# 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

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#### **TABLE OF CONTENTS**

EXECUTIVE SUMMARY	i
1. ECONOMIC DEVELOPMENT AND JOBS	1
Performance Detail – Economic Development and Jobs	
2. REDUCED TAXES AND FEES	6
3. FISCAL RESPONSIBILITY	
Performance Detail – Fiscal Responsibility	11
4. GOVERNMENT REFORM	
5. IMPROVED QUALITY OF LIFE	
Significant Performance Trends - Education	14
Significant Performance Trends – Public Safety	
Significant Performance Trends – Health and Human Services	
Significant Performance Trends - Environment	
Performance Detail – Improving Quality of Life	

#### EXECUTIVE SUMMARY

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 Hogan Administration's Plan is currently being finalized, and this report is organized based on that draft plan.

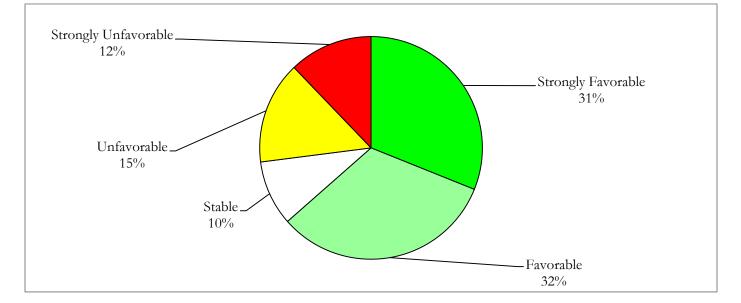
Data concerning each of the performance measures included in the State Plan are presented within the following Hogan Administration priority areas:

- Economic Development and Jobs (11 metrics)
- Reduced Taxes and Fees
- Fiscal Responsibility (6 metrics)
- Government Reform
- Improved Quality of Life (57 metrics)

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 of data.<sup>1</sup> Five years of comparable data are not available for all measures. The percent change for measures with less than five years of data is calculated using available data (all percentages are rounded to establish categories).

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

The following chart summarizes overall performance for measures in the State Plan. The majority of measures are moving in a favorable direction, 63.5%. Performance is stable for 8.1% of measures and, when combined, 73% of measures are either moving in a favorable direction or are stable.



Both a summary table and a detailed presentation of performance trends are included in the following pages for each priority area.

<sup>&</sup>lt;sup>1</sup>For determining trends when the beginning value is zero, the difference between zero and the ending value is calculated rather than a percent change.

#### 1. ECONOMIC DEVELOPMENT AND JOBS

Performance Status (percentages are rounded)	Number of Indicators	Percent
Favorable (Change >10%)	2	18.2%
Favorable (3% to 10%)	4	36.4%
Stable (-2% to 2%)	0	0.0%
Unfavorable (-3% to -10%)	4	36.4%
Unfavorable (< -10%)	1	9.1%
Total	11	100%

#### Performance Overview

In the area of Economic Development and Jobs, 55% of Maryland indicators either performed favorably or held stable between the 2013 and 2017 report years. The next section highlights and explains the factors behind significant performing trends, but particularly notable favorable trends were seen in the following areas:

- the Maryland Port Administration total general cargo tonnage grew 5.4%, from 9.3 million to 9.8 million,
- the number of passengers at BWI Marshall airport reached a new record of 23.8 million, representing growth of 6.4% over five years,
- State sales tax revenue attributable to tourism jumped 17.5%, from \$377.5 million to \$443.5 million,
- annual growth in per capita income increased from 4.41% to 6.36%, and
- the number of jobs created or retained through Department of Commerce facility attraction and business technical assistance activities grew by 6.9%.

The following section discusses significant trends in performance.

#### Significant Performance Trends

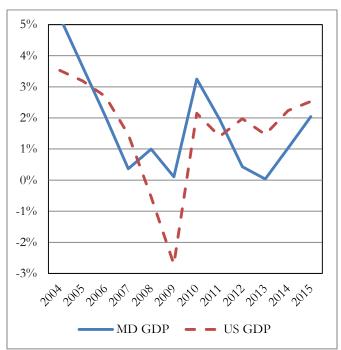
#### Indicator 1.1: Maryland's growth in total real gross domestic product (GDP) (in millions of chained [2009] dollars)

Total real GDP by state is an inflation-adjusted measure of each state's production, wherever sold, that is based on national prices for the goods and services produced within that state. The all industry total includes all private industries and government. Over the period of 2011 to 2015, Maryland's total real gross domestic product grew by 3.6%, compared to 8.5% growth nationwide.

**Exhibit 1.1** displays the Maryland and nationwide trends over the past decade. It shows that Maryland's economy generally performed more strongly than the U.S. as a whole from 2003 through 2011 (except 2006 and 2007), but that trend reversed in 2012. With about 5% of jobs

and 11% of wages in Maryland directly tied to the federal government, and even more indirectly impacted by the federal government<sup>2</sup>, a large part of slow GDP growth in Maryland is related to the pullback in federal spending in recent years<sup>3</sup>. However, it is notable that the gap between U.S. and Maryland growth has narrowed significantly over the past four years, from -1.5% to -0.5%.

