiscal year 2012 MFR Performance Discussion

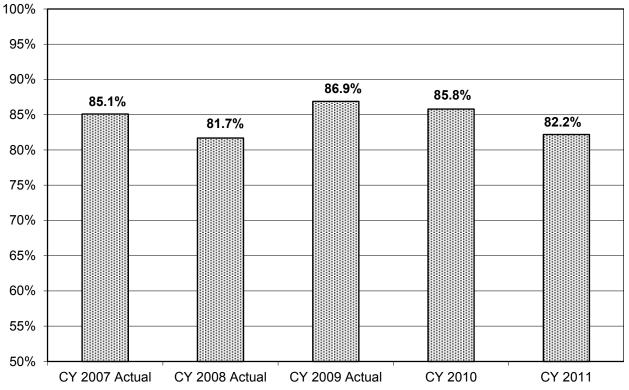
⁶⁴ Data reflects Federal reporting in April of each year.

⁶⁷ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation ⁶⁸ 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 guality and safety of existing roadways.⁶⁹ 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.⁷⁰ The percentage of the State Highway Administration Network in overall preferred maintenance condition remained relatively stable over the period of 2007 through 2010 with the exception of 2008 when performance declined by 4% from 2007. In 2009, performance returned to slightly more than in 2007, 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, and dropped by 4.2% in 2011 to the 2008 level. The Department of Transportation reported that performance declined partially due to total maintenance expenditures averaging about \$9 million less than historical amounts. Cost savings strategies include reductions in non-safety related maintenance activities, resulting in a decrease in the overall maintenance condition on SHA roads. There also is an increased need for drainage system repairs, and maintenance and repair of eroded slopes.⁷¹





 ⁶⁹ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation
 ⁷⁰ Managing for Results Performance Measure Profile Fiscal Year 2012, State Highway Administration, Maryland Department of Transportation

⁷¹ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

Indicator 1.12: Total number of passenger trips per service mile traveled for bus and rail transit⁷²

Target: Double transit ridership in Maryland by 2020

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.⁷³ Service productivity is a function of the frequency of service and total ridership. 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.⁷⁴ Growth in service productivity may be restricted on certain modes by existing and planned service levels and capacity.⁷⁵ The number of passenger trips per service mile increased by 4.2% from 2008 to 2009, and subsequently dropped by 12.0% to 2.2 in 2010. Beginning with 2011 data, this measure is calculated using a weighted average rather than a straight average which adjusts the results by a tenth of a point.⁷⁶ The number of passenger trips per service mile increased to 2.7 in 2011⁷⁷, and increased by 3.7% to 2.8 in 2012. During 2008 and 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.⁷⁸ 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 2010.⁷⁹ Creating a sustainable transit system to reduce highway congestion, and increasing transit ridership continue to be major priorities of the O'Malley Brown administration. 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.⁸⁰ The Department of Transportation plans to establish the Bus Service Allocation Task Force to determine patterns in local bus ridership demand, and allocate service accordingly.⁸¹

⁷² 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

 ⁷³ 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation
 ⁷⁴ Maryland Transit Administration Performance Measure Profile, fiscal year 2013 MFR

⁷⁵ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

⁷⁶ Fiscal year 2014 MFR budget book submission, Maryland Transit Administration

⁷⁷ Data in the fiscal year 2014 MFR was updated for 2011.

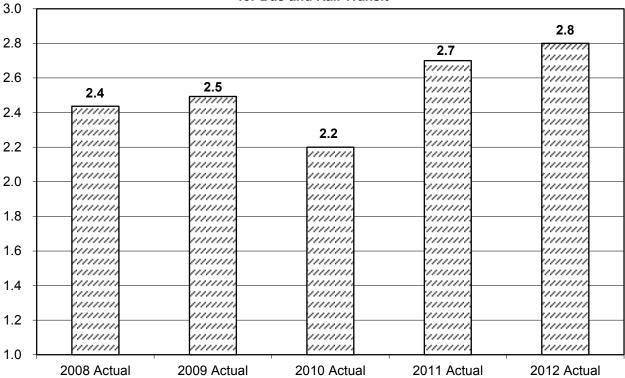
⁷⁸ Maryland Transit Administration FY 2010 MFR Performance Discussion

⁷⁹ 2011 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

⁸⁰ Maryland Transit Administration FY 2012 and FY 2013 MFR Strategies

⁸¹ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

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



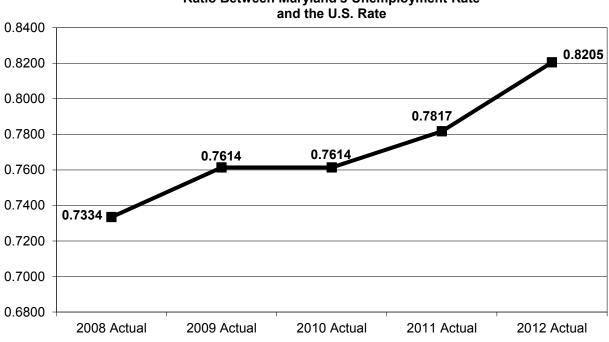
Total Number of Passenger Trips Per Service Mile Traveled for Bus and Rail Transit

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? "Family economic success provides a critical foundation for healthy child development, which, in turn, promotes success in adulthood. Ongoing exposure to economic stress and hardship can negatively affect children's physical and mental health, academic achievement and social/emotional wellbeing."82 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 2007 through October 2012. Over the last two twelve month periods ending in October, the Maryland average unemployment rate was 21.8% and 18.0% below the U.S. unemployment rate. The ratio of Maryland's unemployment rate to the U.S. rate increased by 3.8% in 2009, remained at the 2009 level in 2010, increased slightly by 2.7% in 2011, and increased by 5.0% in 2012. In October 2011, forty states including Maryland registered unemployment rate decreases from a year earlier, eight states and the District of Columbia had increases, and two states experienced no change.⁸³ In October 2012, thirty-seven states including Maryland, and the District of Columbia recorded unemployment rate decreases, seven states posted rate increases, and six states had no change.⁸⁴ 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.⁸⁵ 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. EUC benefits were scheduled to terminate December 29, 2012, but the U.S. Congress extended the Emergency Unemployment Compensation Program through January 1, 2014.



Ratio Between Maryland's Unemployment Rate

⁸² 2012 Kids Count Data Book, The Annie E. Casey Foundation, statistics for Maryland

⁸³ Regional and State Employment and Unemployment – October 2011, Bureau of Labor Statistics News Release, November 20, 2011

⁸⁴ Regional and State Employment and Unemployment – October 2012, Bureau of Labor Statistics News Release, November 20, 2012

⁸⁵ 2011 Kids Count Data Book, The Annie E. Casey Foundation, statistics for Maryland

Indicator 1.14: Percent change in Maryland employment from 2001 baseline (12 month average)

Target: Maintain or increase growth in Maryland employment

"Maryland's distinctive economic strengths, principally its proximity to the federal How are we doing? 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." ⁸⁶ The strength of the state's core health and education services industries also contribute to Maryland's economic stability. Maryland has shown strong employment growth over the 2001 baseline of 2.72 million employed, increasing in 2008 to 6.02% growth (2.88 million employed) over 2001. The national economic downturn significantly impacted Maryland's labor market in 2009. Maryland's 2009 employment (2.8 million) was only 1.57% over the 2001 baseline. There was virtually no employment growth in 2010⁸⁷. In 2011 there was slight growth of 1.9% from the 2001 baseline, with employment returning to slightly more than the 2009 level. Two thousand twelve brought healthy growth of 3.9 percentage points above 2011, with 5.77% growth over 2001. 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,⁸⁸ including job growth related to the Federal Base Realignment and Closure (BRAC), as well as the Federal American Recovery and Reinvestment Plan. Because of the significant federal employment base in Maryland, recent economic stability may be threatened by the impact of the impending January 2013 federal seguestration. However, Enterprising States considers Maryland one of the top ten boom states because it is a center for high-tech business and research and development, as well as being a "strong all-around performer", ranking in the top twenty in nine of the twelve⁸⁹ measures used to determine boom states. Enterprising States ranked Maryland thirteenth in recent job growth and fifteenth in projected job growth, as well as having the tenth most educated young workforce and fifth-best family income level in the nation.⁹⁰ A report by the Maryland Department of Business and Economic Development stated that the mid-Atlantic region has recovered the jobs lost in the recession faster than other regions, with Maryland achieving the eighth fastest rate of jobs recovery in the nation over the period of 2009 through 2012, and the ninth highest job growth rate in the nation in 2011. 91

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 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.⁹² "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."⁹³ 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.⁹⁴ 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.⁹⁵ Another initiative launched by the Department of Labor, Licensing, and Regulation is the Maryland Workforce Dashboard, an interactive tool allowing jobs and skills training seekers to view supply and demand information on Maryland's workforce, educational and training opportunities.

⁸⁷ 2010 data corrected from what was reported in the 2010 Report.

⁸⁶ 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)

⁸⁸ State of the States, Energy, Federal Government States Provide Best Job Markets, Dennis Jacobe, Chief Economist, July 21, 2010, Gallup.com

⁸⁹ 2012 Enterprising States twelve measures include among others, long-term and short-term job growth, projected job growth, education-level of the young workforce, median income for a household of four, cost of living, and growth in per capita personal income.

⁹⁰ Enterprising States, Policies that Produce, June 2012

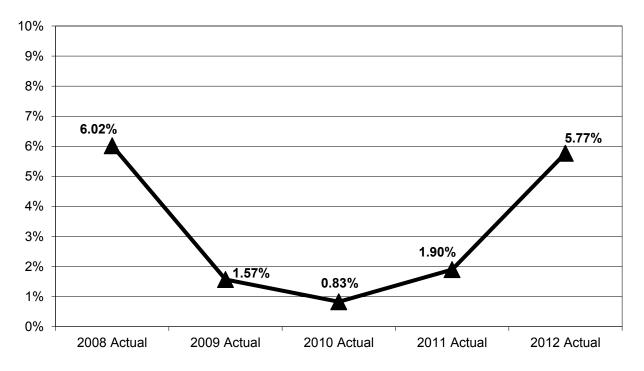
⁹¹ Maryland's Economic Strength, October 2012, Maryland Department of Business and Economic Development

⁹² One Maryland, A Message from the Governor, Building a World-Class Workforce, March 2, 2010

⁹³ Maryland's Forgotten Middle Skill Jobs, National Skills Coalition, March 2010

⁹⁴ Governor's Delivery Unit and StateStat Skills Stock Take, September 29, 2010

⁹⁵ The Workforce Exchange may be found at: <u>https://mwejobs.maryland.gov/</u>



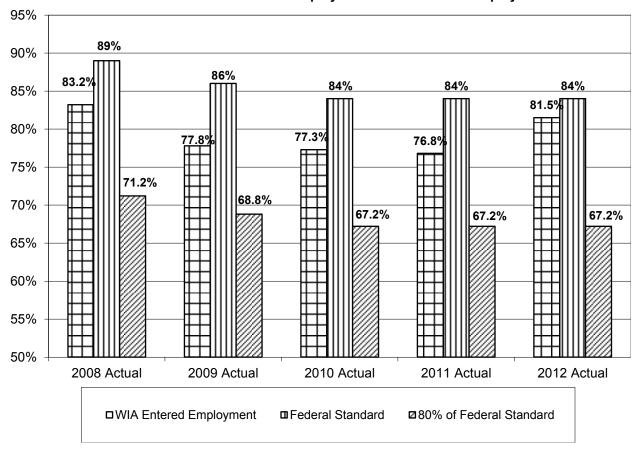
Percent Change in Maryland Employment from 2001 Baseline (12 Month Average - Nov. of Prior Year to Oct. of Current Year)

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

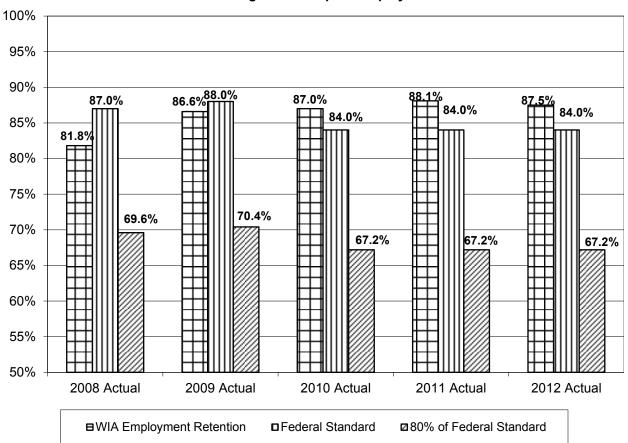
Target: Meet or exceed the Federal standard for entered and retained employment

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. The rate by which Workforce Investment Act adult program participants entered employment increased by 6.1% from 2011 to 2012, while employment retention remained stable. Entered employment fell short of the negotiated Federal standard during the timeframe of 2008 through 2012. However, entered employment was only 2.5 percentage points below the standard in 2012. The employment retention rate exceeded the negotiated Federal standard in 2010 through 2012, and nearly met the standard in 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.⁹⁶ Therefore, although the entered employment and employment retention rates were below the negotiated Federal standard during the years stated above, the rates were well within the acceptable range of 80% of the negotiated standard for all years 2008 through 2012. 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.



Rate that WIA Adult Employment Trainees Enter Employment

⁹⁶ Department of Labor, Licensing, and Regulation



WIA Adult Program Participant Employment Retention Rate

Indicator 1.17: Annual percent change in Maryland per capita personal income (estimated)⁹⁷

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. Maryland's per capita personal income has significantly exceeded (by \$7,000 to \$9,000) the national per capita personal income for each year 2007 through 2011. Although the per capita personal income for both Maryland and the U.S increased each year over the period of 2007 and 2008, the annual percent change slowed in 2008. Maryland's per capita personal income declined by 2.96% in 2009, the U.S. per capita personal income declined by nearly two times that, signaling greater strength in Maryland's economy during the recession. In 2009, Maryland's per capita personal income of \$47,419 was 22.7% higher than the national average. In 2010, the change in Maryland's per capita personal income came out of negative territory, and the average Maryland per capita personal income increased by \$1,202 (2.5%) over the 2009 level. The U.S. percent increase was a half percentage point greater at 2.99.0%. Per capita personal income improved even more in 2011, both nationally (4.5%) and in Maryland (4.2%). Maryland has a large Federal employment base, as well as an economic concentration in industries such as information and business, and professional services that frequently require college and advanced degrees,⁹⁸ and therefore higher salaries.

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.⁹⁹ Maryland was ranked fifth in the nation in the Healthy Economy component of the 2011 Camelot Index, and eighth in the nation in the 2012 Index. The Pew Center on the States' new Economic Mobility¹⁰⁰ Project found that Maryland's Economic Mobility is among the best in the U.S. Eight states, including Maryland have consistently higher upward and lower downward mobility compared to the national average. The Economic Mobility Project found that there are important factors essential to promoting economic mobility overall, including "educational attainment, savings and asset building, and neighborhood poverty during childhood". Maryland scored well on all three factors.¹⁰¹

⁹⁷ 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.

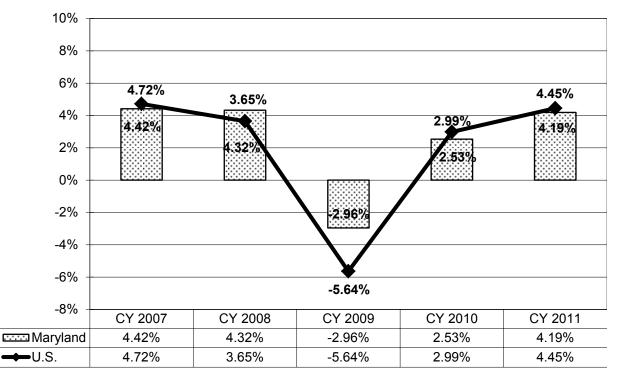
⁹⁸ Moody's Investors Service, Moody's assigns Aaa rating to Maryland's \$728 million General Obligation State and Local Facilities Loan of 2012, Second Series, July 18, 2012

⁹⁹ 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

¹⁰⁰ Economic Mobility is defined as movement up and down the earnings ladder.

¹⁰¹ The study measured economic mobility three ways: (1) absolute mobility which measures resident's average earnings growth over time, and (2) upward and downward relative mobility which measures people's rank on the earnings ladder relative to their peers and (3) their movement up or down the earnings ladder. The report looked at average earnings for workers in their prime working years -ages 35 and 39 between 1978 and 1997, and then looked at how those earnings rose and fell a decade later when the same individuals were 45 and 49. Economic Mobility of the States, April 2012, Pew Center on the States - Economic Mobility Project,

http://www.pewstates.org/uploadedFiles/PCS_Assets/2012/MobilityofStates_Summary(1).pdf

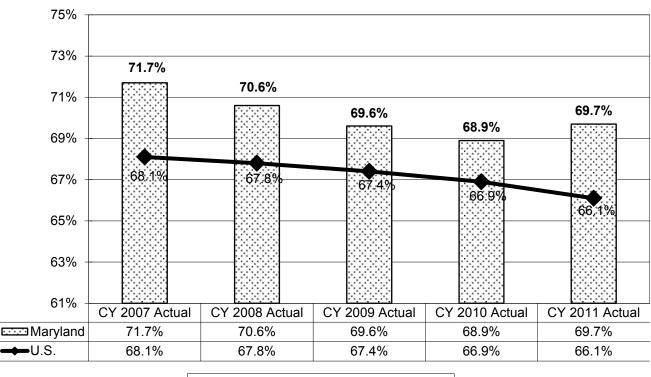


Annual Percent Change in Per Capita Personal Income

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 2007 to 2010 despite the recession, home foreclosure crisis, and changes in lending practices. Home ownership was 3.9% lower in 2010 than in 2007. Home ownership remained near the 2010 level in 2011, with a very slight increase for the first time since 2007. Maryland's home ownership rate has exceeded the U.S. rate by 2.0 to 3.6 percentage points each year from 2007 through 2011. 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

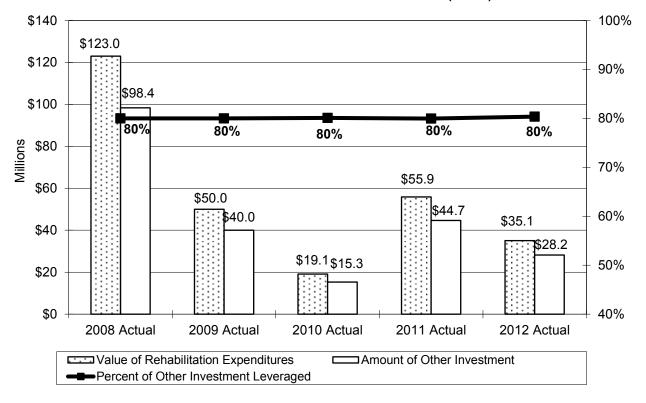
Maryland +U.S.