Exhibit 1.1 Annual Gross Domestic Product Growth, Maryland
and the U.S. 2004-2015



#### Indicator 1.2: State Economic Momentum Index

The Index of State Economic Momentum, developed by Federal Funds Information for States (FFIS), 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 three components are averaged, the national average is set at zero, and each state's score is then expressed as a percentage above or below the national average.

In December 2016, Maryland was ranked  $22^{nd}$  among states and lagged only slightly behind the national average with a value of -0.07. Comprising this overall value, Maryland ranked as follows:

a. 14<sup>th</sup> on change in personal income with 4.0% growth compared to the national average of 3.5%,

<sup>&</sup>lt;sup>2</sup> Maryland Department of Legislative Services. 2016. Spending Affordability Briefing, October 25, 2016.

<sup>&</sup>lt;sup>3</sup> Maryland Board of Revenue Estimates. 2016. Estimated Maryland Revenues, December 8, 2016.

- b. 26<sup>th</sup> in employment growth with 1.1% growth compared to the U.S. growth rate of 1.5%, and
- c. 26<sup>th</sup> in state population change as the state gained 0.36% versus the U.S. population growing by 0.70%.

In the past three years Maryland has moved from negative performance on this metric (-0.55) to very near the national average.

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

General cargo includes foreign and domestic waterborne cargo - it does not include bulk commodities, container weight, empty containers, or domestic non-waterborne cargo.<sup>4</sup> 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, there are many factors outside of MPA's influence that impact the movement of freight, i.e. national and world economic trends, labor costs (here and at competing ports), the value of the U.S. dollar, rail and highway service and rates, prolonged weather phenomena, and changes in vessel sizes.<sup>5</sup>

After experiencing a sharp decline during the global recession,<sup>6</sup> general cargo tonnage has experienced strong 5.4% growth over the past five years. In fact, the 9.8 million tons that moved through the Port in fiscal 2016 set a new record for the Port. Nationally, the Port has been named the top U.S. port for handling autos and light trucks, farm and construction machinery, imported gypsum, imported sugar, and imported aluminum. The Port is an economic engine in Maryland, generating about 13,650 direct jobs, and about 127,000 jobs that are linked to Port activities.<sup>7</sup>

The Hogan Administration has committed to supporting the Howard Street Tunnel Project, which will allow for double-stacked container trains, transforming the Port of Baltimore and dramatically increasing production.

# Indicator 1.5: Total State sales tax revenue attributable to tourism (millions)

This performance measurement reflects revenue collected by the Comptroller in specific sales tax categories that are tourism-related. All eight performance measurements under this metric saw increases in fiscal 2016.<sup>8</sup> With the exception of fiscal 2010 when there was a small decline, this performance metric has seen annual growth since it was first tracked in fiscal 2005.

In fiscal 2015, Maryland welcomed 40.5 million visitors, a six percent increase from fiscal 2014 which outpaced the growth of national visitation by a full percentage point.

#### Indicator 1.6. Percent of MD State Highway Administration (SHA) Network in overall preferred maintenance condition

The overall condition of the State Highway Administration Network reflects how well asset management strategies, improved operations, and technology have sustained the quality and safety of existing roadways.9 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 desired conditions.<sup>10</sup> While against Maryland's performance had recently fluctuated between 82% and 86%, in 2015 it dropped to 79%.

In response to the need for highway improvements, Hogan Administration spending on maintenance activity jumped by 17.5% in fiscal 2016 and remains significantly higher in fiscal 2017 and fiscal 2018 than prior years. In addition, overall capital projects funding is over \$1.5 billion in fiscal 2018 to improve Maryland's roadways and infrastructure.

# Indicator 1.7: Ratio between Maryland's unemployment rate and the U.S. rate

While the ratio between Maryland's unemployment rate and the U.S. rate has grown in recent years, from 0.84 in 2012 to 0.92 in 2016, Maryland's rate continues to be lower than the U.S. unemployment rate. Between 2012 and 2016, the difference between the two ranged between

<sup>&</sup>lt;sup>4</sup>Maryland Department of Transportation 2010 - 2012 Annual Attainment Reports on Transportation System Performance, and Maryland Port Administration fiscal year 2012 MFR Performance Measure Profile

<sup>&</sup>lt;sup>5</sup>Maryland Department of Transportation, Maryland Port Administration, FY 2015 MFR budget book submission; Maryland Department of Transportation 2012 Annual Attainment Report on Transportation System Performance

<sup>&</sup>lt;sup>6</sup>Maryland Department of Transportation 2010 - 2012 Annual Attainment Reports on Transportation System Performance

<sup>&</sup>lt;sup>7</sup>Governor Larry Hogan, CSX CEO Michael Ward Confirm Commitment to Howard Street Tunnel Project," Press Release October 24, 2016

<sup>&</sup>lt;sup>8</sup>Fiscal Year 2018 MFR Submission, Department of Commerce

<sup>&</sup>lt;sup>9</sup>2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation

<sup>&</sup>lt;sup>10</sup>Managing for Results Performance Measure Profile Fiscal Year 2012, State Highway Administration, Maryland Department of Transportation

0.1% to 1.3%. **Exhibit 1.2** compares the Maryland and U.S. employment rate over the past decade.