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

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.¹⁰² 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).¹⁰³ Although the value of commercial rehabilitation expenditures has been much lower for the last four years than in 2008, the percent of other investment leveraged by the SCTC for rehabilitation of historic commercial properties remained stable from 2008 through 2012, 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

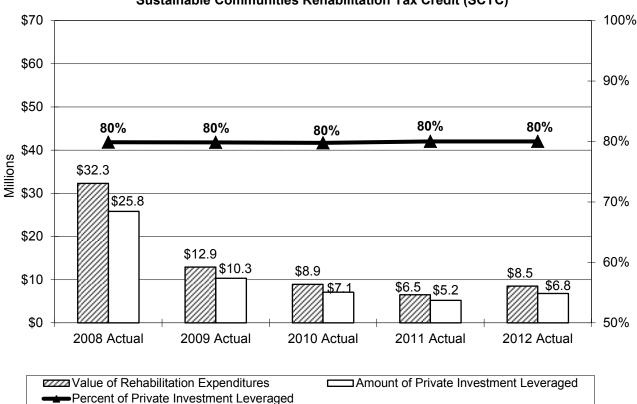
¹⁰² Major Issues Review 2007-2010, Department of Legislative Services

¹⁰³ 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 2008 through 2011 (79.9% overall), the percent of private investment leveraged by the SCTC for rehabilitation of single family, owner-occupied historic residential properties remained stable from 2008 through 2011. The value of rehabilitation expenditures increased 30.8% from 2011 to 2012, returning close to the 2010 level in 2012. The performance target was achieved for each of the last 5 years.



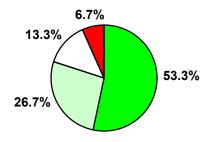
Value of Residential Rehabilitation Expenditures Approved for the State Sustainable Communities Rehabilitation Tax Credit (SCTC)

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.



Status	Number of Indicators	Percent
Favorable Performance (Change >10%)	8	53.3%
Favorable Performance (3% to 10% Change)	4	26.7%
Stable Performance (0% - 2% Change)	2	13.3%
Unfavorable Performance (3% to 10% Change)	0	0.0%
Unfavorable Performance (Change > 10%)	1	6.7%
Total	15	100%

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
UMCES EcoCheck	Chesapeake Bay Habitat Health Index- MD (2007 - 2011)	33%	38%	-13.2%
DNR	Acres of submerged aquatic vegetation (2007 - 2011)	34,424	35,017	-1.7%
DNR	Dredge survey index of stock size - crabs (2008 - 2012)	79	31	154.8%
DNR	Oyster biomass index (2008 - 2012)	1.2	0.9	33.3%
DNR	Estimated nitrogen load to the Chesapeake Bay from Maryland (in million lbs.) (2007 - 2011)	50.15	53.20	-5.7%
MDA	Acres of cover crops planted (2008 - 2012)	402,000	187,479	114.4%
MDE	Waters impaired by nutrients per the Integrated Report of Surface Water Quality (2004 - 2012)	20	97	-79.4%
MDE	Percent of Marylanders served by public water systems in significant compliance with all new and existing regulations (Data for 2008 is not comparable to subsequent data) (2009 - 2012)	92%	87%	5.7%
MDE	3 year average of days the 8 hour ozone standard was exceeded (2007 - 2011)	27.0	45.3	-40.4%
MDE	Percent of oil-contaminated sites cleaned-up (2008 - 2012)	96%	94%	2.1%
DNR	Total acres preserved by all land preservation programs (2008 - 2012)	1,470,224	1,366,377	7.6%

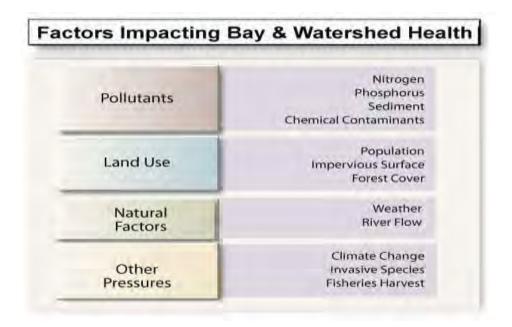
Agency/		Most Recent		
Data Source	Indicator	Data Available	4 Years Prior	4 Year Change
DGS	Percent change from the base year (fiscal year 2008) in energy consumption by all State government facilities (owned and leased) (2009 -2012 - shows difference rather than percent change)	8.67%	0.00%	8.7%
MEA	Percent change in per capita electricity consumption compared to the 2007 baseline (12.32 megawatt hours) in megawatt hours (2008 - 2011)	-5.11%	-2.23%	129.1%
MEA DBM	Percent of newly purchased light duty vehicles in the State vehicle fleet that are hybrid or alternative fueled vehicles (2008 - 2012)	71.0%	23.6%	200.8%
MEA	Percent change from the prior year in number of alternative fuel vehicles and hybrid-electric vehicles registered in Maryland (2008 - 2012)	54%	19%	184.2%

RESTORING THE HEALTH OF THE CHESAPEAKE BAY AND ITS LIVING RESOURCES

Indicator 1.1: Chesapeake Bay Habitat Health Index for Maryland¹

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 indicators² 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.³



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)⁴, whose watershed received less precipitation than average in 2009. Bay-wide health declined in both 2010 and 2011 to grades of C- and D+ respectively. Overall declines were seen in all three water quality indicators and aquatic grasses in 2011. The 2011 decline likely reflects a hot dry summer, followed by two major storms that brought high levels of sediments and nutrients to the Bay as well as decreasing water salinity.⁵

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) – <u>http://ian.umces.edu/ecocheck/report-cards/chesapeake-bay/</u>

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, <u>www.chesapeakebay.net</u>

⁴ Chesapeake Bay Report Card 2009

⁵ Chesapeake Bay Report Card 2011, Overview

The data presented in the graph on the next page are for the Maryland portion⁶ 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. 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 overall health of the Maryland portion of the Bay declined for the second year in a row in 2011. The overall grade declined by seven percentage points from C- in 2010 to a D in 2011, which indicates poor health. Factors contributing to this decline are the same as those that impacted the entire Bay in 2011 – a hot dry summer, followed by two major storms that brought high levels of sediments and nutrients to the Bay as well as decreasing water salinity

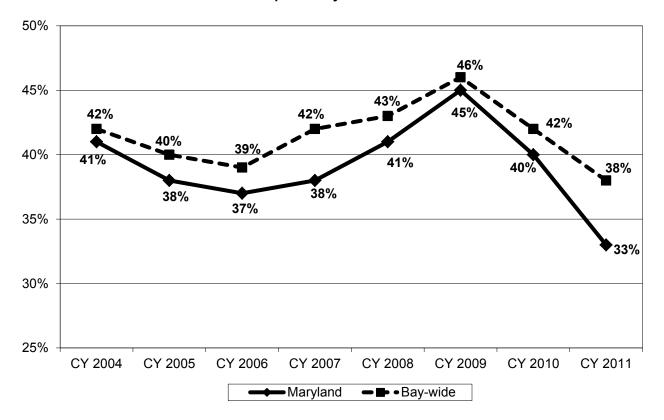
The varying primary nitrogen sources (for example agriculture and point sources) and the Bay health scores highlight the need for targeted implementation of best management practices. Some of the most important and new best management practices being undertaken in agriculture and urban areas include 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 longterm 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. "The Chesapeake Bay TMDL Watershed Implementation Plans identify how the Bay jurisdictions are putting measures in place by 2025 that are needed to restore the Bay, and by 2017 to achieve at least 60 percent of the necessary nitrogen, phosphorus and sediment reductions compared to 2009. Much of this work already is being implemented by the jurisdictions consistent with their Phase I WIP commitments, building on 30 years of Bay restoration efforts."9 Maryland is refining its final Phase II WIP that was completed in March 2012.10 Legislation was adopted in 2012 to address the Bay's long standing water pollution problems. The "flush" fee that pays for sewage plant upgrades was doubled; the State's nine largest counties and Baltimore City are required to raise funds to control their polluted runoff; and limits were placed on rural development using septic systems.

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. <u>http://www.epa.gov/chesapeakebaytmdl/</u>

⁹ U.S. Environmental Protection Agency - <u>http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/EnsuringResults.html?tab2=1</u>
¹⁰ <u>http://www.mde.state.md.us/programs/Water/TMDL/ChesapeakeBayTMDL/Pages/programs/waterprograms/tmdl/cb</u>
<u>tmdl/index.aspx</u>



Chesapeake Bay Habitat Health Index

Indicator 1.2: Acres of submerged aquatic vegetation (SAV)¹¹

 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.¹² "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."¹³ 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.¹⁴ Submerged aquatic vegetation is one of the three indicators in the biotic health 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), and dropped further to a D in 2011. 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. Although there was improvement in 2008 of 21.3% over 2007, the levels of aquatic grasses were still well below the restoration goal.¹⁵ SAV increased an additional 11.3% in 2009. The total increase of 35% (12,269 acres) from 2007 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.¹⁶ 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."¹⁷ 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."18 Acres of SAV declined further in 2011 (based on partial data and estimated data). Complete data is not available because of the inability to photograph the upper Potomac due to turbid conditions from tropical storms Irene and Lee in late summer of 2011. Two years of extreme weather conditions negatively impacted acres of SAV. The estimated SAV abundance for 2012 is 40,000 acres. Actual data should be available in spring 2013.19

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 called for the protection and restoration of 185,000 acres of bay grass by 2010.²⁰ "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

²⁰ Bay Grass Restoration in Maryland, Maryland Department of Natural Resources Web site:

¹¹ Data was previously reported by fiscal year, and is now reported on a calendar year basis

¹² 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"

¹³ 2009 Chesapeake Bay Report Card, Eco-Check

¹⁴ Maryland Department of Natural Resources Web site, October 2010

¹⁵ 2008 Chesapeake Bay Report Card, Eco-Check

¹⁶ Department of Natural Resources, December 6, 2010

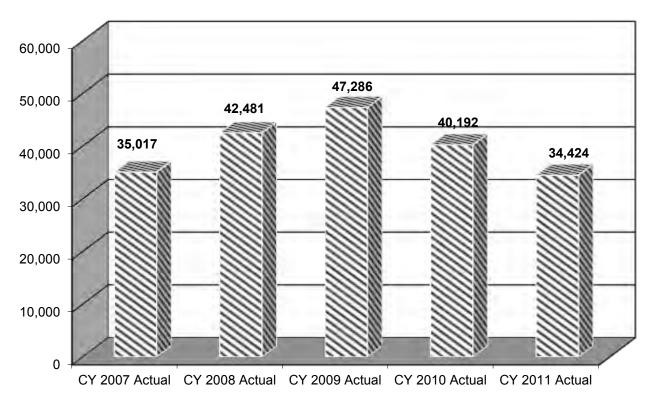
¹⁷ Maryland's Bay Grasses Declined 15% in 2010, Significant bay grass declines in mid-Bay area overshadow gains, DNR news, April 2011

¹⁸ 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

¹⁹ 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.

http://www.dnr.state.md.us/bay/sav/restoration.asp

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."²¹



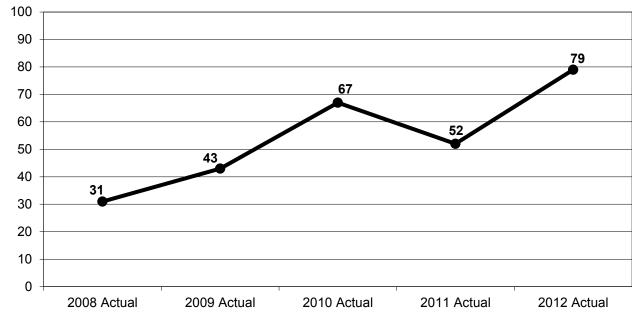
Acres of Submerged Aquatic Vegetation

²¹ 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

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.²² The Index value increased substantially by 154.8% from 2008 to 2012. In 2009, the number of spawning females doubled and increased again in 2010. The number of iuvenile crabs (smaller than 2.4 inches) doubled from 2009 to 2010, and reached its highest density since 1997. The Index declined by 22.4% from 2010 to 2011.²³ The value of the Index increased by 51.9% from 2011 to 2012, exceeding the 2010 level by 17.9%. The 2012 Maryland blue crab population was at a 19 year (since 1993) high.²⁴ The blue crab population can vary dramatically from year to year. Crabs are vulnerable to extreme cold, and the 2010 winter's below average temperatures are to blame for the reduction of adult crabs. Crab reproduction was also lower in 2011.²⁵ The abundance of adult females declined in 2011 largely due to high over wintering mortality from rapidly declining water temperature early in the winter, resulting in an extended period of extremely low water temperatures.²⁶ 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 2010,²⁷ and continuing in 2012. Bills were passed during the 2011 legislative session that increased enforcement authority and penalties for certain egregious violations of striped bass, ovster and blue crab rules. Legislation passed in 2012 aimed at the Bays water pollution problems including curtailing septic pollution, allowing upgrades to sewage treatment plants, and enabling local governments to reduce polluted storm water runoff.²



Dredge Survey Index of Stock Size

²² Maryland Department of Natural Resources, Fisheries Service, Data Definition and Control Procedures, fiscal year 2012 and 2013

²³ 2011 data has been updated

²⁴ Office of the Governor, More Blue Crabs newsletter, May 3, 2012

²⁵ 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

²⁶ Maryland Department of Natural Resources, Fisheries Service, MFR Performance Discussion, fiscal year 2013

²⁷ 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 ²⁸ Office of the Governor, More Blue Crabs newsletter, May 3, 2012

Indicator 1.4: Oyster Biomass Index²⁹

Target: Improved viability of oysters

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 ovster biomass in the samples, and calculates an Index based on this data.³⁰ Ovsters 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." ³¹ The Oyster Biomass Index remained stable at 0.9 from 2008 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.³² 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 ovster 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.³³ 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.³⁴ The Oyster Biomass Index increased to 1.2 in 2012, showing an increase in the health of the oyster population. 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.³

²⁹ 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

³⁰ Maryland Department of Natural Resources, Fisheries Service, Data Definition and Control Procedures, fiscal year 2013

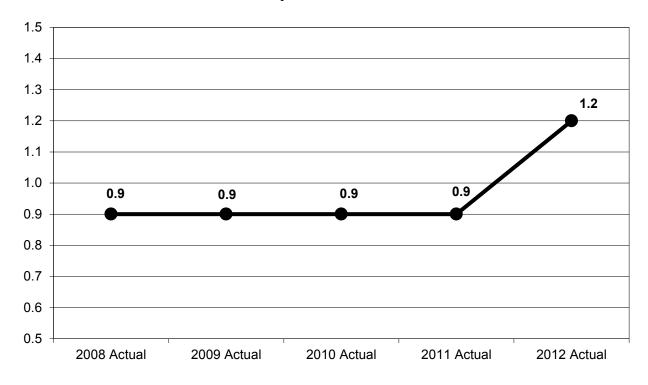
³¹ Maryland Department of Natural Resources, Fisheries Service, fiscal year 2012 Managing for Results Performance Discussion

³² 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

³³ Maryland Department of Natural Resources, Fisheries Service, fiscal year 2013 Managing for Results Performance Discussion

³⁴ 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

³⁵ Maryland Department of Natural Resources, Fisheries Service, fiscal year 2014 Managing for Results Performance Discussion



Oyster Biomass Index

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.³⁶ 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.³⁷ 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.³⁸ The estimated nitrogen load to the Chesapeake Bay declined by 4.9% from 2010 to 2011.³⁹ Data is not yet available for 2012. 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.40

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 2009.⁴¹ 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.⁴² Over the past four years, Maryland has continued its leadership in Bay restoration through actions such as:

- Being the 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; and

³⁶ Chesapeake Bay Program - <u>http://www.chesapeakebay.net/status_nitrogensources.aspx?menuitem=19797</u> <u>http://www.chesapeakebay.net/websitesearchresults.aspx</u>?

³⁷ Department of Natural Resources FY 2012 and FY 2013 MFR submissions

³⁸ Maryland's Actions and Strategies to Restore the Chesapeake Bay, Solutions, BayStat:

http://www.baystat.maryland.gov/solutions.html

³⁹ Data was revised for 2010 and 2011 in MDE's fiscal year 2014 MFR. Previously, DNR reported this data.

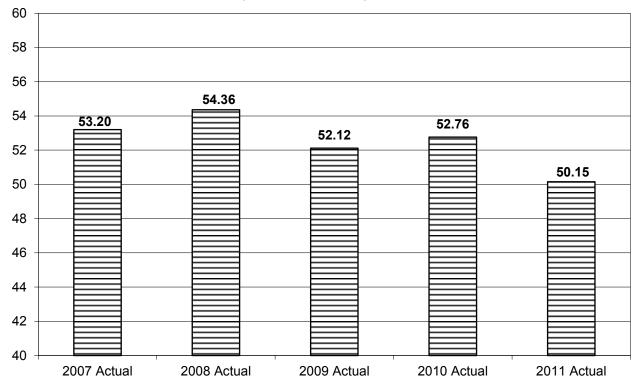
⁴⁰ Chesapeake Bay Program, Wastewater Treatment

⁴¹ Maryland Phase I Watershed Implementation Plan – Executive Summary Submitted Final 12/03/10

⁴² 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

• Implementing one of the most progressive set of stormwater requirements for a stormwater (MS4) permit in the Bay Watershed.⁴³

As part of the development of the Chesapeake Bay Total Maximum Daily Load (TMDL),⁴⁴ the Maryland Department of the Environment worked to ensure that the Bay TMDL addressed the nutrient and sediment impairments in all of Maryland's tidal waters listed as impaired by nutrients and sediment. MDE has taken the lead to develop an allocation process for major water basin loading caps of nutrient and sediment to each of the fifty-eight "segment-sheds" in Maryland (land areas that drain to each impaired Bay water quality segment, and to each pollutant source sector in those areas).⁴⁵



Estimated Nitrogen Load to the Chesapeake Bay From Maryland (Millions of Pounds)

⁴³ Maryland Phase I Watershed Implementation Plan – Executive Summary Submitted Final 12/03/10

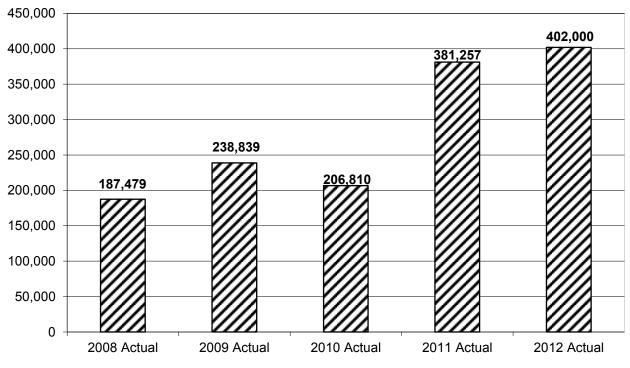
⁴⁴ See page 73 for an in-depth explanation of the TMDL

⁴⁵ Maryland Department of Environment, Developing the Bay TMDL: A Pollution Diet for the Chesapeake Watershed – <u>http://www.mde.state.md.us/programs/water/tmdl/chesapeakebaytmdl/pages/programs</u>

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.⁴⁶ The Cover Crop Program provides cost share assistance to farmers to implement this best management practice.⁴⁷ 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 $1^{st} - 15^{th}$.⁴⁸ Through the cover crop program, the number of acres planted has increased dramatically. A record number of acres of cover crops were planted in 2008 to 2012 (1.4 million acres). The number of acres of cover crops planted increased by 84.4% from 2010 to 2011⁴⁹. 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."50 The number of acres of cover crops planted further increased by 5.4% from 2011 to 2012.