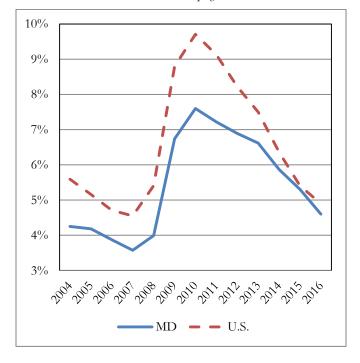


Exhibit 1.2 MD and U.S. Unemployment Rate, 2004-2016

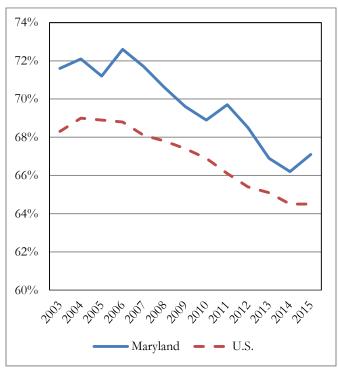
# Indicator 1.9: Annual percent change in Maryland per capita personal income (estimated)

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 \$4,000 to \$10,000) the national per capita personal income for the past fifteen years. Maryland has a large Federal employment base, as well as an economic concentration in industries such as information and professional services that frequently require college and advanced degrees, and therefore pay higher salaries. Maryland's per capita income has increased annually for the past five years. In 2015, the most recent year where data is available, growth was 6.4% which is the strongest growth in 10 years.

#### Indicator 1.10: Homeownership

Homeownership rates are another key economic measure, with higher rates indicating market stability. **Exhibit 1.3** displays that, similar to other indicators, Maryland's homeownership rates have historically exceeded the U.S. rate. While Maryland has performed less well over the past five years, with homeownership declining from 69.7% in 2011 to 67.1% in 2014, the **Exhibit** clearly shows that this decline is a national trend that started in 2004. In fact, 2015 represented the first uptick in the state homeownership rate in five years, an indication of Maryland's improving economy.

Exhibit 1.3 MD and U.S. Homeownership Rate, 2003-2015



#### Performance Detail – Economic Development and Jobs

#### Key Performance Area 1 – Data by Report Year

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
<b>1.1.</b> Maryland's growth in total real gross domestic product (in millions of chained [2010] dollars) (CY 2011 - 2015)	U.S. Commerce BEA	316,774*	318,146*	318,255*	321,539*	328,103	3.6%	N/A
<b>1.2.</b> State Economic Momentum Index (CY 2012 - 2016)	FFIS	0.29	-0.19	-0.55	-0.09	-0.07	-124.1%	N/A
<b>1.3.</b> Maryland Port Administration total general cargo tonnage, (millions) (FY 2012 - 2016)	MDOT	9.3	9.6	9.6	9.7	9.8	5.4%	N/A
<b>1.4.</b> Annual BWI Marshall passenger growth rate - Number of passengers (CY 2011 - 2015)	MDOT	22.4	22.7	22.5	22.3	23.8	6.4%	N/A
<b>1.5.</b> Total State sales tax revenue attributable to tourism (millions) (FY 2012 - 2016)	Commerce Comptroller	\$377.5	\$392.0	\$401.4	\$425.9	\$443.5	17.5%	N/A
<b>1.6.</b> Percent of MD State Highway Administration network in overall preferred maintenance condition (CY 2011 - 2015)	MDOT	82.2%	85.1%	83.4%	83.4%*	78.8%	-4.1%	Maintain at or above 84%
<b>1.7.</b> Ratio between Maryland's unemployment rate and the U.S. rate (FY 2012 - 2016)	U.S. DOL/BLS	0.8425*	0.8773*	0.9239*	0.9722*	0.9239	9.7%	N/A
<b>1.8.</b> Rate that adult employment trainees enter employment (FY 2012 - 2016)	DLLR	81.5%	79.5%	80.3%	78.6%	75.4%	-7.5%	Meet or exceed federal standard
<b>1.9.</b> Annual percent change in Maryland per capita personal income (CY 2011 - CY 2015)	U.S. Commerce BEA	4.41%*	2.39%*	1.03%*	1.32%*	6.36%	44.2%	N/A
<b>1.10.</b> Homeownership (CY 2011 - CY 2015)	U.S. Census	69.7%	68.5%	66.9%	66.2%	67.1%	-3.7%	N/A

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
<b>1.11.</b> Number of jobs created/retained through Department of Commerce facility attraction and business technical assistance activities (FY 2012 - 2016)	Commerce	10,576	10,829	10,627	*11,761	11,305	6.9%	N/A

\*Numbers have been updated since last year's report.

#### Performance Discussion

As said by Governor Hogan, "Reducing and eliminating taxes, tolls, and fees not only helps to streamline state government, it has a direct impact on the livelihood of Maryland citizens. Our goal is to make it easier to live, work, and retire in our state, and continue to change Maryland for the better."<sup>11</sup>

While tax and fee reductions do not easily lend itself to performance metrics, this section of the Performance Report highlights the steps the Hogan Administration has taken to reduce taxes and fees.