Acres of Cover Crops Planted

⁴⁶ Overview, Chesapeake Bay Report Card, 2010, Chesapeake EcoCheck <u>WWW.eco-check.org/reportcard/chesapeake/2010/overview/</u>

⁴⁷ Cost-share support is administered through Maryland Agricultural Water Quality Cost-Share (MACS) program, Maryland's Chesapeake Bay Tributary Strategy Implementation Plan, January 2008

⁴⁸ BayStat executive briefing memorandum for reporting period September 2010

⁴⁹ 2011 data changed from what was reported in the fiscal year 2013 MFR

⁵⁰ Letter from the Maryland Department of Agriculture, Cover Crop Performance 2011, November 15, 2011

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 Quality⁵¹

Target: Commitments to the Chesapeake Bay Program are met

The Federal Clean Water Act requires states to identify waters assessed as not How are we doing? meeting water guality standards⁵², 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.⁵³ 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.⁵⁴ 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 ⁵⁵ 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 guality. 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. ⁵⁶ The number of impaired waters needing a TMDL declined by 17.3% from 2008 to 2010. 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.⁵⁷ The number of impaired waters needing a TMDL further declined by 67.7% by 2012. The number of impaired waters with TMDLs completed or not needed increased by 11.1% from 2008 to 2010, and nearly doubled by 2012. The Maryland Department of the Environment reported that this significant change between 2010 and 2012 is largely the result of the completion of the Chesapeake Bay TMDL which was finalized in December 2010. Since December 2010, Maryland has completed the Phase I WIP, and is currently

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

⁵¹ Previously referred to as the 303(d) List which has been combined with the 305(b) Report into a single integrated report ⁵² A water quality standard is the combination of a designated use for a particular body of water and the water quality criteria

⁵³ 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.

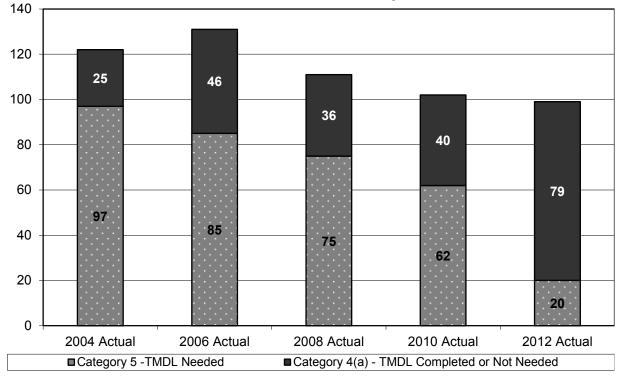
⁵⁴, Maryland's Tributary Strategy Statewide Implementation Plan, January 2008.

⁵⁵ Maryland Phase I Watershed Implementation Plan – Executive Summary Submitted Final 12/03/10

⁵⁶ Maryland Department of the Environment

⁵⁷ Facts About...Maryland's Draft 2010 Integrated Report

refining the Phase II WIP. MDE has worked extensively with inter-jurisdictional and inter-agency workgroups and committees over the last three years to provide technical expertise and guidance to ensure that the Bay TMDL addressed the nutrient and sediment impairments in all of Maryland's tidal waters listed as impaired by those pollutants on the State's Integrated Report of Surface Water Quality.⁵⁸ Phase III WIPs will be submitted in 2017 with a focus on ensuring that all practices are in place by 2025 as needed to fully restore the Bay and its tidal waters.



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

⁵⁸ MDE Chesapeake Bay TMDL, Developing the Bay TMDL: A Pollution Diet for the Chesapeake Watershed, http://www.mde.md.us/programs/water/tmdl/chesapeake baytmdl/pages/programs, October 17, 2012

Indicator 1.8: Percent of Marylanders served by public water systems in compliance with rules adopted as of 2009⁵⁹

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

This measure captures both technical and health-based violations. Water systems are How are we doing? 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.⁶⁰ EPA and states have adopted the management goal of bringing water supply systems into compliance within five years of the adoption of new regulations.⁶¹ During 2008, 82% of Marylanders were served by public water systems in compliance with all rules adopted as of 2002. Performance declined in 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%, and further increased by 10.8% to 92% in 2012. 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.⁶² Compliance with health-based standards rebounded in 2012, increasing by 4.1% from 2011 to 2012.

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.⁶³

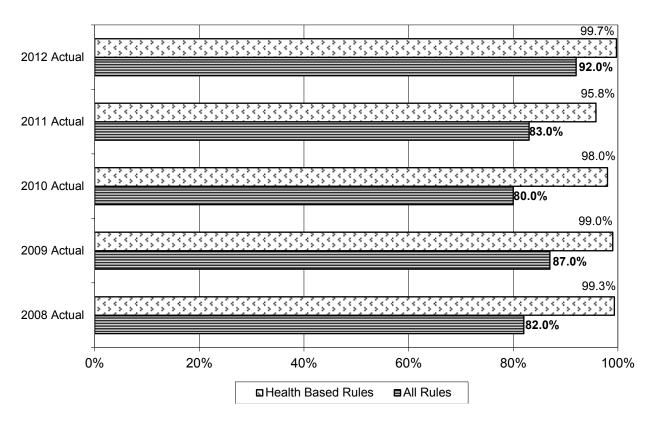
⁵⁹ The 2005 through 2008 actual data reflects compliance with rules adopted <u>as of 2002</u>. Beginning with 2009, this measure was revised to reflect all new and existing regulations that have been adopted and implemented <u>since 2002</u>.

⁶⁰ 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"

⁶¹ Maryland Department of the Environment 2009 Managing for Results Work Plan

⁶² 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"

⁶³ U.S. Environmental Protection Agency, Office of Ground Water and Drinking Water, "A New Approach to Protecting Drinking Water and Public Health, March 2010 <u>www.epa.gov/safewater</u>



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

ENSURING CLEAN AIR

Indicator 1.9: Three year average of days the eight-hour ozone standard⁶⁴ 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 (NOx) 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 NOx and VOC.65 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.⁶⁶ 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.⁶⁷ 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."⁶⁸ The Maryland Department of the Environment reported that legal challenges to Federal rules concerning power plants have prevented the rules from being fully approved and implemented. Therefore, out-of-state pollution reductions have been somewhat delayed, which affects Maryland's ability to meet the Federal ozone standard. Additionally, weather conditions, particularly prolonged periods of very hot weather, tend to generate high ozone levels.⁶⁹ The three year average of days the eight-hour ozone standard was exceeded declined significantly by 37.5% from 2007 to 2010. 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. The three year average of days declined by 4.6% from 2010 to 2011. A cloudy and wet August in 2011 suppressed the 2011 estimated three year average.⁷⁰

⁶⁴ 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.
⁶⁵ U.S. Environmental Protection Agency, Ground Level Ozone, Basic Information,

http://www.epa.gov/air/ozonepollution/basic.html

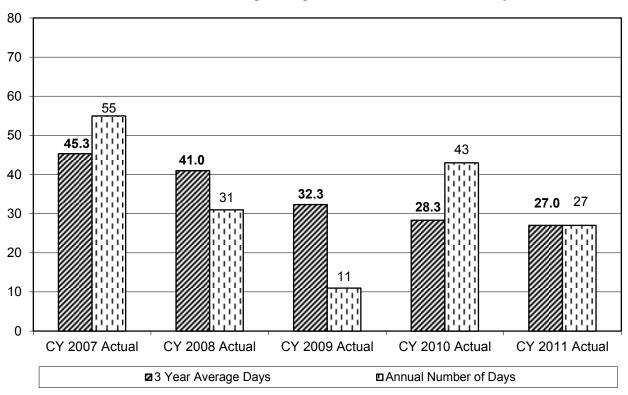
⁶⁶ Maryland Department of the Environment

⁶⁷ Maryland Department of the Environment, Healthy Air Act, <u>http://www.mde.maryland.gov/programs/air/pages/md_haa.aspx</u>

⁶⁸ 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, <u>http://www.epa.gov/airtransport/basic.html</u>

⁶⁹ Maryland Department of the Environment, fiscal year 2014 MFR Performance Discussion

⁷⁰ Maryland Department of the Environment, October 27, 2011



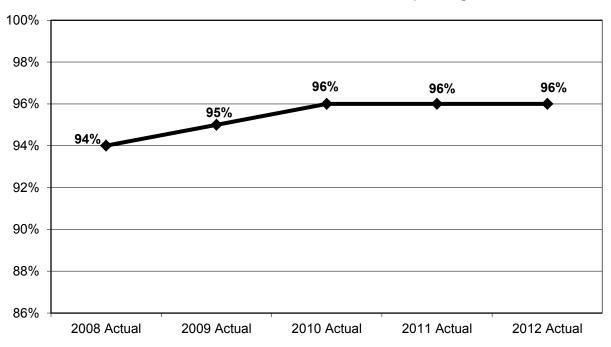
Three Year Average of Eight Hour Ozone Exceedance Days

REDUCING 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.⁷¹ The percent of oil-contaminated sites cleaned-up increased by 2.1% from 2008 to 2012. The percent of oil-contaminated sites cleaned-up increased by 2.1% from 2008 to 2012. The period of 2010 through 2012. MDE anticipated that the number of open cases would continue to decline over 2010 to 2011, and thereafter remain level due to the anticipated long term, difficult remaining cases, and the regular influx of new cases. The number of open confirmed release cases declined from 689 to 381 (44.7%) from 2008 to 2012. On average nationally, 17% of release cases remain open, whereas 3.5% of confirmed release cases remain open in Maryland.⁷²



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

⁷¹ Maryland Department of the Environment

⁷² Maryland Department of the Environment, performance statement, October 22, 2012

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: Contribute to sustainability through increased number of acres of preserved land

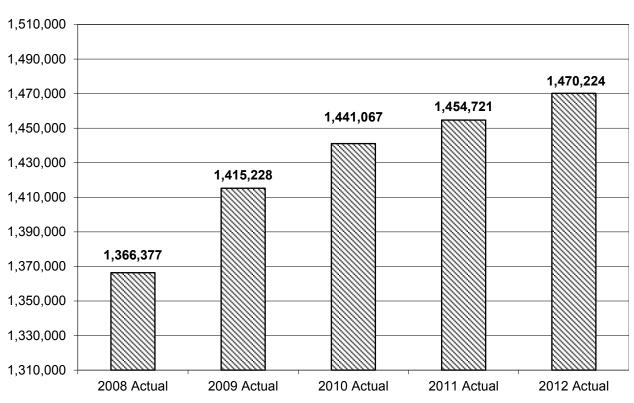
How are we doing? Land preservation programs exist to keep land ecologically sound as well as safe from development. Preserved lands include forests, wetlands, sensitive habitat, agricultural land, and areas important for protecting water quality. Land Preservation programs manage protected lands through 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."⁷³

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."⁷⁴ The number of acres of preserved land has steadily increased between 2008 and 2012, with a total increase of 7.6%. As of 2012, there are 1.47 million acres preserved out of a total of 6.25 million acres in Maryland (23.5%).

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. On Dec. 19, 2011, Governor Martin O'Malley accepted PlanMaryland, the State's first long-range plan for sustainable growth. PlanMaryland is an executive policy plan that better coordinates the smart growth efforts and programs of State government. State agencies will identify changes in strategy to achieve the goals of the plan, and will work with local governments on delineating areas for future growth and preservation.⁷⁵ Through Plan Maryland there will be more efficient use of roads, schools, and other public infrastructure.

⁷³ Maryland Department of Natural Resources, fiscal year 2013 MFR Performance Discussion

⁷⁴ "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/plreports/currenttotals.asp



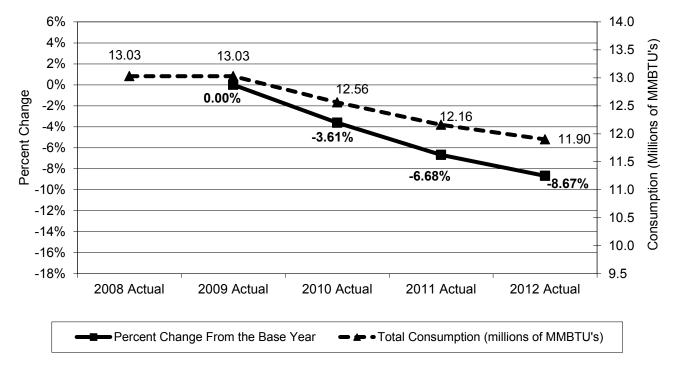
Total Acres Preserved Under All Land Preservation Programs

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.⁷⁶ 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 through use of the Statewide Energy Database (a utility management system), Energy Performance Contracts, an Electricity Purchasing strategy, and the Renewable Energy Initiative. The Department of General Services (DGS) has been working with State agencies with the goal of substantially reducing Maryland's government energy consumption through energy efficiency projects. To date, the Board of Public Works has approved twenty Energy Performance Contract (EPCs) projects. These projects are helping Maryland achieve contractually guaranteed energy and operational savings of approximately \$310 million to be realized throughout the life of the contracts (\$21.3 million annually).⁷⁷ Other strategies implemented to reduce consumption include the use of Solar PV Panels on four DGS buildings and three other State agencies, and construction of two Leadership in Energy and Environmental Design (LEED) certified buildings, as well as designing and constructing eight new green State projects. The baseline consumption by State government facilities in 2008 was 13.03 million MMBTU's.⁷⁸ State government consumption stayed level in 2009 at 13.03 million MMBTU's. Energy consumption has declined each year since 2009, with an 8.67% decline from the base year as of year-end 2012.





⁷⁶ Maryland Energy Outlook, Maryland Energy Administration, January 2010

⁷⁷ Department of General Services, Energy Conservation: <u>http://www.dgs.maryland.gov/energy/index.html</u>, November 2012

⁷⁸ 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)⁷⁹

Target: 15% reduction by 2015

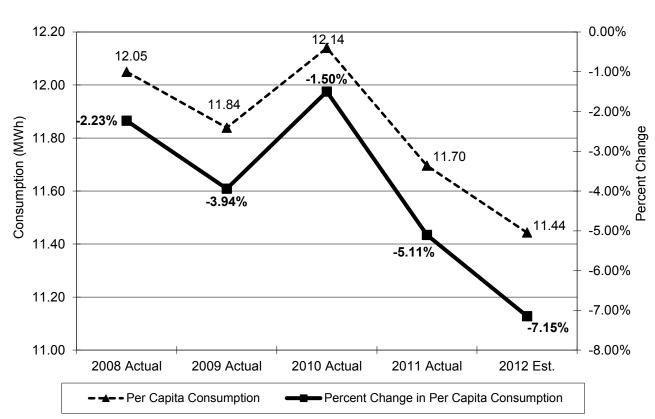
How are we doing? Maryland is making steady progress toward achieving the EmPower Maryland energy efficiency/consumption target. Per capita electricity consumption has been below the 2007 baseline for each year 2008 through 2011. In 2008, per capita electricity consumption across the State declined by 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 more rapidly declined by 5.11% in 2011, and the decline is expected to accelerate in 2012. 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.⁸⁰ 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. Maryland ranked in the top 10 for the second year in a row as reported in the 2012 State Energy Efficiency Scorecard.⁸¹ 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.⁸² The 2012 Scorecard gave kudos to Maryland for adopting the most recent and most stringent energy efficiency code for residential construction.

⁷⁹ Data has been updated from what was reported last year.

⁸⁰ Maryland Energy Outlook, Maryland Energy Administration, January 2010

⁸¹ Any changes in states' overall scores are a function both of changes in efforts to improve energy efficiency and adjustments to the scoring methodology. The scoring methodology was updated in four policy areas to better reflect potential energy savings, limitations in the data, economic realities, and changing policy landscapes, The 2012 State Energy Efficiency Scorercard, October 2012, Report Number E12C, the American Council for an Energy-Efficient Economy

⁸² 2011 State Energy Efficiency Scorecard, American Council of Energy Efficient Economy - <u>http://aceee.org/sector/state-policy/scorecard</u>; 2011 scorecard news release, October 20, 2011, Scorecard Fact Sheet: <u>http://aceee.org/sector/state-policy/maryland</u>

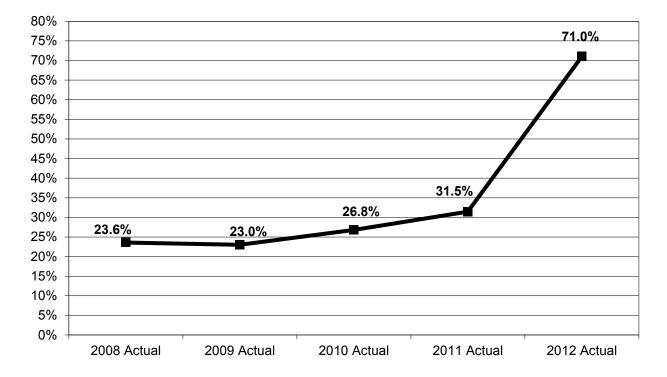


Percent Change in Per Capita Electricity Consumption Compared to the 2007 Baseline (12.32 MGh)

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.⁸³ 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. The percent remained static in 2008 and 2009, and then increased by 36.9% from 2009 to 2011. The percent of newly purchased light duty vehicles in the State vehicle fleet that as hybrid or alternative fueled vehicle fleet that were hybrid or alternative fueled vehicles was at its highest level in 2012, more than double the proportion in 2011. Prior to 2012, the State vehicle fleet had a smaller number of hybrid and alternative fueled vehicles because of higher purchase prices and Federal mandates for vehicles that are not satisfied by hybrids.⁸⁴ Prices for ethanol vehicles are now equivalent to the prices for the same category of gasoline fueled vehicles, and ethanol vehicles are now available in nearly every class of vehicle. These changes in prices and availability are the primary reasons for the dramatic increase in hybrid or alternative fueled vehicles in the State vehicle fleet in 2012.⁸⁵



Percent of Newly Purchased Light Duty Vehicles in the State Vehicle Fleet That Are Hybrid or Alternative Fueled Vehicles

⁸³ Maryland Energy Administration

⁸⁴ Maryland Energy Administration

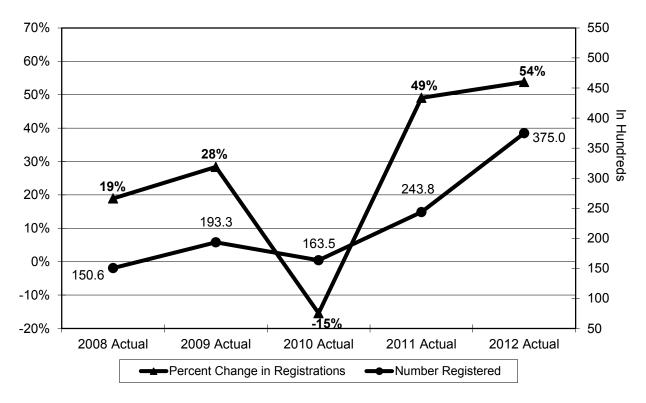
⁸⁵ Fleet Administration Unit, Department of Budget and Management, November 2012

KEY PERFORMANCE AREA 2 PROMOTING ENERGY EFFICIENCY AND CONSERVATION

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 2008 to 2009, increasing by 28% over that timeframe. Overall, this increase was driven by, among other factors, increased gasoline prices in 2008 and 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 15% in 2010, followed by a significant increase in 2011 and 2012 of 54%, with a total increase from 2010 to 2012 of 129.4%.⁸⁶ The Maryland Energy Administration theorizes that the reduction during 2010 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 2009.⁸⁷ As of 2011 and 2012, prices for ethanol vehicles became equivalent to the prices for the same category of gasoline fueled vehicles, and ethanol vehicles became available in nearly every class of vehicle. These changes in prices and availability have influenced the purchasing and registering of alternative fueled vehicles.⁸⁸



Alternative Fueled and Hybrid-Electric Vehicles Registered in Maryland

⁸⁶ Actual data for 2011 has been revised from what was reported in the 2012 Performance Report.

⁸⁷ Maryland Energy Administration, fiscal year 2012 MFR

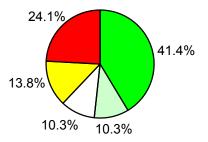
⁸⁸ Fleet Administration Unit, Department of Budget and Management, November 2012

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.



Status	Number of Indicators	Percent
Favorable Performance (Change >10%)	12	41.4%
Favorable Performance (3% to 10% Change)	3	10.3%
Stable Performance (0% - 2% Change)	3	10.3%
Unfavorable Performance (3% to 10% Change)	4	13.8%
Unfavorable Performance (Change > 10%)	7	24.1%
Total	29	100%

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
DHMH	Percent of live births for which prenatal care was initiated during the first trimester (2010-prior year data not comparable)	69.0%	69.0%	0.0%
DHMH	Percent of babies born at low birth weight and very low birth weight (2006 - 2010)	8.8%	9.4%	-6.4%
DHMH	Infant mortality rate for all races (per 1,000 live births) (2007 - 2011)	6.7	8.0	-16.3%
MHCC	Maryland's average annual uninsured rate over a 2 year period among the nonelderly (under age 65; estimated) (2000-2001 - 2008-2009)	14.5%	12.1%	19.8%
CDC	Percent of Maryland children fully immunized (by 24 months) (2007 - 2011)	76.9%	91.3%	-15.8%
DHMH	Number of children under 6 years of age with elevated blood lead levels (>10ug/dl) (2007 - 2011)	452	892	-49.3%
DHMH	Cumulative percent change from the calendar year 2000 baseline for underage high school students smoking cigarettes (no survey in 2004) (2002 - 2010)	-49.9%	-21.3%	134.3%
DHMH	Overall cancer mortality rate per 100,000 persons (age adjusted to 2000 U.S. Standard Population) (2007 - 2011)	165.7	180.0	-7.9%
DHMH	Heart disease mortality rate for all races per 100,000 population (age adjusted) (2007 - 2011)	171.4	203.0	-15.6%

A SAFETY NET FOR MARYLAND'S FAMILIES

Agency/ Data		Most Recent Data	4 Years	4 Year
Source		Available	Prior	Change
DHMH	Rate of age adjusted new HIV diagnoses (per 100,000 population) (2007 - 2011)	31.6	44.2	-28.5%
DHMH	Rate of primary/secondary syphilis incidence (cases per 100,000 population) (2007 - 2011)	7.8	6.1	27.9%
CDC	Number of reported cases of vaccine preventable communicable diseases - hepatitis A (2008 - 2012)	26	44	-40.9%
CDC	Number of reported cases of vaccine preventable communicable diseases - pertussis (2008 - 2012)	329	163	101.8%
DHMH	Number of reported cases of vaccine preventable communicable diseases - measles (2007 - 2011)	2	0	2.0
DHMH	Number of reported cases of vaccine preventable communicable diseases - mumps (2007 - 2011)	2	12	-83.3%
Children's Cab. Inter- agency Fund	Rate of injury-related deaths due to accidents to children and youth between 0 and 19 years of age (per 100,000 children) (2007 - 2011)	7.1	10.7	-33.6%
GOC	Rate of homicide deaths of children and youth ages 0 to 19 (per 100,000 population) (2007 - 2011)	4.2	6.6	-36.4%
DJS	Number of DJS youth who are the victims of a homicide (2008 - 2012)	3	22	-86.4%
DHR	Percent of children with no recurrence of maltreatment within 6 months of first occurrence (2011 - 2012; comparable data not available for prior years)	92.4%	92.7%	-0.3%
Children's Cab. Inter- agency Fund	Percent of related children and youth under age 18 whose families have incomes below the poverty level (estimated) (2007 - 2011)	13.2%	10.0%	32.0%
USDA	Maryland prevalence of household-level very low food security (3 year average) (2005-2007 to 2009-2011)	5.6%	3.4%	64.7%
Children's Cab. Inter- agency Fund	Rate of live births to adolescents between 15 and 19 years of age (per 1,000 women) (2007 - 2011)	24.7	34.4	-28.2%
DHR	Statewide percent of current child support paid (FFY 2008 - 2012)	65.68%	64.58%	1.7%
Children's Cab. Inter- agency Fund	Rate of children placed in out-of-home care (per 100,000 children) (2008 - 2011; 2007 data not comparable)	11.2	10.2	9.8%
DHMH	Percent decrease in substance abuse by adults during treatment (2008 - 2012)	75%	78%	-3.8%
DHMH	Percent decrease in substance abuse by adolescents during treatment (2008 - 2012)	71%	78%	-9.0%
DHMH	Percent increase in employment of adults at completion of substance abuse treatment (2008-2012)	46%	21%	119.0%

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
DHMH	Percent of adults who report mental health services have allowed them to deal more effectively with daily problems (2008-2012)	70%	77%	-9.1%
MSDE	One-year retention of employment by people with disabilities who were assisted by the Department of Education's Division of Rehabilitation Services (2008- 2012)	87.8%	85.7%	2.5%
DHMH	Percent of Developmental Disabilities Administration Community Service respondents of the "National Core Indicators" Survey who expressed satisfaction with Individual Outcomes	Data not yet available		
DHMH	Percent of Developmental Disabilities Administration Community Service respondents of the "National Core Indicators" Survey who expressed satisfaction with Family Indicators	Data not yet available		
DHMH	Percent of Developmental Disabilities Administration Community Service respondents of the "National Core Indicators" Survey who expressed satisfaction with Health, Welfare, and Rights	Data not yet available		

A SAFETY NET FOR MARYLAND'S FAMILIES

BABIES BORN HEALTHY

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

Target: At least 80% 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.¹ Lack of prenatal care and late prenatal care are related to both low birth weight and infant mortality.² Health care risks such as late prenatal care increase infant mortality by 40%.³ The percent of live births for which prenatal care was initiated during the first trimester remained stable from 2006 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. The methodology for collecting information on the time during pregnancy that prenatal care began was changed in the 2010 revision of the Maryland birth certificate. Therefore, prior year data are not comparable to 2010 data. Sixty nine percent (69%) of live births had first trimester care in 2010.

"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."⁴ Other strategies have been implemented to increase early prenatal care including the Babies Born Healthy Initiative, Improved Pregnancy Outcome Program, and the Governor's action plan.⁵ 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.⁶ Maryland's Pregnancy Risk Assessment and Monitoring System (PRAMS) is a project to research why some babies are born healthy and others are not. One out of every 35 women who gave birth each month is selected, at random, to participate in the PRAMS project. These mothers are sent a survey about their behaviors and experiences before, during and shortly after pregnancy. This information is used to improve health for all mothers and babies. There are 36 states, New York City and South Dakota (Yankton Sioux Tribe) in addition to Maryland who participate in the PRAMS project <u>.</u>

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

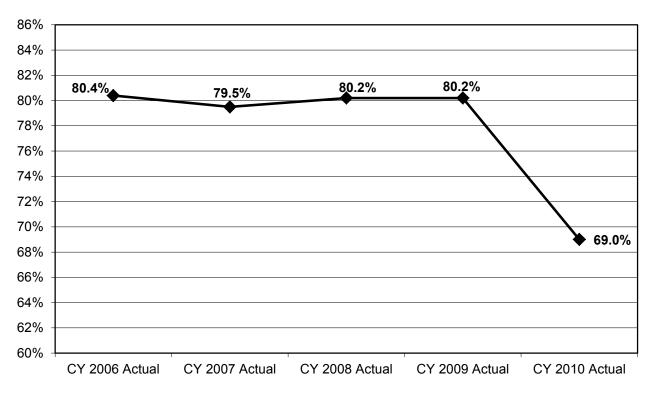
² Maryland's Results for Child Well-Being 2009

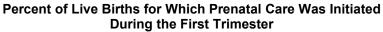
³ "Plan for Reducing Infant Mortality in Maryland by 10% by 2012", March 2010, Department of Health and Mental Hygiene, and the Governor's Delivery Unit – <u>www.governor.maryland.gov/statestat/gduinfant.asp</u>

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

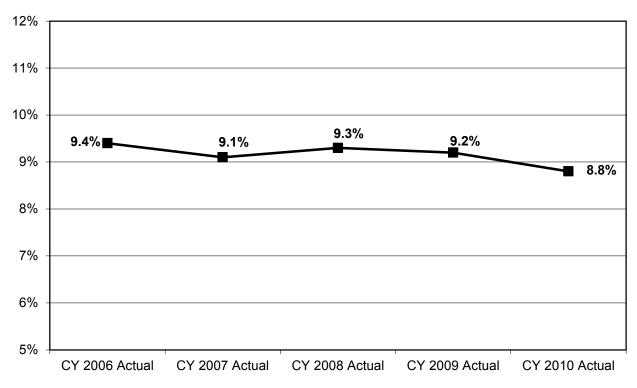




Indicator 1.2: Percent of babies born at low birth weight (less than 2,500 grams – about 5.5 pounds), and very low birth weight (less than 1,500 grams – about 3.3 pounds)

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 infants (those with 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 remained steady from calendar year 2006 through 2009, hovering around 9.3%. During 2010, 8.8% of babies were 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.



Percent of Babies Born at Low and Very Low Birth Weight

⁷ State Health Improvement Process

⁸ Maryland's Results for Child Well Being 2009

⁹ "Plan for Reducing Infant Mortality in Maryland by 10% by 2012", March 2010, Department of Health and Mental Hygiene, and the Governor's Delivery Unit – <u>www.governor.maryland.gov/statestat/gduinfant.asp</u>

¹⁰ Department of Health and Mental Hygiene – <u>http://dhmh.maryland.gov/ship/execsummary.html</u>

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

Target: Reduce infant mortality by 10% by end of 2012¹¹

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.¹² Factors contributing to Maryland's infant mortality rate include family history, personal health history, diet, environment, lifestyle, and poor access to quality health and social services.¹ The three leading causes in Maryland in 2010 and 2011 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).¹⁴ White infant mortality rates have been historically lower in Maryland than the nation, and black rates have been higher in Maryland than nationally in recent years.¹⁵ Over the past decade, the average infant mortality rate in Maryland has fallen by 7%, with a more rapid decline for white infants than for black infants.¹⁶ Infant mortality remained at 8.0 for 2007 and 2008, and declined by 10% (0.8 infant deaths per thousand) to 7.2 in 2009.¹⁷ The infant mortality rate in Maryland fell to 6.7 per 1,000 live births in 2010, and remained at 6.7 in 2011, 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.¹⁸ From 2007 through 2011, the infant mortality rate has declined by 16.3%. 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 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."¹⁹ Jurisdictions with the highest infant mortality rates have been targeted.²⁰ Three new initiatives are underway. They include: (1) The expansion of family planning services to all women with incomes below 200% of the poverty line through the Medicaid program. This expansion began in January 2012; (2) The Health Enterprise Zone program, which focuses resources and incentives in areas of the state with significant disparities in chronic illness. In January 2013, Lt. Governor Anthony G. Brown announced the designation of the State's first Health Enterprise Zones (HEZ) in five locations: Capitol Heights in Prince George's County, Greater Lexington Park in St. Mary's County, Dorchester and Caroline Counties, West Baltimore, and Annapolis. Community coalitions in each area will receive a range of incentives, benefits, and grant funding to address unacceptable and persistent health disparities; and (3) The full implementation of the Affordable Care Act, which will give nearly all Maryland women access to affordable health coverage.²

¹⁸ Maryland Vital Statistics, Infant Mortality in Maryland, 2010

¹¹ Governor's Strategic Goal

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; Maryland Vital Statistics, Infant Mortality in Maryland, 2011

¹⁵ Maryland Vital Statistics, Infant Mortality in Maryland, 2011

¹⁶ Maryland Vital Statistics, Infant Mortality in Maryland, 2011

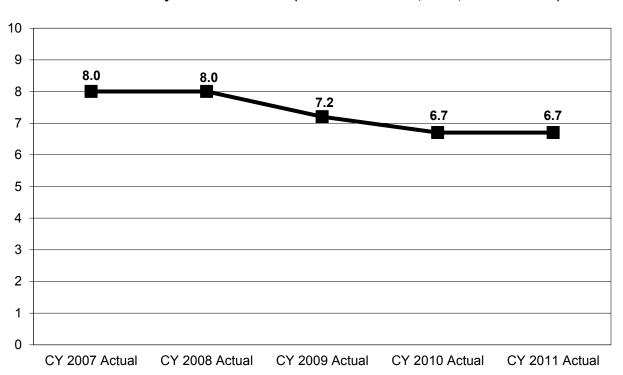
¹⁷ The change from 2008 to 2009 was not statistically significant - Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration

¹⁹ "Reducing Infant Mortality", Maternal and Child Health, Family Health Administration, Department of Health and Mental Hygiene - <u>http://fha.maryland.gov/mch/gdu-home.cfm;</u> "Plan for Reducing Infant Mortality in Maryland by 10% by 2012", March 2010, Department of Health and Mental Hygiene, and the Governor's Office:

www.governor.maryland.gov/statestat/gduinfant.asp; Governor Martin O'Malley Announces Maryland's Infant Mortality Rate has been Driven Down to Record Low, Governor O'Malley Press Release, August 8, 2012

²⁰ Governor O'Malley and Lt. Governor Brown Announce Maryland Infant Mortality Rate Drops for Second Year in a Row, Press Release, August 24, 2011

²¹ Governor O'Malley and Lt. Governor Brown Announce Maryland Infant Mortality Rate Drops for Second Year in a Row, Press Release, August 24, 2011



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

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 insurance²²

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."²³ 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%)."24 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 367,000 Marylanders since 2007 through these strategies.²⁵ 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. Following the passage of the Affordable Care Act, Maryland took steps to meet the federal requirement to create a health benefit exchange. The Health Benefit Exchange Act of 2012 puts into place many policies that will guide the Exchange's operations. The Exchange will "reduce costs, expand access, and improve the quality of care for Maryland families, individuals, and small businesses".²⁶ Maryland seeks to establish a highly effective, efficient, and accountable exchange to reduce the number of Marylanders without health insurance, and to provide high-guality, affordable private health plans at a competitive cost.

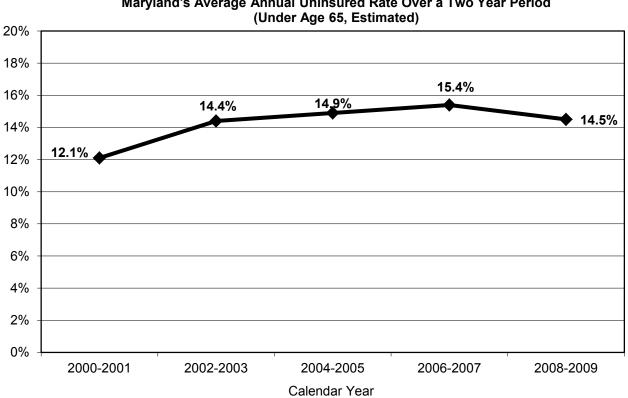
²² State Health Improvement Process objective, Maryland Department of Health and Mental Hygiene

²³ State Health Improvement Process objective, Maryland Department of Health and Mental Hygiene

²⁴ Health Insurance Coverage in Maryland Through 2009, Maryland Health Care Commission, January 2011

²⁵ Health Care Reform Coordinating Council, Final Report and Recommendations, January 1, 2011,

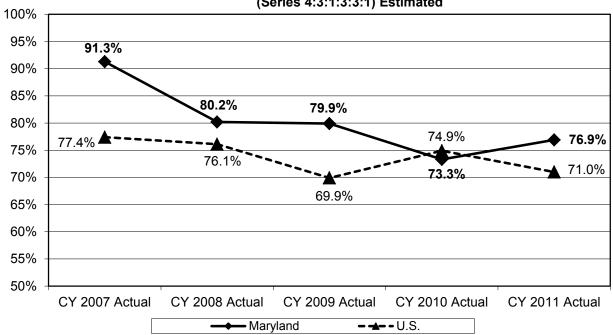
http://dhmh.maryland.gov/healthreform/SitePages/finalreport.aspx; Press Release, March 26, 2012, House and Senate Pass O'Malley-Brown Administration's Health Benefit Exchange Legislation ²⁶ House and Senate Pass O'Malley-Brown Administration's Health Benefit Exchange Legislation, March 26, 2012



Indicator 1.5: Percent of Maryland children 19 to 35 months²⁷ fully immunized (immunization series 4:3:1:3:3:1)²⁸

Target: 80% vaccination coverage for recommended vaccines among young children (19-35 months) by 2014²⁹

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.³⁰ Current Centers for Disease Control (CDC) guidelines call for children to be immunized using the 4:3:1:3:3:1 series. Data presented in this report is based on this series. In 2008, the percent of Marvland children aged 19 to 35 months who are fully immunized declined by 11.1 percentage points below the 2007 level. 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 6.9 percentage points in the percent fully immunized in Maryland from 2008 to 2010, and an overall reduction of 18 percentage points from 2007 to 2010. The rate increased slightly by 3.6 percentage points from 2010 to 2011. Maryland's immunization rate was essentially the same as the national rate in 2010, and near the national rate in 2008. In 2007 through 2009, and in 2011, Maryland compared favorably to the national rate. 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.³



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

²⁷ 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 4:3:1:3:3:1 immunization series.