#### **Tax Reductions**

Taxes in Maryland are set in statute, and therefore the Administration requires cooperation from the General Assembly to pass tax relief legislation. During the 2015 Legislative Session, the Governor introduced a number of tax relief bills, including legislation:

- exempting all military retirement income from the income tax with a four year phase-in,
- exempting any retired law enforcement, fire, rescue or emergency personnel from tax on retirement income specific to their service as a first responder,
- repealing the "rain tax,"
- eliminating the personal property income tax for businesses that have less than \$10,000 in personal property, and
- repealing the automatic gas tax increases passed in 2013.<sup>12</sup>

While the General Assembly did not pass most of the legislation, the Governor did sign into law bills increasing the military retirement income exemption and repealing the "rain tax" in May 2015.

During the 2016 Legislative Session, the Hogan Administration introduced over \$480 million in tax relief measures, including reductions for retirees, small businesses, working families, and manufacturers. Again, the General Assembly failed to pass most the legislation with the exception of a bill establishing a tax credit for aerospace, electronics, or defense contract businesses to encourage the development of these industries in Maryland. However, the Governor also supported the passage of several additional bills which reduced the tax burden on Maryland residents and companies, including legislation:

- establishing a new tax credit of up to \$5,000 for individuals who have incurred \$20,000 or more in undergraduate student loan debt and have at least \$5,000 in outstanding undergraduate debt and
- reducing the annual interest rate on tax deficiencies and refunds, from the current rate of 13 percent to 9 percent by 2020, lowering the interest rate burden on taxpayers.

#### Fee Reductions

In May 2015, the Hogan Administration rolled back tolls statewide, saving Maryland citizens \$270 million over the next five years. On September 15, 2015, the Governor announced that eight agencies would reduce or completely eliminate hundreds of individual fees previously levied by Maryland's government, saving Marylanders an estimated \$51 million over the next five years.<sup>13</sup>

Major fees reduced include:

- Reduction to \$1 for homeless identification cards
- Elimination of \$1.50 monthly EZ-Pass fees
- \$4 reduction in vehicle emissions test fees for selfservice kiosk customers
- 10% reduction in numerous business license fees associated with the sale and registration of new and used motor vehicles
- Reduction or elimination of outdoor advertising fees
- \$10 reduction in MVA's vehicle title correction fee
- A range of business license fees in the Prevention & Health Promotion Administration
- Numerous food manufacturing and processing license fees
- Reduction in the three-year controlled dangerous substance (CDS) registration fee
- \$2,000 reduction in ambulatory surgery center fees
- Multiple reductions in real estate broker, salesperson and home appraisal license fees
- Numerous fees associated with financial regulations
- \$65 reduction in annual license fee for veterinarians
- 20% across-the-board reduction in lab fees for animal health diagnostics (115 individual fees)

<sup>&</sup>lt;sup>11</sup> "Governor Larry Hogan Announces Additional \$60 Million in Fee Cuts," Governor Hogan Press Release May 12, 2016.

<sup>&</sup>lt;sup>12</sup>"Governor Hogan Unveils Tax Relief Measures," Governor Hogan Press Release February 4, 2015.

<sup>&</sup>lt;sup>13</sup>"Governor Hogan Eliminates or Cuts Fees Statewide, Saving Marylanders \$51 Million Over Five Years," Governor Hogan Press Release September 15, 2015.

- Elimination or reduction of business fees associated with asbestos contractor licenses
- Elimination of license fees for underground storage tank technicians, removers and inspectors
- Elimination of state park boat launch fee for seniors with Golden Age Pass
- Elimination of \$25 child support income tax intercept fee

Since then, the Hogan Administration has continued its work in reducing the burden of fees on State residents and businesses with the following actions:

- Introduction and passage of Administration 2016 legislation reducing the fee for certified copies of birth and death certificates from \$24 to \$10.
- Support of the passage of 2016 legislation eliminating the Maryland Health Insurance Plan (MHIP) and the assessment fee on hospital rates that was in place to pay for the operation and administration of the program. Individuals who used to be covered under the MHIP program are now eligible to get insurance through the Maryland Health Benefit Exchange, and the elimination of the assessment will lower hospital costs for residents throughout Maryland.
- In May 2016, the Hogan Administration announced 155 additional fee reductions and eliminations across state government, including reductions to the cost of EZPass transponders, reduced admission to state parks for veterans, cuts to the child support collection fee, and a \$15 million cut to the surcharge paid by every single Marylander who gets a phone bill each month.<sup>14</sup>

These May 2016 reductions bring total fee, tax, and toll reductions across state government to \$660 million since the Administration took office.

<sup>&</sup>lt;sup>14</sup> "Governor Larry Hogan Announces Additional \$60 Million in Fee Cuts," Governor Hogan Press Release May 12, 2016.

#### Performance Overview

<b>Performance Status</b> (percentages are rounded)	Number of Indicators	Percent
Favorable (Change >10%)	0	0.0%
Favorable (3% to 10%)	2	33.3%
Stable (-2% to 2%)	1	16.7%
Unfavorable (-3% to -10%)	2	33.3%
Unfavorable (< -10%)	1	16.7%
Total	6	100%

In the area of Fiscal Responsibility, three out of six indicators either performed favorably or held stable in between the 2013 and 2017 report years. The next section highlights and explains the factors behind significant performing trends.

#### Significant Performance Trends

# Indicator 3.1: Bond ratings from three nationally recognized bond rating agencies for each issuance of State General Obligation Bonds

Maryland uses the proceeds from the issuance of General Obligation Bonds to finance 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. 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.

# Indicator 3.2: Capital debt service as a percent of State revenue

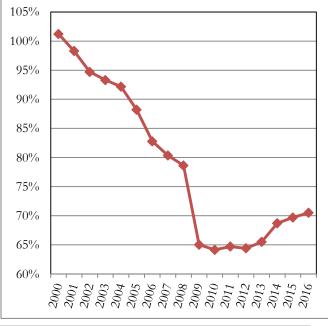
Capital debt service as a percent of State revenue measures whether the State can pay the debt service, and considers the ability of the State to manage debt over time to achieve goals. Tax supported debt is tracked by the Capital Debt Affordability Committee. Under criteria imposed by the Capital Debt Affordability Committee, debt service on State tax-supported debt may not require more than 8% of revenues. Each year during the period of 2012 through 2016, the capital debt service as a percent of State revenue was below the affordability benchmark of 8%. Overall there was a 9% increase in the debt to revenue ratio from 2012 to 2016. Maintaining debt below the threshold has contributed to the continued triple A bond ratings given by the bond rating agencies for Maryland's General Obligation bond issues. The Hogan Administration has continually limited capital budget borrowing to \$995 million in order to constrain growth in debt service payments and begin to bend the curve back towards sustainable, affordable levels.

# Indicator 3.3: Asset to liability ratio for the MD State Retirement and Pension System (funded ratio)

The funded ratio measures the ability of the Maryland State Retirement and Pension System to pay all projected retirement benefits as they become due. The funded ratio is the primary measure of funding progress, and the System is fully funded if the funded ratio is greater than or equal to 100%. When analyzing the overall funded status, it is important to keep in mind that a funding plan is over a long horizon in which fluctuations in the market are expected.

Pension reform legislation was passed during the 2011 legislative session with the goal of improving the funded ratio of the System. **Exhibit 3.1** displays that, in fiscal 2016, the results of that reform are starting to be realized. The funding level has ticked up to 70.5% from a low of 64.1% in fiscal 2010. In fiscal 2017, the Governor provided \$150 million for the pension system beyond what is actuarially required.

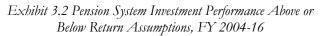
Exhibit 3.1 Maryland State Retirement and Pension System Funded Ratio, FY 2000-16



Indicator 3.4: Difference between the actual rate of return for the composite portfolio and the actuarial return assumption set by the State Retirement Agency (SRA) Board of Trustees over one year

The State pension system, including over 300,000 active and retired members, is funded through three sources of income: (1) State government contributions, (2)contributions from employees in the system, and (3) investment returns. Employee contribution rates are set in statute, but when the Board of Trustees is determining how much the State budget should include in order to move the system towards full funding, they must make certain assumptions regarding how much investment income the system will collect. If that assumption is exceeded, the State can contribute less in future years, but if investment returns fall short the system is short-funded and the State budget has to make up the difference in future years. In June 2013, the Board lowered its annual investment return assumption from 7.75% to 7.55% over four years.

**Exhibit 3.2** shows the degree to which the system either fell below (-%), met (0%), or exceeded (+%) this assumption over the past twelve years. In eight of the years, returns were strong. However, the impact of the recession and slow recovery can clearly be seen in the years where the System failed to hit its investment target. It is this low performance that has led to discussions regarding the possibility of further lowering the return assumption.



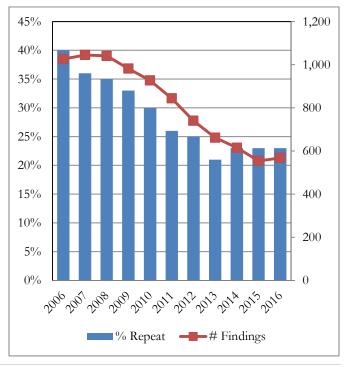


# Indicator 3.5: Percent of repeat audit findings for State agencies

The Maryland Office of Legislative Audits (OLA) is a unit within the Department of Legislative Services which conducts audits and evaluations of Maryland State government agencies and local school systems. Fiscal compliance audits are conducted of each State agency within the Executive and Judicial Branches every three to four years to evaluate internal controls and compliance with certain State laws and regulations. For certain agencies, this category also includes financial statement audits and follow-up reviews of actions taken to implement audit recommendations.

**Exhibit 3.3** displays a clear decline in the number of agency repeat audits findings over the past decade, as well as a decline in the number of reported audit items. Since 2005, the overall percentage of repeat audit findings has decreased from 45% to 23% in 2016. While the percentage of repeat findings has remained virtually unchanged since 2013, the number of findings has continued to decline. OLA has attributed the decline to an increased emphasis among agencies on implementing audit recommendations. This emphasis is partially due to the work of the Audit Compliance Unit within the Maryland Department of Budget and Management. The Unit works with Executive Branch agencies to reduce repeat audit findings by assuring that corrective action plans are adequate and successfully implemented.