²⁸ 4 or more doses of DTaP (diphtheria, tetanus, pertussis), 3 or more doses of poliovirus vaccine, 1 or more does of any MMR (measles, mumps, rubella), 3 or more doses of Hib (Haemophilus influenza type b), 3 or more does of HepB (hepatitis B), and 1 or more doses of varicella vaccine

²⁹ State Health Improvement Process (SHIP) objective

³⁰ Maryland's Results for Child Well-Being 2010

³¹ Maryland Department of Health and Mental Hygiene, Infectious Disease and Environmental Health Administration: <u>http://ideha.dhmh.maryland.gov/IMMUN/Default.aspx</u>

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 population³²

Lead is one of the most significant and widespread environmental hazards for children How are we doing? in Maryland.³³ 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.³⁴ 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.³⁵ The number of children with elevated blood lead levels (above 10 ug/dl) continued a steady and significant decline over the timeframe of 2007 through 2009, dropping by a total of 38%. The decline slowed in 2010, dropping by 4.0% between 2009 and 2010. A greater decline occurred from 2010 to 2011 with a decrease of 14.9%. 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.³⁶ As of 2009 more children were tested 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.³⁷ In 2011, 0.4% of children tested had elevated blood lead levels of greater than 10ug/dL. The Maryland Plan to Eliminate Childhood Lead Poisoning by 2010, modified July 2008, has 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.³⁸ The Maryland Department of the Environment's Lead Poisoning Prevention Program serves as the coordinating agency of statewide efforts to eliminate childhood lead poisoning. A primary prevention strategy that is responsible for much of the past decline in blood lead levels is the implementation and enforcement of Maryland's "Reduction of Lead Risk in Housing" law.³⁹ However, the law only extended to rental properties built before 1950. The Maryland Department of the Environment reported that children with elevated blood lead levels are now more likely to live in homes not covered by Maryland's lead Law. MDE provided staff support for a study group that evaluated ways to fight lead poisoning in owner-occupied properties and rental properties not previously covered by Maryland's law, and that were built before lead-based paint was banned in the late 1970's.40 The 2012 legislature passed a bill giving the State greater oversight of renovation and repair of homes constructed before 1978 when lead paint was outlawed in the U.S. Continuing the public health screening and case management

³⁸ Maryland Plan to Eliminate Childhood Lead Poisoning by 2010

³² State Health Improvement Process objective, Maryland Department of Health and Mental Hygiene

³³ Press Release "Department of Environment's 2009 Childhood Lead Registry Statistics Show Decrease in Children with Elevated Lead Blood Levels, Increase in Testing", Maryland Department of the Environment, August 27, 2010

³⁴ Fiscal year 2013 MFR Data Definition, Family Health Administration, Department of Health and Mental Hygiene; Lead Poisoning Prevention Program, Maryland Department of the Environment

³⁵ Family Health Administration, Department of Health and Mental Hygiene; Lead Poisoning Prevention Program, Maryland Department of the Environment

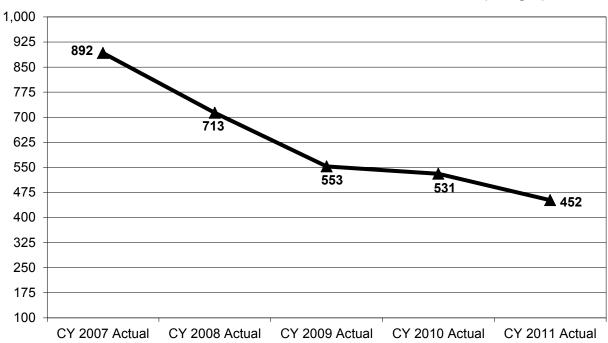
³⁶ Family Health Administration, Department of Health and Mental Hygiene, fiscal year 2013 MFR Performance Discussion

³⁷ Maryland Department of the Environment, Lead Poisoning Prevention Program Childhood Blood Lead Surveillance in Maryland, Annual Report 2009, August 2010; State Employees Protecting Our Children, A Message from Governor O'Malley, August 27, 2010; Major Issues Review 2007 – 2010, Department of Legislative Services; Press Release "Department of Environment's 2009 Childhood Lead Registry Statistics Show Decrease in Children with Elevated Lead Blood Levels, Increase in Testing", Maryland Department of the Environment, August 27, 2010

³⁹ Maryland Department of the Environment, Lead Poisoning Prevention Program Childhood Blood Lead Surveillance in Maryland, Annual Report 2010, August 2011

⁴⁰ Maryland Department of the Environment MFR Performance Discussion, fiscal year 2013 MFR submission

components of the Governor's Childhood Lead Poisoning Prevention Initiative is another primary strategy to address blood lead poisoning.

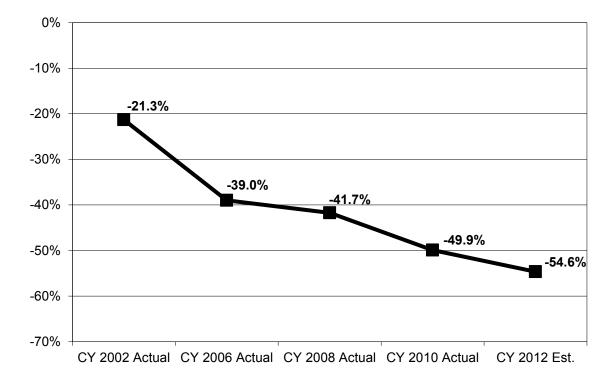


Number of Children With Elevated Blood Lead Levels (>10ug/dl)

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 2014, 73.2% 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.⁴¹ 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 2012.⁴² 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.⁴³ Reducing tobacco use among adolescents is one of the focus areas of the State Health Improvement Process.



Cumulative Percent Change From the Calendar Year 2000 Baseline for Underage High School Students Who Ever Smoked a Whole Cigarette

⁴¹ 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

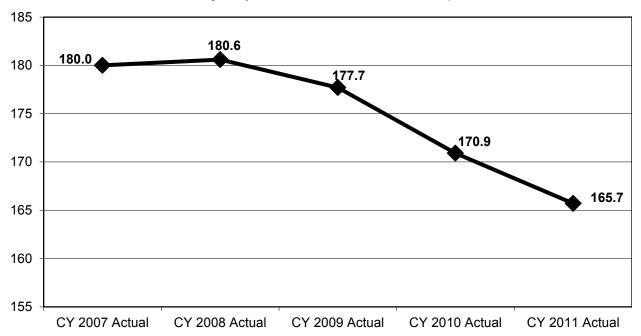
⁴² Actual data is not yet available for 2012. Youth surveys have traditionally been conducted in the fall of even calendar years. However, the fall 2012 youth surveys have been delayed until spring of 2013.

⁴³ Strategies and Discussion of Program Performance, fiscal year 2012 MFR submission, Cigarette Restitution Fund – Tobacco Use Prevention and Cessation Program - Family Health Administration;

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

Target: By calendar year 2013, no more than 161.8 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 nation⁴⁴, and was responsible for nearly one quarter of all deaths in Maryland in 2009.⁴⁵ The overall cancer mortality rate in Maryland declined by 7.9% from 2007 to 2011, a reduction of 14.3 deaths per 100,000 persons. Maryland's cancer mortality rate was above the national rate in 2007 through 2009.⁴⁶ "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."⁴⁷ 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.⁴⁸



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

⁴⁴ Maryland Vital Statistics Annual Report 2011, Vital Statistics Administration, Department of Health and Mental Hygiene; Cancer Report 2010, Cigarette Restitution Fund Program, Cancer Prevention, Education, Screening and Treatment Program, December 2010, updated March 2011

⁴⁵ Maryland Vital Statistics Annual Report 2009, Department of Health and Mental Hygiene

⁴⁶ National data is not yet available from the National Cancer Institute for 2010-2011

⁴⁷ The Maryland Comprehensive Cancer Control Plan, Executive Summary, 2011:

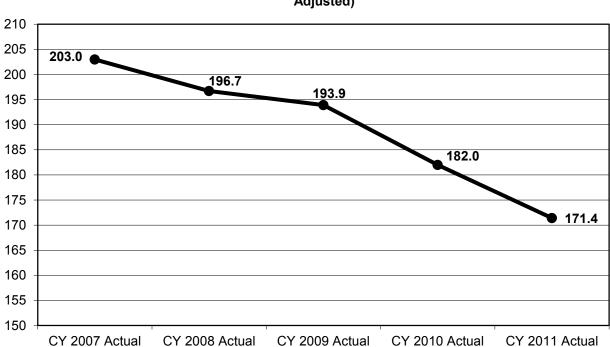
http://fha.maryland.gov/cancer/cancerplan/publications.cfm

⁴⁸ Fiscal Year 2013 MFR Strategies, and fiscal year 2014 MFR Performance Discussion, 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 2013, no more than 157 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.⁴⁹ Heart disease continued to be the leading cause of death in Maryland in 2011. The age adjusted heart disease mortality rate was 171.4 per 100,000 population in 2011, 28% below the rate a decade ago.⁵⁰ From 2007 through 2011, the heart disease mortality rate declined by 15.6%, with most of the decline occurring from 2009 through 2011 (11.6%). The rate declined by 6.1% from 2009 to 2010, the largest year to year decline during the period of 2007 through 2011. Mortality from heart disease in those under age 85 is declining more rapidly than cancer mortality. From 1991 to 2009, heart disease mortality declined at an annual average of 3.4%, compared to a decline of 1.9% per year in cancer mortality.⁵¹ 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.⁵²



Heart Disease Mortality Rate For All Races Per 100,000 Population (Age Adjusted)

⁴⁹ Fiscal year 2012 MFR Data Definition and Control Procedures, Family Health Administration, Department of Health and Mental Hygiene

⁵⁰ Maryland Vital Statistics Annual Report 2011, Department of Health and Mental Hygiene

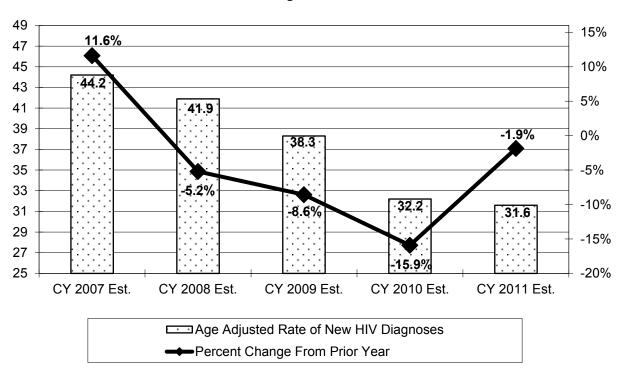
⁵¹ Cancer Report 2009, Cigarette Restitution Fund Program, Cancer Prevention, Education, Screening and Treatment Program, December 2009

⁵² Fiscal year 2014 MFR Strategies and Discussion of Program Performance , Family Health Administration, Department of Health and Mental Hygiene

Rate of diagnoses and the percent change from the prior year level in the number of age Indicator 1.10: adjusted new HIV diagnoses (per 100,000 population)⁵³

Target: Reduced age adjusted rate of new HIV diagnoses below the 2010 level

The rate of HIV diagnoses declined steadily year to year by a total of 28.5% from 2007 How are we doing? to 2011. 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 in 2007. This may reflect a temporary change in HIV case reporting as well as an increased number of diagnoses due to additional testing efforts.⁵⁴ 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.⁵⁵ 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

⁵³ 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 Environment al Health Administration

Fiscal year 2012 MFR budget book submission, Infectious Disease and Environmental Health Administration, Department of Health and Mental Hygiene ⁵⁵ Fiscal year 2014 MFR Strategies and Discussion of Program Performance, Infectious Disease and Environmental Health

Administration, Department of Health and Mental Hygiene

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

Target: Through calendar year 2013, the rate of primary and secondary syphilis will decline from the calendar year 2010 rate of 5.8

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.⁵⁶ 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.⁵⁷ 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.⁵⁸ Maryland's rate of primary/secondary syphilis cases per 100,000 population exceeded the national rate from 2007 through 2010. The 13 states with the highest rates of primary and secondary syphilis accounted for 75% of all U.S. cases in 2009, and 69% of all U.S. cases in 2010. During 2010, the rate of primary and secondary syphilis in these 13 states exceeded the national rate of 4.5 cases per 100,000 population. Of these states, 8 were in the South, including Maryland at seventh highest (5.8 cases per 100,000 population). Maryland's rate of syphilis incidence in 2011 increased by 2 cases per 100,000 population (34.5%) over 2010. From 2007 to 2008, the rate of syphilis incidence increased by 9.8%, dropped by 17.9% in 2009, and stayed close to that level in 2010 (increased by 5.5%). 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.⁶⁰ Maryland has focused efforts to reduce the syphilis epidemic on collaborative public health efforts.⁶

http://www.cdc.gov/std/stats10/tables/25.htm

⁵⁶ Sexually Transmitted Disease Surveillance 2007 Supplement, Syphilis Surveillance Report, Division of STD Prevention, March 2009, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

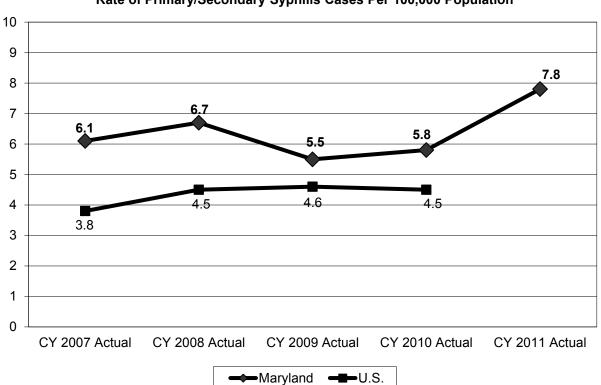
⁵⁷ Fiscal year 2013 MFR Data Definitions and Control Procedures, Infectious Disease and Environmental Health Administration, Department of Health and Mental Hygiene; CDC Sexually Transmitted Diseases in the United States, 2008, November 2009

⁵⁸ Sexually Transmitted Disease Surveillance 2007 Supplement, Syphilis Surveillance Report, Division of STD Prevention, March 2009, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

⁵⁹ Centers for Disease Control and Prevention, 2010 Sexually Transmitted Diseases Surveillance, Table 25. Primary and Secondary Syphilis – Reported Cases and Rates by State, Ranked by Rates, United States, 2010:

⁶⁰ Sexually Transmitted Disease Surveillance 2007 Supplement, Syphilis Surveillance Report, Division of STD Prevention, March 2009, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

⁶¹ Fiscal year 2014 MFR Strategies and Discussion of Program Performance, Prevention and Health Promotion Administration, Department of Health and Mental Hygiene



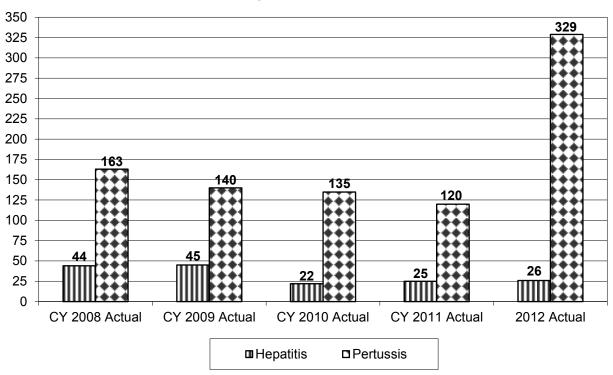
Rate of Primary/Secondary Syphilis Cases Per 100,000 Population

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 43.2% from 2008 through 2011. There was one more case of hepatitis in 2012 than in 2011. Reported cases of pertussis declined by 26.4% over the period of 2008 to 2011, and increased dramatically by 209 cases (174.2%) in 2012. Maryland has focused efforts to reduce the communicable diseases on collaborative public health efforts.



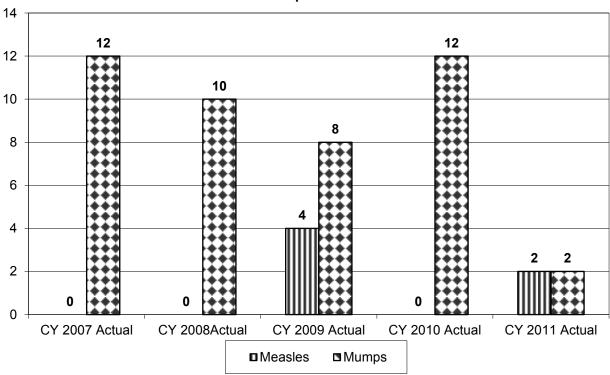
Reported Cases of Vaccine Preventable Communicable Diseases Hepatitis A and Pertussis

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 2007 through 2011, with no cases during 2007, 2008, and 2010. There were two more measles cases in 2011 than in 2010. The number of reported cases of mumps declined by 33.3% between 2007 and 2009, and then increased to the 2007 level (12) in 2010, a 50% increase. There was an 83.3% decline in mumps cases in 2011, the lowest number in five years.



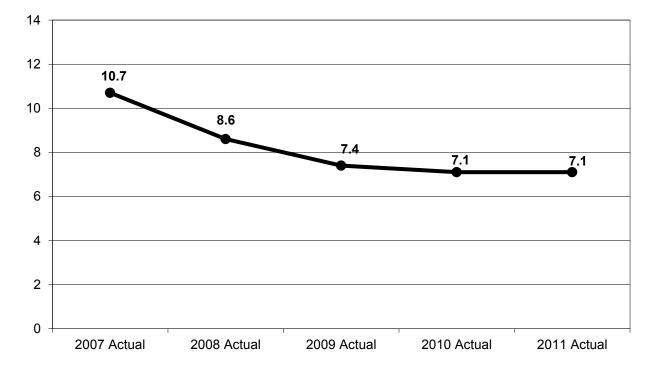
Reported Cases of Vaccine Preventable Communicable Diseases Mumps and Measles

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).⁶² Accidents include motor vehicle and other types. Unintentional injuries to Maryland children ages 1 to 17 were the leading cause of death from 2007 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.⁶³ The child rate of 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, and stayed at the 2010 level in 2011. 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.⁶⁴



Rate of Injury-Related Deaths Due to Accidents Per 100,000 Children and Youth Between Ages 0 and 19

⁶² Maryland's Results for Child Well Being 2009

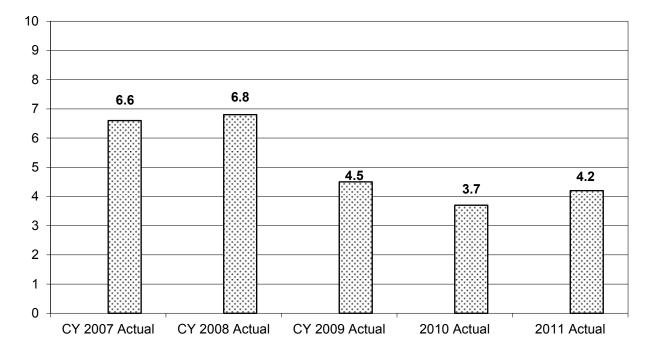
⁶³ Child Death Report, 2008 and Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration;

⁶⁴ Department of Health and Mental Hygiene, Family Health Administration - http://www.fha.state.md.us/mch/cfr_home.cfm

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

This measure is associated with risk and exposure to violence. The rate of homicide How are we doing? deaths of children and youth ages 0 to 19 increased by 3.0% from 2007 to 2008, declined dramatically by 33.8% between 2008 and 2009, and further declined by 17.8 from 2009 to 2010. There was a total decline of 45.6% from 2008 to 2010. Although the rate increased by 13.5% to 4.2 in 2011, the rate was 6.7% below where it was in 2009. Homicide was the second leading cause of death of children and youth ages 1-17 years during 2007 to 2009. The rate of homicides among African American children was substantially higher (six times greater risk) than among white non-Hispanic children.⁶⁵ 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).66 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 2007.⁶⁷ 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 2007-2009.⁶



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

⁶⁵ 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

⁶⁶ Child Death Report, 2008 and Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration

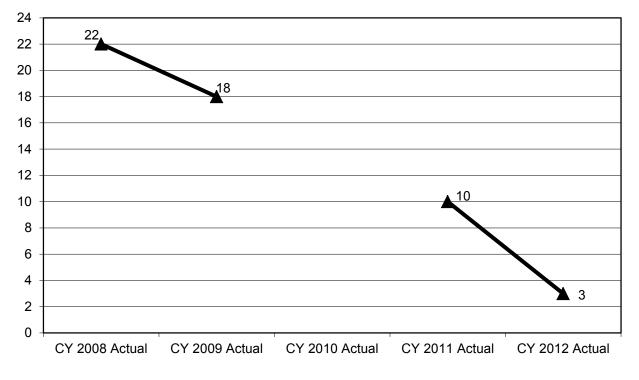
⁶⁷ Child Death Report, 2008 and Child Death Report 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration

⁶⁸ Child Death Report, 2011, Department of Health and Mental Hygiene, Center for Maternal and Child Health, Family Health Administration; The Child Death Report is published every other year. Data on subgroups is not available beyond 2009.

Indicator 1.18: Number of DJS youth who are the victims of a homicide

Target: By calendar year 2013, 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. The number of DJS youth who were victims of homicide has been on a steady downward trend over the period of calendar years 2008 through 2012. Overall, the number of DJS youth who were the victims of a homicide declined by 86.4% over this timeframe. Data for 2010 is not available, and data for 2012 is preliminary.

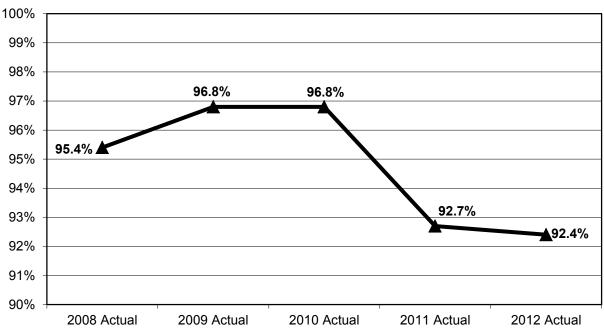


Number of DJS Youth Who Are Victims of Homicide

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? Child abuse and neglect are affected by many family factors including substance abuse, mental health issues, and poverty. The recession has contributed to poverty and unemployment, both of which are factors in parents' abilities to cope with other stressors.⁶⁹ 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. 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. Beginning with fiscal year 2011, the calculation methodology for this indicator changed. Therefore, data beginning with fiscal year 2011 is not comparable to data for 2009 and 2010. The percent of children with no recurrence of maltreatment was stable in 2011 and 2012. Reducing child maltreatment is an objective in the Maryland Health Improvement Process, with a focus on engaging communities in strategies to reduce child maltreatment. DHR has implemented a Family-Centered Practice Model as part of the Place Matters initiative that addresses risk factors which lead to abuse and neglect, and increases safety for children.⁷⁰





⁶⁹ 2011 Maryland's Results for Child Well-Being

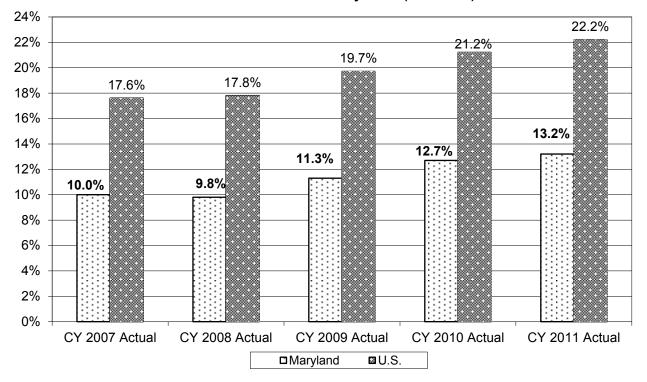
⁷⁰ 2011 Maryland's Results for Child Well-Being

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.⁷¹ Growing up in poverty is one of the greatest threats to healthy child development.⁷² 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.⁷³ 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.⁷⁴ 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 2007 through 2011.⁷⁵ In the domain of economic well-being of the 2012 child well-being index used by the Annie E. Casey Foundation for the Kids Count Data Book, Maryland ranked fourteenth in the nation. The percent of related children and youth under age 18 whose families have incomes below the poverty level remained constant in 2007 and 2008, increased by 15.3% in 2009, and by 12.4% in 2010. The rate of increase slowed to 3.9% in 2011. The recession has been a significant factor contributing to child poverty. Maryland's rate of unemployment also has been a major contributor.⁷⁶



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

⁷¹ 2011 State Profiles of Child Well-being, Kids Count Data Book, The Annie E. Casey Foundation

⁷² 2012 Kids Count Data Book, The Annie E. Casey Foundation

⁷³ Maryland's Results for Child Well Being 2010

⁷⁴ 2011 State Profiles of Child Well-being, Kids Count Data Book, The Annie E. Casey Foundation

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 2015⁷⁷; All Marylanders will be food secure

How are we doing? Because of its connection to student achievement, workforce strength, physical health, and behavioral health, eradicating childhood hunger is one of Governor Martin O'Malley's priorities.⁷⁸ "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."⁷⁹ 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.⁸⁰ 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 3year average is used to provide more reliable statistics at the state level. Over the 3-year periods shown below, with the exception of 2009-2011 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 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.⁸¹ 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.⁸² 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 2009-2011, prevalence rates of very low food security ranged from 3.1% to 7.6%, with Maryland falling near the middle of the pack at 5.6%, and equal to the national average. Maryland was one of 28 states not significantly different than the national average. The prevalence of very low food security was higher than the national average in 9 States, lower in thirteen states and the District of Columbia. Maryland's estimated prevalence of household-level very low food security increased by 9.8% in the three year period of 2009-2011. 83

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.⁸⁴ 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

⁸¹ Household Food Security in the United States, 2008/ERR-83, Economic Research Service/USDA

⁸² Food Research and Action Center

⁷⁷ One of Governor O'Malley's fifteen strategic policy goals

⁷⁸ Press release, "Governor O'Malley Announces Progress on Childhood Hunger Goal", July 12, 2012

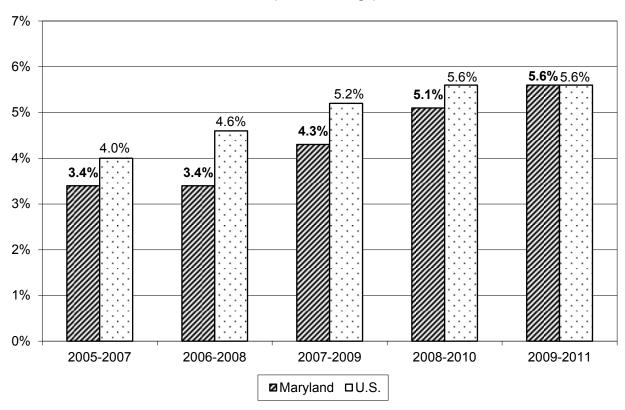
⁷⁹ Household Food Security in the United States in 2010, ERR-125, Economic Research Service/USDA

⁸⁰ 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).

⁸³ Household Food Security in the United States in 2011, ERR-141, Economic Research Service/USDA, September 2011 ⁸⁴ <u>http://frac.org/state-news/maryland-hunger-solutions/</u>

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.⁸⁵ "The most effective way to reduce childhood hunger in Maryland is to improve the number of eligible families participating in already established programs. The Partnership's goal is to close the gap between eligibility for the federal nutrition programs, the Food Supplement Program, and the Women, Infants and Children program and participation in those programs."⁸⁶

The O'Malley-Brown Administration's five-part plan to end childhood hunger includes (1) providing access to a healthy breakfast to all children in Maryland; (2) Expanding the reach of summer meals programs for youth by serving one million additional meals; (3) Expanding access to nutritious food for pregnant women, new mothers, children and youth; (4) Enhancing working families' economic security through expanded utilization of the Earned Income Tax Credit; and (5) Ensuring that all eligible families with children have access to supplemental food assistance (such as the Women, Infants, and Children's Program and At-Risk Afterschool Meals Program).⁸⁷ In the fiscal year 2013 budget, funding doubled for the annual grant to the Maryland Food Bank and more than doubled for Farmers and Hunters Feeding the Hungry.



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

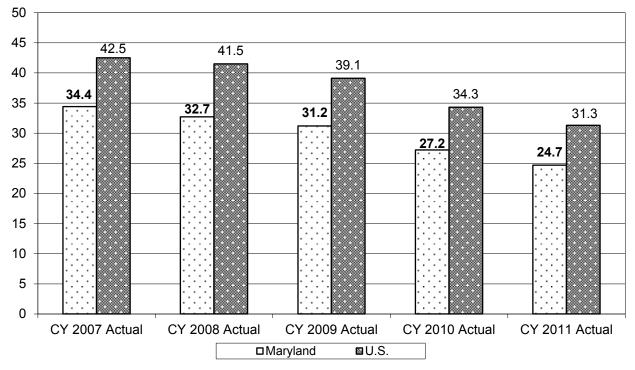
⁸⁵ One Maryland, A Message from the Governor, Governor O'Malley Celebrates Two-Year Anniversary of the Partnership to End Childhood Hunger, November 9, 2010; Campaign to End Childhood Hunger in Maryland Strengthened Through New Corporate Commitment, Share Our Strength press release, January 31, 2011 ⁸⁶ 2011 Maryland's Results for Child Well-Being

⁸⁷ Press release, "Governor O'Malley Announces Progress on Childhood Hunger Goal", July 12, 2012; and Governor O'Malley's StateStat - http://www.statestat.maryland.gov/GDUhunger.asp

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

Target: By calendar year 2013, no more than 23.7 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.⁸⁸ Births to teen mothers accounted for 6.7% of all births in 2011, of which 2% were to mothers under the age of 18.89 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 2007 through 2011, and has steadily declined each year during this timeframe. The greatest year to year decline in Maryland's teen birthrate (12.8%) occurred in 2010, mirroring the 12.3% national decline. The U.S. teen birth rate remained stable in 2007 and 2008, 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.⁹⁰ This downward trend has continued through 2011 for both Maryland and the U.S. Maryland's 2009 rate was 25.3% lower than the U.S. rate, and has remained around 26% below the U.S. rate through 2011. 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.⁹¹ The State Personal Responsibility Education Program (PREP) and Abstinence Education programs provide curriculum-based programs for adolescents and their parents/caregivers at school, after school and in community settings.⁹²



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

⁸⁸ Maryland's Results for Child Well Being 2009; State Profiles of Child Well-being, 2011 Kids Count Data Book, The Annie E. Casey Foundation

⁸⁹ Maryland Vital Statistics Annual Report 2009, Vital Statistics Administration, Department of Health and Mental Hygiene

⁹⁰ 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

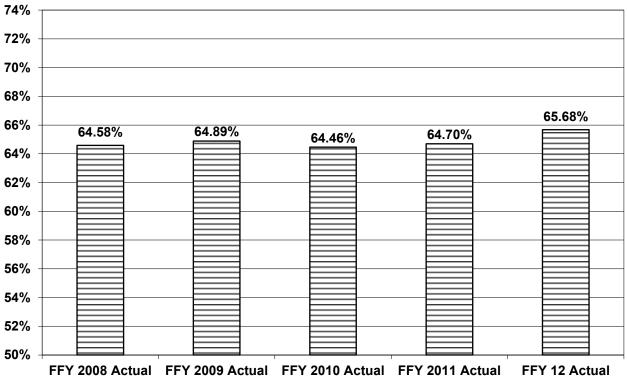
⁹¹ Fiscal year 2013 MFR Strategies and Discussion of Program Performance, Family Health Administration, Department of Health and Mental Hygiene

^{92 2011} Maryland's Results for Child Well-Being

Indicator 1.23: Statewide percent of current child support paid⁹³

Target: 1 percentage point 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 2008 through 2012, with 65.68% paid in 2012, nearly meeting the target of a one percentage point increase from 2011 to 2012. 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.



Percent of Current Child Support Paid

⁹³ The data for this measure is collected by Federal fiscal year (FFY) and includes cases for persons who receive public assistance, and other persons who apply for child support services from the Department of Human Resources.

Indicator 1.24: Rate of children placed in out-of-home care (per 100,000 children)⁹⁴

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,⁹⁵ Community-Based Residential Placement,⁹⁶ Non-Community-Based Residential Placement,⁹⁷ and Hospitalization.⁹⁸ 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.⁹⁹ "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."¹⁰⁰ 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 11.8% from 2008 to 2009. The rate remained stable in 2009 and 2010, and subsequently declined by 3.4% in 2011.¹⁰¹

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 decreased in 2011 largely due to the efforts of local and statewide teams that try to get children the services they need within the State of Maryland.¹⁰² 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.¹⁰³ 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.¹⁰⁴ The Children's Cabinet Interagency Fund provided funds for evidence based practices and prevention programs such as Functional Family Therapy, Multi-systemic Therapy, and Trauma-Focused Cognitive-Behavioral Therapy.¹⁰⁵ Maryland's Care Management Entities are another means to prevent placement of children by providing care coordination through a wraparound service delivery model. The Children's Cabinet Advisory Council for Children recommends ways for the State to reduce placement with an emphasis on best practices and increasing community-based interventions in place of institutional interventions. The State also partners with the Institute for Innovation and Implementation of the University of Maryland to

⁹⁴ This indicator includes the rate per 1,000 children under age 18. However, the Department of Juvenile Services, the Department of Human Resources, and the Maryland State Department of Education include some youth ages 19 to 21 due to mandates. The data collection methodology changed effective with fiscal year 2007 in order to provide more accurate and consistent data. The data collection methodology changed again effective with fiscal year 2008. Data for 2007 is not comparable to data for subsequent years or to 2006. Because some youth experience multiple out-of-home placements through different State agencies, and some youth are co-committed or co-funded among agencies, there may be duplicative counts. Source: Governor's Office for Children

⁹⁵ Includes Relative/Kinship Care, Foster Care, Treatment Foster Care, Adoptive and Pre-Adoptive Care, Living Arrangement-Family Home, and Individual Family Care, Maryland's Results for Child Well-Being 2010, Governor's Office for Children and the State of Maryland, Out of Home Placement and Family Preservation Resource Plan, FY 2011

⁹⁶ Includes Independent Living, Living Arrangement-Community Based, and Residential Child Care Programs, Maryland's Results for Child Well-Being 2010, Governor's Office for Children and the State of Maryland, Out of Home Placement and Family Preservation Resource Plan, FY 2011

⁹⁷ Includes Residential Treatment Centers, Psychiatric Respite Programs, Juvenile Detention/Commitment Centers, Correctional/adult, Substance Abuse and Addiction Programs, Residential Educational Facilities, Diagnostic Evaluation Treatment Programs, Living Arrangement-Non-Community Based, and Non-Secure/Non-RTC), Maryland's Results for Child Well-Being 2010, Governor's Office for Children and the State of Maryland, Out of Home Placement and Family Preservation Resource Plan, FY 2011

⁹⁸ Includes General Hospitalization, Psychiatric Hospitalization and In-Patient Private, Maryland's Results for Child Well-Being 2010, Governor's Office for Children and the State of Maryland, Out of Home Placement and Family Preservation Resource Plan, FY 2011

⁹⁹ Maryland's Results for Child Well-Being 2009 and 2010, Governor's Office for Children

¹⁰⁰ Maryland's Results for Child Well-Being 2010, Governor's Office for Children

¹⁰¹ Data changed from what was reported in the 2012 MFR Performance Report for 2009 through 2011.

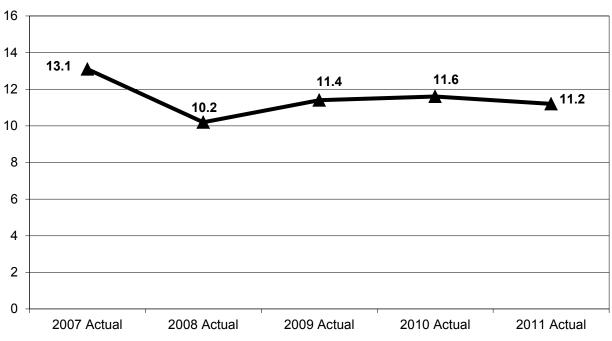
¹⁰² State of Maryland, Out of Home Placement and Family Preservation Resource Plan, FY 2011

¹⁰³ Governor's Office for Children, Children's Cabinet Briefing, November 2009; Maryland's Results for Child Well-Being 2009, Governor's Office for Children

¹⁰⁴ Maryland's Results for Child Well-Being 2010, Governor's Office for Children

¹⁰⁵ 2011 Maryland's Results for Child Well-Being, Governor's Office for Children

collect outcomes and conduct fidelity monitoring for evidence-based practices, and facilitate strategic planning among the Children's Cabinet agencies.



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

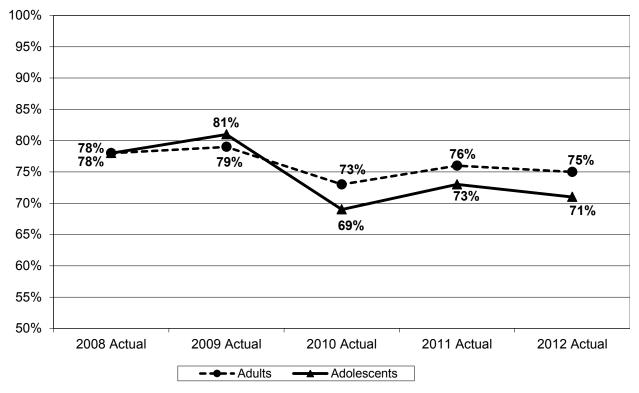
SUBSTANCE ABUSE TREATMENT

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 2014, 82% decrease in the number of adults and 78% decrease in the number of 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. After improving by 3.8% from 2008 to 2009, the percent decrease in substance abuse by adolescents during treatment declined by 14.8% from 2009 to 2010, with a subsequent 5.8% improvement from 2010 to 2011¹⁰⁶. There was little change from 2011 to 2012. The trend in the percent decrease in substance abuse by adolescents during treatment has been similar to the trend in the percent decrease in substance abuse by adolescents during treatment. However, the rate of decline in the percent decrease for adults from 2009 to 2010 was 7.2 percentage points lower than for adolescents. From 2010 to 2012, the percent decrease in substance abuse during treatment for adults has been three to four percentage points higher than for adolescents. 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 through planning and implementation of services.¹⁰⁷



Percent Decrease in Substance Abuse During Treatment

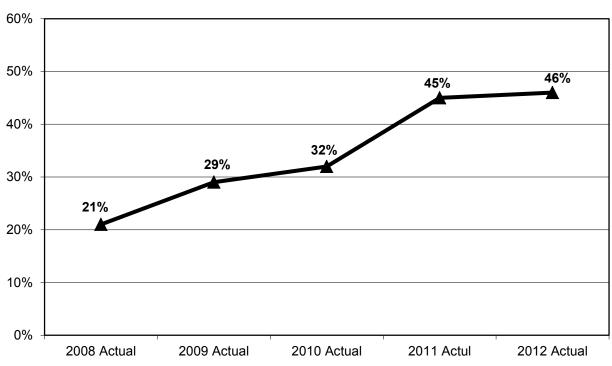
¹⁰⁶ Data changed for 2010 and 2011 in the fiscal year 2014 MFR submission.

¹⁰⁷ Alcohol and Drug Abuse Administration, Department of Health and Mental Hygiene fiscal year 2014 MFR Performance Discussion

Indicator 1.27: Percent increase in employment of adults at completion of substance abuse treatment

Target: By 2014, 47% increase in employment

How are we doing? The percent increase in employment of adults at completion of treatment more than doubled between 2008 and 2010. The greatest year to year improvement (40.6%) occurred between 2010 and 2011,¹⁰⁸ and leveled off in 2012. The ADAA utilizes regional interdisciplinary technical assistance teams to help providers in funded programs improve treatment outcomes through planning and implementation of services.¹⁰⁹



Percent Increase in Employment of Adults at Completion of Substance AbuseTreatment

¹⁰⁸ Fiscal year 2011 data changed in the fiscal year 2014 MFR submission.