Exhibit 3.3 Percentage of Repeat Audit Findings and Total Number of Audit Findings, FY 2006-16



# Indicator 3.6: Projected percentage of ongoing revenues covering ongoing spending based on the Governor's 5-year plan

The Budget Highlights document each year includes a 5year general fund budget projection showing how much of projected revenues will cover projected expenditures over the next five years. Even though this metric has performed negatively over the past five years, declining from 99.8% to just 93.8%, this does not tell the entire story.

When Governor Hogan took office in 2015, he inherited a large looming budget gap. Quick action was taken to resolve the budget deficit, and by the time the fiscal 2017 budget was introduced in January 2016 it was in full structural balance as shown by the 100.1% value on this metric in last year's report.

However, revenues have begun to soften somewhat as the economy slowed nationwide during 2016. Actual revenues for fiscal 2016 came in \$250 million below the estimate. This shortfall carried forward into fiscal 2017, where revenues were revised downward by a total of \$379 million. Finally, fiscal 2018 revenues were written down by a total of \$442 million, with General Fund revenues now projected to come in \$55 million less than the FY 2017 budget approved by the General Assembly during the 2016 Legislative Session.

The Administration took immediate action to address this shortfall by going to the Board of Public Works with midyear reductions. In order to resolve the remaining fiscal 2017 shortfall Governor Hogan has limited deficiency spending, made additional budget reductions, and made prudent use of the Rainy Day Fund surplus greater than five percent of state revenues.

In order to address budget gaps beyond fiscal 2017, the Governor's fiscal 2018 budget is both fiscally responsible and structurally balanced. It allocates less spending in general funds than last year while also leaving \$1 billion in cash reserves for any future write downs in revenues. In fact, the budget holds total fund growth to 1.1%, the second-lowest year-over-year percentage increase since at least 1970.

#### Performance Detail – Fiscal Responsibility

#### Key Performance Area 3 – Data by Report Year

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
<b>3.1.</b> Bond rating from all three nationally	Treasurer's Office	AAA	AAA	AAA	AAA	AAA	No change	Maintain AAA
recognized bond rating agencies for each issuance of State General								
Obligation Bonds (maintain AAA rating)								
(CY 2012 - CY 2016) <b>3.2.</b> Capital debt service as a percent of State revenue (FY 2012 – FY 2016)	CDAC	6.64%	6.60%	6.86%	6.97%*	7.27%	9.5%	At or below 8%
<b>3.3.</b> Asset to liability ratio for the MD State Retirement and Pension System (funded ratio) (FY 2012 – FY 2016)	State Retirement and Pension System	64.4%	65.5%	68.7%	69.7%	70.5%	9.5%	100% funded by 2039
<b>3.4.</b> Difference between the actual rate of return for the composite portfolio and the actuarial return assumption set by the SRA Board of Trustees over one year (FY 2012 – FY 2016)	State Retirement and Pension System	-7.4%	2.8%	6.7%	-4.9%	-6.4%	-13.5%	0.0% or higher
<b>3.5.</b> Percent of repeat audit findings for State agencies (FY 2012 – FY 2016)	DBM	25%	21%	23%	23%	23%	-8.0%	N/A
<b>3.6.</b> Projected percentage of ongoing revenues covering ongoing spending based on the Governor's 5-year plan included in the budget allowance (FY 2014 – FY 2018)	DBM	99.8%	99.2%	99.2%	100.1%	93.9%	-5.9%	N/A

\*Numbers have been updated since last year's report.

#### Performance Discussion

Another major principle of the Hogan Administration is reform: "We must improve our State government's ability to be more responsive to, and to better serve and represent all of our citizens." It is difficult to measure reform efforts; therefore this section of the Performance Report highlights the steps the Hogan Administration has taken to reform State government in Maryland to date.

#### Improving the State's Business Climate

The Governor has introduced and supported a number of bills which would improve Maryland's business climate. In May 2015 he signed several such bills into law, including legislation:

- establishing the Advisory Council on the Impact of Regulations on Small Business,
- establishing the State Customer Service and Business Development Efforts Training Program to improve customer service provided by state agencies to businesses and customers in the state,
- requiring the Motor Vehicle Administration to establish a program to assist veterans and members of the military transitioning out of military service to obtain a commercial driver's license, and
- limiting the amount of a bond that a small business has to post to proceed with an appeal or verdict.

In addition, the Department of Commerce was renamed as of October 1, 2015 and has since (1) placed more of its team members in customer-facing positions, (2) worked to expand its team of business representatives who can assist businesses with everything from expanding and finding a new location to financing assistance and navigating regulations, (3) started hiring more regional and strategic industry representatives and putting more emphasis on core and growing industries in Maryland including life sciences, cybersecurity, manufacturing, and aerospace and defense, and (4) begun plans to add a liaison to the State's higher education community, which combines two of the main ingredients for Maryland's economic success-highly educated workers and cuttingedge research.<sup>15</sup> The end result is a Department that better serves both Maryland's businesses and its citizens.

The progress described under Reduced Taxes and Fees has also gone a long way towards reducing the financial burden that government has upon businesses in the state. In July 2015, the Governor signed Executive Order 01.01.2015.20, establishing the Maryland Regulatory Reform Commission. The Commission was tasked with resolving regulatory issues that impact Maryland's business environment, while still continuing to protect the health, safety, and welfare of Marylanders. The Commission's initial report was submitted December 2, 2015, based on input from more than 500 citizens obtained through six public outreach meetings, as well as departmental meetings and commission research. The final report was completed in December 2016 and included 187 recommendations.

The Administration is currently reviewing the recommendations and developing plans to implement all of them.

#### Procurement Reform

In February 2016, Governor Hogan signed Executive Order 01.01.2016.05, establishing the Commission to Modernize State Procurement, a bipartisan commission that conducted a comprehensive review of Maryland's procurement code and regulations. Due to an outdated approach, as well as a lack of modern technology, the State's current process for procurement is considered unpredictable and discourages full participation among Maryland citizens and the business community. "Over the past year, it has become apparent that Maryland's procurement system is a patchwork of archaic laws and processes that are inefficient, ineffective, and result in wasted taxpayer dollars," said Governor Hogan. "By modernizing the way Maryland deals with procurement, we will create a predictable, consistent, and transparent system, and get the best value for every dollar we spend exactly what Marylanders expect and deserve."

In December 2016, the 19 member Commission released its final report, including 57 recommendations. The Administration is currently reviewing the recommendations and developing plans to implement them.

In December 2016, the Administration unveiled a new website, <u>procurement.maryland.gov</u>, as a comprehensive communications portal providing online access to Maryland procurement information for all policymakers, vendors, and citizens.

**Regulatory Reform** 

<sup>&</sup>lt;sup>15</sup>"Governor Larry Hogan Announces Formation of Maryland Department of Commerce," Press Release, October 1, 2015.

#### **Government Efficiency**

The Hogan Administration's first years have included multiple steps to enhance the efficiency of State services. In July 2015 the Governor announced the closure of the Baltimore City Detention Center, ending a long history of corruption, appalling conditions, and waste. In the fall of 2015, the Administration began the consolidation of (a) certain human resources functions, which were spread inefficiently throughout a multitude of agencies, under the Department of Budget and Management's Office of Personnel Services and Benefits and (b) certain information technology functions, which were also widespread, under the Department of Information of Technology. This consolidation will annually save State tax dollars and improve efficiency.

On May 10, 2016, Governor Hogan announced the formation of a new Office of Transformation and Renewal which will lead a multiyear effort to optimize government departments and agencies within the executive branch. Working closely with members of the Cabinet as well as the legislature, the Office's primary focus will be on three areas: efficiency improvements, greater accountability and performance benchmarks, and improved customer services throughout Maryland state government.

Also in May 2016, the Governor signed Executive Order 01.01.2016.06, rescinding 72 obsolete executive orders issued by previous administrations over the last 46 years. The removal of almost five decades of gubernatorial directives that are either outdated or superseded by legislation reflects the ongoing effort of the Hogan administration to modernize and streamline state government, including the removal of archaic and duplicative regulations. Rescinded orders included:

- 1970.10 The oldest in COMAR, on June 15, 1970, it created the Science Advisory Council which has not met since 1996.
- 1987.29 Created in late 1987, the Child Day Care Coordinator is a defunct position in an agency that was long ago merged with the Maryland State Department of Education.
- 1990.01 Construction Industry Employers Advisory Council is among numerous committees, task forces, and boards that are still in active executive orders in COMAR, but are listed in the Maryland Manual as "defunct units."
- 1998.18 This executive order makes reference to an Interagency Nutrient Reduction Oversight Committee, which is defunct and has not met since July 2001.

• 2011.07 – The Maryland War of 1812 Bicentennial Commission, which was created in 2011, completed its work in 2012 and has not met since.

#### **Enhancing Customer Service**

In June 2016, Governor Hogan launched the Customer Service Initiative, a continuous program designed to foster improvements in customer service across Maryland state agencies. The initiative focuses on three core deliverables: a renewed focus on a strong service culture in state agencies, improved customer service training for state employees, and the establishment of new service performance metrics which will allow the administration and all Marylanders to track improvements in customer service over time.

A key provision of the initiative is a requirement for every state agency to develop and maintain a plan to continually improve service delivery, including minimum response times for phone, written, and in-person inquiries and services. These plans were due by October 1, 2016, are required to be resubmitted each fall for review, and will be reviewed annually by the Governor's Customer Service Workgroup. The Workgroup, which reports to the Governor, will measure improvements in service delivery using key performance metrics established by the Office of Performance Improvement. These metrics will also be published online for review by the public.

Finally, to solicit direct feedback from the public, in November 2016 the Workgroup launched an online survey where citizens can rate an agency's service. The data collected by the survey will allow the state to track customer service performance among agencies and make targeted improvements as needed.