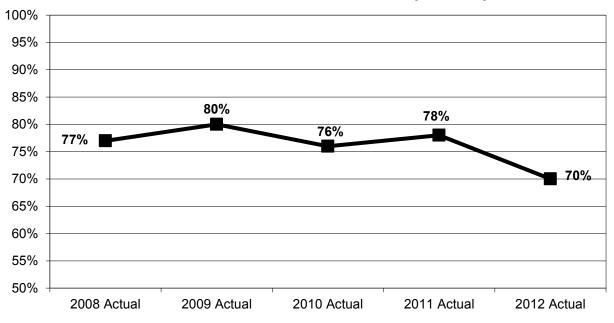
¹⁰⁹ Fiscal year 2014 MFR Performance Discussion, Alcohol and Drug Abuse Administration, Department of Health and Mental Hygiene

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 2014, 73% of adults report that they deal more effectively with daily problems

How are we doing? During the period of 2008 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 by two to four percentage points, and in 2012 dropped by eight percentage points to 70%. To improve services, 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.¹¹⁰



Percent of Adults Who Report That Maryland's Public Mental Health System Services Have Allowed Them to Deal More Effectively With Daily Problems

¹¹⁰ Mental Hygiene Administration, Department of Health and Mental Hygiene fiscal year 2012 and 2013 MFR Strategies and Program Performance Discussions

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

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 2013, 2,600 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 has remained stable from 2008 (85.7%) through 2012 (87.8%). DORS continues a multi-vear 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.¹¹¹ 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 gualified individuals with disabilities. The Maryland Department of Disabilities (MDOD) was an influential partner in the creation of this national marketing campaign.¹¹² 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.¹¹³ 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.¹¹⁴ DORS is a partner in the Skills2Compete Initiative through programs at its Workforce and Technology Center and throughout Maryland communities.¹¹⁵ "DORS' Workforce and Technology Center continues to develop Customized and Partnership Training programs that provide short-term, intensive training for individuals with significant disabilities who are not pursuing college degrees but are interested in obtaining an industry certification and/or skills required to enter employment that will provide a higher than average entry wage."¹¹⁶

¹¹¹ Fiscal year 2012 -2014 MFR Performance Discussion, Division of Rehabilitation Services, Maryland State Department of Education

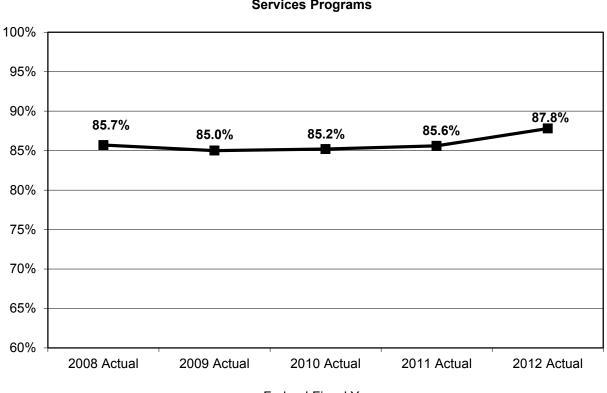
 ¹¹² "State Employees Assuring Inclusion for All Marylanders", A Message from Governor O'Malley, September 17, 2010
 ¹¹³ Maryland Department of Disabilities, <u>http://www.mdod.maryland.gov/employers.aspx?id=2230</u>

¹¹⁴ "State Employees Assuring Inclusion for All Marylanders", A Message from Governor O'Malley, September 17, 2010

¹¹⁵ MFR Performance Discussion fiscal year 2013, Maryland State Department of Education

¹¹⁶ MFR Performance Discussion fiscal year 2014, Maryland State Department of Education

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



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

Federal Fiscal Year

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 "National Core Indicators" Survey who expressed satisfaction with Individual Outcomes

Indicator 2.3: Percent of Developmental Disabilities Administration Community Service respondents of the "National Core Indicators" Survey who expressed satisfaction with Family Indicators

Indicator 2.4: Percent of Developmental Disabilities Administration Community Service respondents of the "National Core Indicators" Survey who expressed satisfaction with Health, Welfare, and Rights

Target: By 2014, the percent of respondents expressing satisfaction will remain the same or improve

How are we doing? The survey instrument for this indicator has changed and therefore the domains measured have also changed. ¹¹⁷ The "National Core Indicators" Survey is a quality of life consumer interview and family survey used to establish a standard set of indicators to measure how well public developmental disabilities systems serve and support people. Data is not yet available for this indicator. 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.

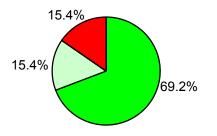
¹¹⁷ This measure replaces the "Percent of Developmental Disabilities Administration Community Service respondents of the "Ask ME Survey" who expressed satisfaction with physical well-being, personal development, and self-determination

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.



01-1	Number of	Damast
Status	Indicators	Percent
Favorable Performance (Change >10%)	9	69.2%
Favorable Performance (3% to 10% Change)	2	15.4%
Stable Performance (0% - 2% Change)	0	0.0%
Unfavorable Performance (3% to 10% Change)	0	0.0%
Unfavorable Performance (Change > 10%)	2	15.4%
Total	13	100%

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
State Police	Firearm homicide rate per 100,000 (calendar year) (2007- 2011)	4.67	7.32	-36.2%
State Police	Traffic fatality rate per 100 million miles traveled (calendar year) (2007 - 2011)	0.81000	1.08339	-25.2%
State Police	Part I crime rate (offenses per 100,000 population) (2007- 2011)	3,355	4,066	-17.5%
DPSCS	Recidivism: Percent of offenders returned to Department of Public Safety & Correctional Services supervision for a new offense within one year of their release from the Division of Correction - all releases (2007 - 2011)	15.5%	21.9%	-29.2%
DPSCS	Total number of inmates who escape (2008 - 2012)	2	4	-50.0%
DPSCS	Total number of inmates who walk off (2008 - 2012)	59	151	-60.9%

A SAFER, MORE SECURE MARYLAND

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Change
DPSCS	Percent of all cases closed where the offender was employed at closing (2008 - 2012)	28%	34%	-17.6%
Children's Cab. Inter- agency Fund	Rate per 100,000 of arrests of youth ages 15 to 17 for violent criminal offenses (2007 - 2011)	668	988	-32.4%
DJS	Youth Recidivism: Percent of youth re- committed/incarcerated within one year of release from all residential placements (2007 - 2011)	18.7%	19.7%	-5.1%
Children's Cab. Inter- agency Fund	Percent of public school students in grades nine through twelve who are current drinkers (2005 - 2011)	34.8%	39.8%	-12.6%
Children's Cab. Inter- agency Fund	Percent of public school students in grades nine through twelve who reported using heroin one or more times (2005 - 2011)	4.2%	2.6%	61.5%
DHMH	Percentage score Maryland receives on the Centers for Disease Control and Prevention State Technical Assistance Review (TAR) (2008 - 2012)	100%	93%	7.5%
State Police	Number of matches of DNA taken during criminal investigations with DNA included in the Combined DNA Index System (CODIS) database (2008 - 2012)	443	312	42.0%

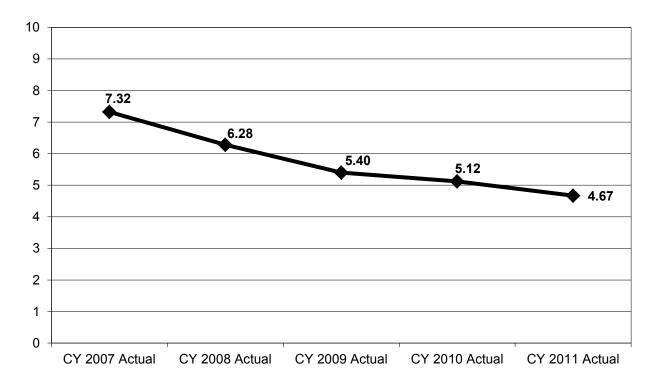
KEY PERFORMANCE AREA I REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

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 declined dramatically by 14% per year from 2007 to 2009, and by an additional 5.2% from 2009 to 2010. The decline accelerated to 8.8% from 2010 to 2011. The firearm homicide rate has been in a downward trend with an overall decline of 36.2% from 2007 through 2011. 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 and 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 During the 2012 session of the Maryland General Assembly, legislation was passed and signed into law establishing the Task Force to Study Access of Individuals with Mental Illness to Regulated Firearms.



Firearm Homicide Rate Per 100,000 Estimated Population

2

¹ Fact Sheet, Gun Tracking Task Force, Tracking and curbing illegal gun sales & gang activity, January 2010, <u>http://www.goccp.maryland.gov/msac/documents/FactSheets/GTTF.pdf</u>

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. The rate declined by a total of 25.2% from 2007 to 2011. Although the U.S. traffic fatality rate has been declining, Maryland's traffic fatality rate has been consistently lower than the U.S. rate from 14% to 22% lower.⁶ In 2010. Maryland's fatality rate was 22% lower than the national fatality rate. National data is not yet available for 2011. 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.' 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 The new 2011 – 2015 SHSP that focuses on a reduced number of emphasis areas as determined by traffic crash data, is a primary strategy that will be implemented.⁹. 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.¹⁰

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

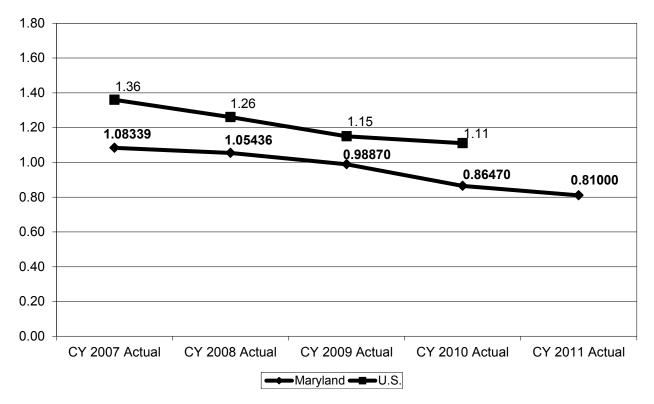
⁶ U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System

⁷ 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, 2011 Annual Attainment Report on Transportation System Performance

¹⁰ Maryland Department of Transportation, 2010 and 2011 Annual Attainment Reports 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



Traffic Fatality Rate Per 100 Million Vehicle Miles Traveled

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"¹¹; 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.¹² The Maryland Part I crime rate remained relatively steady in 2007 and 2008, declined by 8.6% in 2009, 6.4% in 2010, and an additional 5.4% in 2011. Overall, the Part I crime rate declined by 19.1% from 2008 to 2011. 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.¹³ 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. Maryland is working with DC, Virginia, Delaware and Pennsylvania to ensure that arrest information is being shared across state borders. The Violence Prevention Initiative (VPI) continues to be a primary strategy to track and supervise nearly 2,000 of the State's most violent offenders in a community setting.¹⁴ The Violence Prevention Initiative uses specific criteria to identify potentially violent, repeat offenders and subjects them to enhanced supervision. The Initiative has been enhanced to include drug treatment, mental health counseling, family counseling, and job readiness training. Improving the automated VPI screening tool is an on-going effort. The Department has also implemented Watch Center Models that create a network between police officers and parole and probation agents who work together to exchange real time information to respond effectively to non-compliant offender behavior. There also is cooperation between law enforcement and parole and probation agents to ensure timely service of violation of parole and probation warrants on high risk offenders.¹⁵

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 including and has an agreement with the District of Columbia law enforcement agencies that allows D.C. police to access the database and provides Maryland with D.C. information.¹⁶ 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.

¹¹ Governor O'Malley's 15 Strategic Policy Goals, StateStat, <u>http://www.statestat.maryland.gov/GDUcrime.asp;</u>

One Maryland, Public Safety, Local Businesses, and New Technologies, June 2012, Governor Martin O'Malley ¹² Department of State Police, fiscal year 2012 MFR Data Definition and Control Procedures

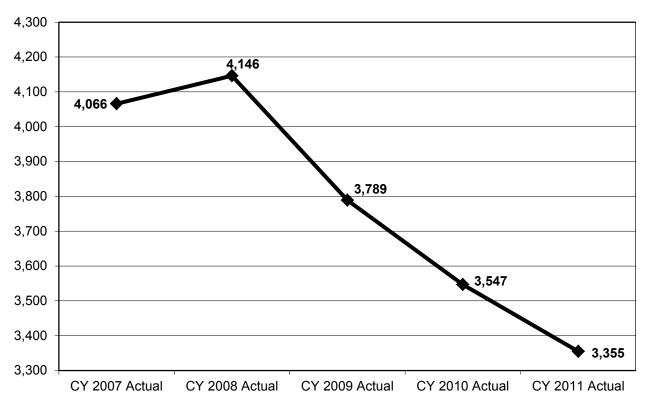
¹³ "State Employees Keeping Marylanders Safe", A Message from Governor O'Malley, October 8, 2010

¹⁴ One Maryland, Public Safety, Local Businesses, and New Technologies, Governor Martin O'Malley, June 2012

¹⁵ Fiscal year 2014 MFR Performance Discussion, Department of Public Safety and Correctional Services

¹⁶ Capitol Ideas E-Newsletter, Maryland Dashboard Brings Information Together for Law Enforcement, September/October 2011, Council of State Governments

KEY PERFORMANCE AREA I REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

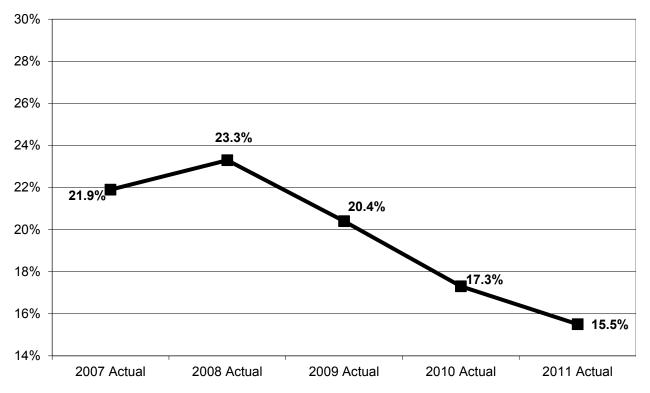


Part I Crime Rate per 100,000 Population

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%)

The percent of offenders returned to DPSCS supervision for a new offense increased How are we doing? by 6.4% from 2007 to 2008 bringing the 2008 level to nearly the same level as in 2001. The percent returned to DPSCS supervision declined significantly each year from 2009 through 2011, with an overall decline of 33.5%. Performance exceeded 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. Fatal and non-fatal violence is tracked among the offender population to ensure that the Violence Prevention Initiative risk screener is the correct tool to identify the most violent offenders under supervision.¹⁷ 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 The Department also will continue to monitor, review, and evaluate for potential use best practices monitoring." 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

¹⁷ MFR Performance Discussion, fiscal year 2014, Department of Public Safety & Correctional Services

¹⁸ Strategies fiscal year 2013 MFR Submission, Department of Public Safety & Correctional Services

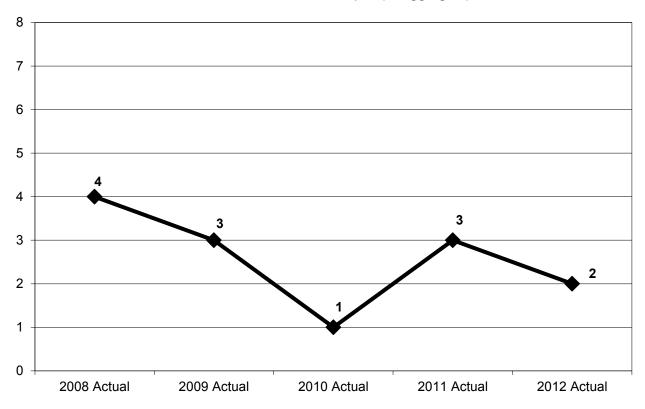
KEY PERFORMANCE AREA I REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

MAINTAINING SECURITY AND SAFETY IN CORRECTIONAL INSTITUTIONS

Indicator 1.5: Number of inmates who escape from correctional facilities, detention facilities, and alternative confinement settings – aggregate

Target: No escapes

How are we doing? Maintaining security and safety standards in adult correctional facilities contributes to keeping the public safe. 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, and subsequently dropped to 2 in 2012. 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.¹⁹ 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.²⁰ Strategies used to address the escapes in 2012 include appropriate disciplinary actions as well as re-training. In addition, supervisor security rounds have increased and the security door and camera equipment are better maintained at the facility where the escapes occurred.²¹



Number of Inmate Escapes (In Aggregate)

¹⁹ Fiscal year 2010 MFR Performance Discussion, Department of Public Safety & Correctional Services

²⁰ Fiscal year 2013 MFR Strategies, Department of Public Safety and Correctional Services

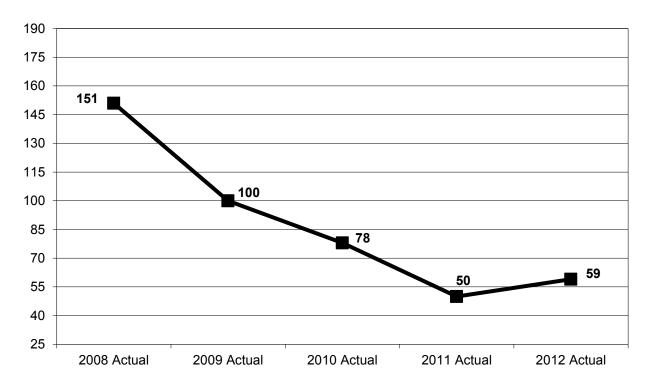
²¹ Fiscal year 2014 MFR Strategies, Department of Public Safety and Correctional Services

KEY PERFORMANCE AREA I REDUCING AND PREVENTING CRIME COMMITTED BY ADULTS

Indicator 1.6: Total number of inmates who walk off from correctional facilities, detention facilities, alternative confinement settings, and home detention - aggregate

Target: Not to exceed 72

How are we doing? The total number of inmate walk-offs while under Departmental supervision decreased dramatically by 60.9% from 2008 to 2012. During 2012, there were 59 walk-offs, nine more than in 2011, yet 13 below below the target of no more than 72 department-wide. The 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. During 2012, the majority of walk-offs were inmates working in the community and housed at the Baltimore Pre-Release Unit (BPRU). A new policy was enacted at BPRU that requires case management staff to double the number of job contacts during an inmate's first 60 days of employment, with at least half being on-site visits. Thereafter, work release case managers conduct at least two on-site and two telephone checks each month. In addition, custodial staff are required to conduct one telephone check per week/per shift to verify the inmates' presence at work.²² The Department 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)

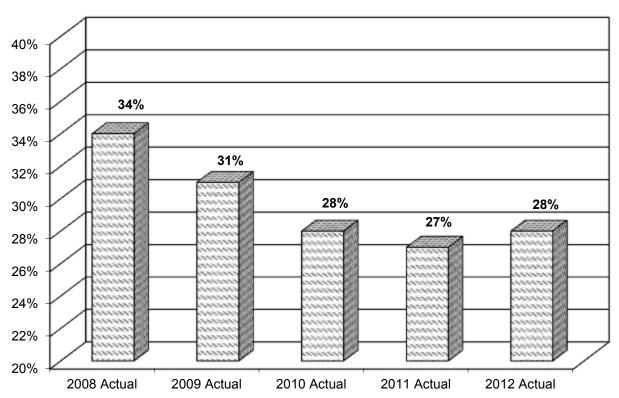
²² Fiscal year 2014 MFR Strategies, Department of Public Safety and Correctional Services

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. The percent of cases closed where the offender was employed at closing fell by 20.6% from 2008 to 2011, and increased by a modest 3.7% in 2012. Most likely, the economic climate has contributed 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.²³ 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.²⁴



Percent of Cases Closed Where the Offender Was Employed at Closing

²³ Performance Discussion fiscal year 2013 MFR Submission, Department of Public Safety and Correctional Services

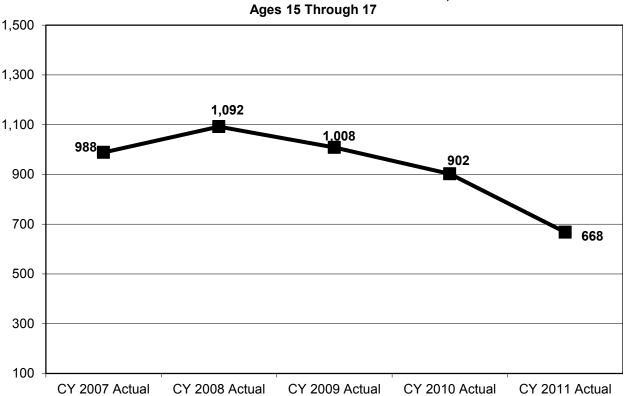
²⁴ Strategies fiscal year 2013 MFR Submission, Department of Public Safety and Correctional Services

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 delinguency 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.²⁵ 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. Between 2007 and 2008 the violent offense arrest rate for youth increased by 10.5%, and thereafter steadily declined by total of 38.8% from 2008 through 2011. 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.



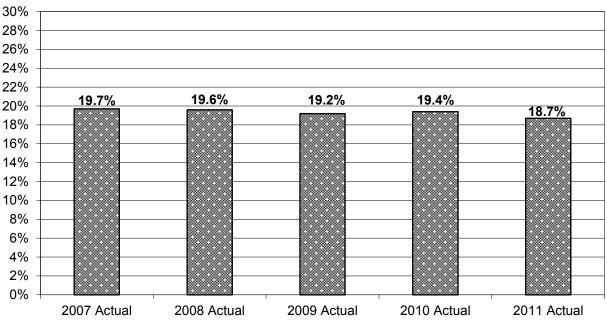
Rate of Arrests for Violent Criminal Offenses Per 100,000 Youth

²⁵ Maryland's Results for Child Well-Being 2009

Indicator 2.2: Recidivism: Percent of youth re-adjudicated/convicted within one year of release from all residential placements

Target: No more than 18% of youth released from DJS residential programs are re-adjudicated/convicted within one year after release

How are we doing? The percent of youth re-adjudicated/convicted within one year of release held steady from 2007 to 2010, and declined by 3.6% from 2010 to 2011. Overall the percent of youth readjudicated/convicted within one year of release declined by 5.1% from 2007 to 2011. 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 modeled its evidence based program on models identified by the University of Colorado's Center for the Study and Prevention of Violence, a leader in EBP research.²⁶ "To help reduce the number of juvenile offenders who are involved in violent crime as either defendants or victims, the Department of Juvenile Services created [a] Violence Prevention Initiative (VPI) specifically crafted to target juvenile homicides and non-fatal shootings."²⁷ The VPI provides increased supervision and prevention services for Maryland's most at-risk youth. Global Positioning System (GPS) technology is one distinguishing feature of the Juvenile VPI. GPS supplements contacts with case managers and other program partners by tracking the movement and whereabouts of VPI youth twenty-four hours per day, seven days per week. In addition to the close monitoring and supervision, other services are integrated through the Operation Safe Kids and other program partners. Each youth has a Treatment Services Plan that identifies strengths and needs of the youth, and ensures access to critical services. These services include, among others, case management, crisis intervention and safety planning, mental health treatment, substance abuse treatment, and family therapy. Using the Department of Public Safety and Correctional Services' adult VPI as a template, the Department of Juvenile Services developed and implemented a Watch Center concept for youth. The Watch Center liaison works with local police and other partners to identify non-fatal shooting victims under DJS supervision, and to develop plans to prevent shooting victims from retaliating or becoming further victimized.²⁸



Percent of Youth Re-Adjudicated/Convicted Within One Year After Release From All Residential Placements

²⁶ Department of Juvenile Services fiscal year 2011 MFR Performance Discussion

²⁷ Maryland's Comprehensive State Crime Control and Prevention Plan, 2012-2014, Governor's Office of Crime Control and Prevention

²⁸ Maryland's Comprehensive State Crime Control and Prevention Plan, 2012-2014, Governor's Office of Crime Control and Prevention

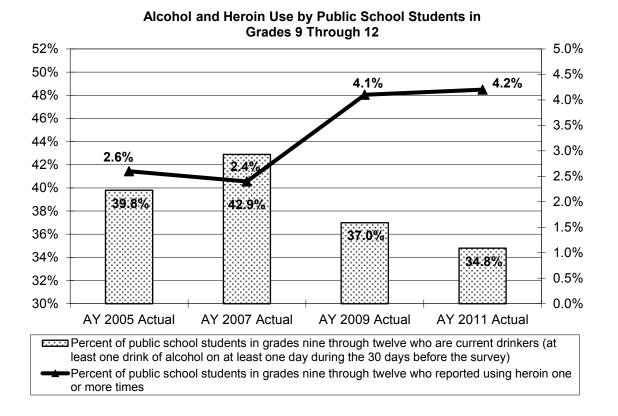
REDUCING AND PREVENTING ALCOHOL AND SUBSTANCE ABUSE BY YOUTH²⁹

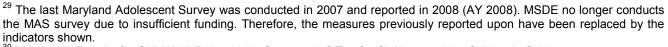
Indicator 2.3: Percent of public school students in grades nine through twelve who are current drinkers (at least one drink of alcohol on at least one day during the 30 days before the survey)

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.³⁰ 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 61.5% from 2005 through 2011, while alcohol use declined by 12.6% over that same timeframe. "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."³¹





³⁰ Maryland's Results for Child Well-Being 2010, Governor's Office for Children and the Children's Cabinet

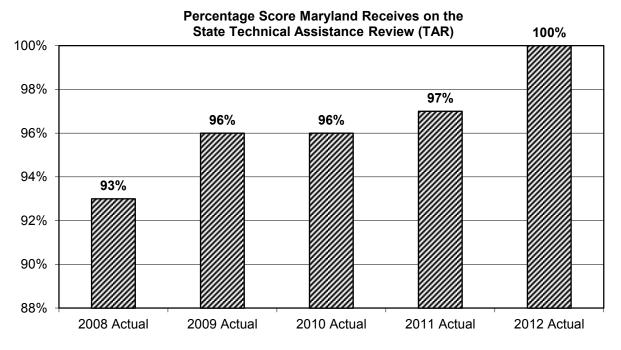
³¹ Maryland State Department of Education Data Definitions and Controls, fiscal year 2013 MFR

STRENGTHENING CAPACITY AND READINESS OF ALL REGIONS IN THE STATE TO RESPOND TO CRIMINAL ACTIVITY, EMERGENCIES, AND TERRORIST INCIDENTS

Indicator 3.1: Percentage score Maryland receives on the Centers for Disease Control and Prevention State Technical Assistance Review (TAR)

Target: By fiscal year 2014, a score of at least 98%

National attention is now focused on how best to distribute emergency medications and How are we doing? other medical supplies to the general population in the event of a bioterrorism event, emerging infectious disease, and natural or man-made disasters. The State TAR is a comprehensive CDC assessment tool that reviews and evaluates the State's ability to receive, store, and distribute emergency medications and medical supplies. The topics that are reviewed during the State TAR cover a broad range of programs within the Department of Health and Mental Hygiene (DHMH) and its state and local partners, and demonstrate the collaborative planning accomplished with those partners. The State TAR score is monitored by CDC annually to assure state's ability to receive, store, and distribute medical countermeasures.³² Maryland's TAR scores increased by 7.5% from 2008 to 2012, ending with a score of 100%. The DHMH Office of Preparedness and Response's Strategic National Stockpile (SNS) and Cities Readiness Initiative (CRI) Coordinators will work closely with State and local partners to enhance and maintain current SNS plans. Regular meetings will be conducted to review planning progress, trainings will be offered to ensure responder readiness, and drills and exercises will be developed to evaluate the Maryland SNS plan. Documentation of SNS program activities will be kept throughout the year.³³ 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 2012 annual "Ready or Not? Protecting the Public from Diseases. Disasters, and Bioterrorism" report which provides assessments of states' readiness to respond to health emergencies ranging from bioterrorist threats to serious disease outbreaks to extreme weather, Maryland was one of five states that achieved eight out of ten key indicators of public health emergency preparedness, the highest score achieved for 2012.³



³² Department of Health and Mental Hygiene, Office of Preparedness and Response, e-mail dated November 30, 2012

³³ Department of Health and Mental Hygiene, Office of Preparedness and Response MFR Strategies and Discussion of Program Performance, fiscal year 2014

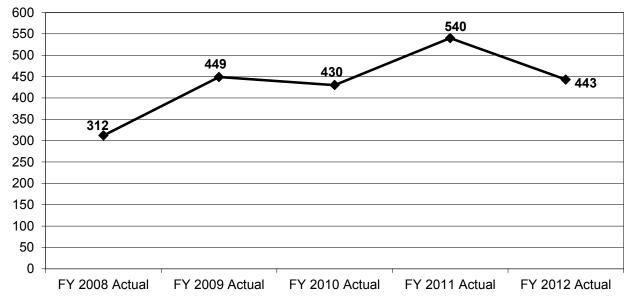
³⁴ Report prepared by the Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation, December 2012, http://www.rwjf.org/content/dam/farm/reports/reports/2012/rwjf403352

KEY PERFORMANCE AREA 3 STRENGTHENING HOMELAND SECURITY AND LAW ENFORCEMENT

Indicator 3.2: 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."³⁵ 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.³⁶ 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 103,609 CODIS samples in Maryland's database, 5,250 of which were added in 2012. Overall, there have been 2,697 hits resulting from the Maryland CODIS databank. In 2011, there were 412 hits including case to case, other states to our state data, and convicted offender data. There have been 287 hits of the same type in 2012.³⁷ 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. 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. Matches declined by 18% in 2012 principally due to the Maryland Court of Appeals ruling in April 2012 that the arrested/charged law was unconstitutional and therefore DNA sample collection was suspended. In July 2012, the U.S. Supreme Court issued a stay on the Court of Appeals ruling, so that the State could continue to collect DNA samples while the nation's Supreme Court decides whether it will hear the case. A priority of the Administration is to repeal the sunset of the DNA Sample Collection at Charge legislation,³⁸ and to pursue the case with the Supreme Court.



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

³⁶ MFR Definitions and Control Procedures, fiscal year 2013, Department of State Police, Criminal Investigation Bureau
 ³⁷ Updated November 17, 2011, Governor's Office of Crime Control and Prevention Web site:

³⁵ Governor's Office of Crime Control and Prevention DNA Web site: <u>http://www.goccp.maryland.gov/dna/index.php</u>

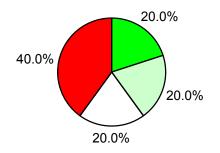
http://www.goccp.maryland.gov/dna/statistics.php ³⁸ Maryland's Comprehensive State Crime Control and Prevention Plan 2012-2014, Governor's Office of Crime Control and Prevention.

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.



	Number of	
Status	Indicators	Percent
Favorable Performance (Change >10%)	1	20.0%
Favorable Performance (3% to 10% Change)	1	20.0%
Stable Performance (0% - 2% Change)	1	20.0%
Unfavorable Performance (3% to 10% Change)	0	
Unfavorable Performance (Change > 10%)	2	40.0%
Total	5	100%

Agency/ Data Source	Indicator	Most Recent Data Available	4 Years Prior	4 Year Variance
DBM	Annual General Fund closing balance as of June 30th available for new fiscal year operations (millions) (2008 - 2012)	\$551.2	\$487.1	13.2%
Treasurer's Office	Bond rating from all three nationally recognized bond rating agencies for each issuance of State General Obligation Bonds (maintain AAA rating) (2008 - 2012)	AAA	AAA	no change
CDAC	Capital debt service as a percent of State revenue (2008- 2012) �	6.68%	5.55%	20.4%
State Retirement and Pension System	Asset to liability ratio for the MD State Retirement and Pension System (funded ratio) (2008 - 2012)	64.37%	78.62%	-18.1%
Governor's Office and DBM	Percent of the total legislative appropriation for Executive departments covered by StateStat (2009 - 2013)	73%	70%	4.3%

 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.

KEY PERFORMANCE AREA 1 EFFECTIVE AND EFFICIENT RESOURCE MANAGEMENT

RESTORING AND MAINTAINING FISCAL ACCOUNTABILITY

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 2008 through 2012 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 The General Fund closing balance of \$551.2 million for fiscal year 2012 was \$438.9 million less than the fiscal year 2011 closing balance. Although there was a decline in the General fund closing balance, the 2012 closing balance exceeded the 2009 balance by \$464 million. Maryland was one of twenty-two states with fiscal year 2012 balances equal to 5% of General Fund spending.⁵

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, cuts to enacted budgets, and tax collections.⁶ 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".⁷ Maryland placed within twenty-two states that are "Holding Up" on the fiscal year 2012 Continuum of State Fiscal Stress. This category falls between the top rating and the middle rating. Most states placed under "holding Up' on the continuum while only four placed in the top category.⁸

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

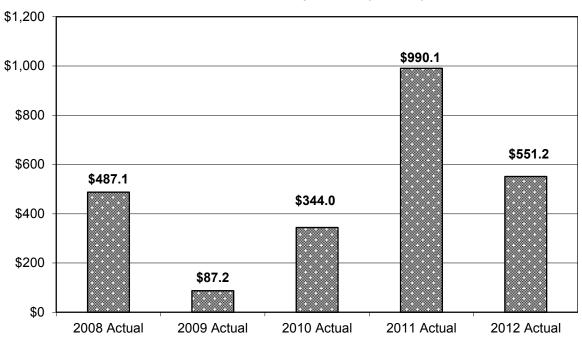
⁵ State Policy Reports Volume 30, Issue 11, July 2012- Continuum of State Fiscal Stress

⁶ 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

⁷ Continuum of State Fiscal Stress, State Policy Reports Volume 29, Issue 11, June 2011, Federal Funds Information for States

⁸ State Policy Reports Volume 30, Issue 11, July 2012- Continuum of State Fiscal Stress

KEY PERFORMANCE AREA 1 EFFECTIVE AND EFFICIENT RESOURCE MANAGEMENT



Annual General Fund Closing Balance as of June 30th Available for New Fiscal Year Operations (Millions)

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.⁹. 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 1993.¹⁰ 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).¹¹ 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. 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."

Rating Agency	CY 2008	CY 2009	CY 2010	CY 2011	CY 2012
Fitch Ratings	AAA	AAA	AAA	AAA	AAA
Moody's Investors Service	Aaa	Aaa	Aaa	Aaa	Aaa
Standard & Poors	AAA	AAA	AAA	AAA	AAA

⁹ Moody's cited an "above average debt burden" as a challenge for the State in its February 2011, July 2011, September 2011, February 2012, and July 2012 rating reports

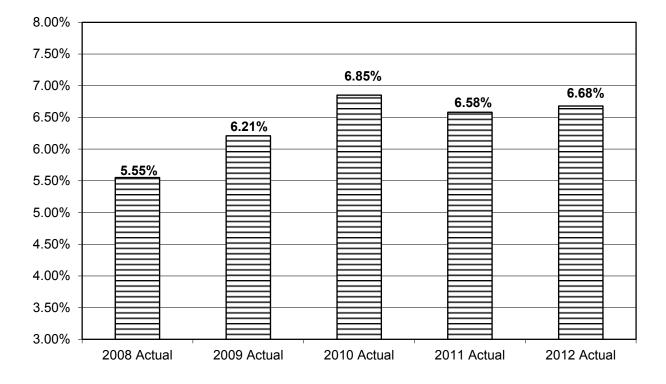
News Releases, Maryland Retains AAA Bond Rating, State Treasurer's Office, July 14, 2010, July 14, 2011, July 19, 2012 ¹¹ This stems from a bond rating convention that typically caps state and local government bond ratings at or below the rating for the Federal government. Fitch and Moody's have not 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

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.¹³ 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 2008 through 2012, 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 -1.15 to -2.45 percentage points over the period of 2008 to 2012.



Capital Debt Service As A Percent of State Revenue

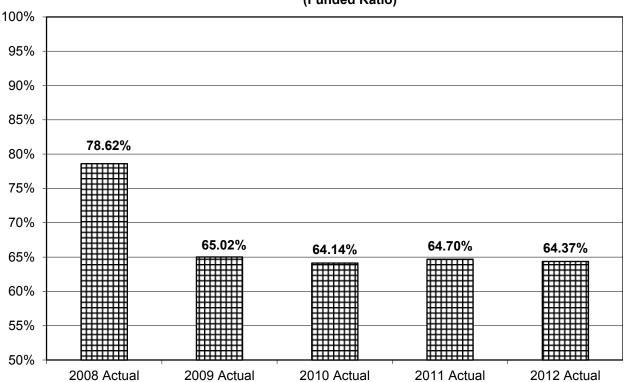
¹³ Report of the Capital Debt Affordability Committee on Recommended Debt Authorizations for Fiscal Year 2014, October 2012

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: Improved funded ratio of the System, achieving 100% funding by 2030

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).¹⁴ 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.¹⁵ The funded ratio steadily declined from 2008 through 2010 by an overall 14.48 percentage points (18.4%). 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.¹⁶ The funded ratio remained relatively stable from 2009 to 2012.¹⁷ 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. Although various reforms have been implemented recently, underfunding coupled with weak investment returns have been factors considered by the three nationally recognized bond rating agencies.¹⁸



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

¹⁴ Comprehensive Annual Financial Report (CAFR) 2012 for the Maryland State Retirement and Pension System

¹⁵ Comprehensive Annual Financial Reports 2005 through 2012 for the Maryland State Retirement and Pension System ¹⁶ CAFR's 2008 and 2009

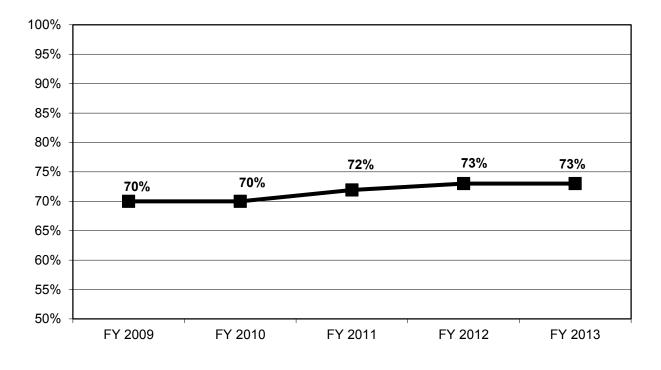
¹⁷ The unfunded liability is mitigated by the corridor funding method and the smoothed value basis for measuring plan assets.

¹⁸ Standard & Poors Ratings Services, Maryland's Series 2012 General Obligation Bonds Rated "AAA", Outlook Stable, July 19, 2012

Indicator 2.1: Percent of the total legislative appropriation for Executive departments¹⁹ covered by StateStat

Target: 75% 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. StateStat focuses 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.²⁰ Currently 16 (73%) of them participate in StateStat²¹ and account for nearly three quarters of the total legislative appropriation for fiscal year 2013. From 2009 to 2013, the percent of the total legislative appropriation for Executive departments covered by StateStat increased by 4.3%. The percent covered by StateStat has remained static for fiscal years 2011 through 2013.



Percent of the Total Legislative Appropriation for Executive Departments Covered by StateStat

¹⁹ 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.

²⁰ 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

²¹ 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 Disabilities, and the Dept. of Aging.