Performance Status (percentages are rounded)	Number of Indicators	Percent
Favorable (Change >10%)	21	36.8%
Favorable (3% to 10%)	18	31.6%
Stable (-2% to 2%)	6	10.5%
Unfavorable (-3% to -10%)	5	8.8%
Unfavorable (< -10%)	7	12.3%
Total	57	100%

#### Performance Overview

The final major Hogan Administration priority, improving quality of life, encompasses many areas of performance across the State. Overall, 78.9% of related indicators either performed favorably or held stable between the 2013 and 2017 report years. These indicators can be broken down into four different categories: (1) Education, (2) Public Safety, (3) Health and Human Services, and (4) Environment. The next section highlights and explains the factors behind significant performing trends in each category, but particularly notable favorable trends were seen in the following areas:

- Education
  - The percent of high school dropouts fell from 11.22% to 8.08%.
  - The percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities jumped by 20.6%.
  - The number of higher education graduates in science, technology, engineering, and math (STEM) fields grew by 29.7%, from 11,592 to 15,039.
- Public Safety
  - The percent of all Department of Public Safety and Correctional Services (DPSCS) cases closed where the offender was employed at closing grew by 17.9%, from 28% to 33%.
  - Youth recidivism, or the percent of Department of Juvenile Services (DJS) youth re-adjudicated within one year after release from all residential placements fell by 9.4%.
  - The Part I crime offense rate per 100,000 went from 3,355 to 2,652, a decline of 21.0%.
- Health and Human Services
  - Maryland's uninsured rate was reduced by almost half in the past four years, from 14.4% to 7.5%.
  - The percent of children fully immunized grew from 76.9% to 84.3% between 2011 and 2015.

- The rate of new HIV diagnoses dropped 8.6% between 2011 and 2015.
- The Maryland prevalence of household-level very low food security over a 3-year average fell by 32.1%, from 5.6% to 3.8%.
- The rate of live births to adolescents between 15 and 19 plummeted by 32.8% in the past five years.
- The percent of adults with serious mental illness who receive mental health services grew by 16.1%.
- Environment
  - The Maryland Chesapeake Bay Habitat Index improved by 45.5% over five years.
  - Acreage of submerged aquatic vegetation (SAV) in the Maryland portion of the Bay grew by 11%.
  - The oyster biomass index increased by 47.5%, jumping from 1.2 to 1.8.
  - The number of waters impaired by nutrients per the Integrated Report of Surface Water Quality fell from 20 to just 7.
  - The three-year average of days that eight-hour ozone standards were exceeded declined by 72.8% from 27.0 to 7.3.
  - The number of children under 6 years of age with elevated blood lead levels dropped by 32.1%.

The following section discusses significant trends in performance.

#### Significant Performance Trends - Education

#### Indicator 5.1: Percent of students entering Kindergarten demonstrating Full Readiness on the Kindergarten Readiness Assessment

A comprehensive new Kindergarten Readiness Assessment (KRA) was administered for the first time in fall 2014 (AY 2015). This assessment is part of Maryland's new Ready for Kindergarten: Maryland's Early Childhood Comprehensive Assessment System (R4K) which was developed to align to more rigorous PreK-12 College and Career-Ready Standards. Ready for Kindergarten builds on and advances the Maryland Model for School Readiness (MMSR), which was the statewide kindergarten assessment tool in use from 2001 through 2014.<sup>16</sup>

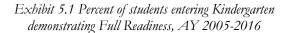
While the 2014-2015 and 2015-2016 assessments showed a large drop from prior years, this drop was expected due

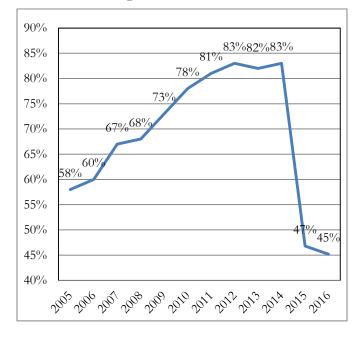
<sup>&</sup>lt;sup>16</sup>Fiscal year 2017 MFR Performance Discussion, Maryland State Department of Education.

to implementation of a new testing mechanism. Because it is an entirely different assessment, the result cannot be compared to results from prior years and the percent change is not included in the total count for this report. The results from the fall 2014 and 2015 KRA establish a new baseline for measuring kindergarten readiness going forward. **Exhibit 5.1** shows that, absent this drop due to new tests, Maryland saw 51% growth in performance over the past decade. 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.<sup>17</sup>

#### Indicator 5.3: Prekindergarten enrollment

The increase in the number of students enrolled in prekindergarten in Maryland—from 28,850 in 2012 to 30,891 in 2016—reflects a growing national emphasis on the importance of prekindergarten for student achievement. In fiscal 2015, \$4.3 million in new State funds were provided to expand access to prekindergarten to low-income families. The following year, the Hogan Administration applied for and obtained \$15 million in annual new federal grants for four years starting in fiscal 2016. The Governor's fiscal 2018 budget commits an additional \$3.7 million in funding to continue to expand access to prekindergarten.





<sup>&</sup>lt;sup>17</sup>Children Entering School Ready to Learn, 2010-2011 Maryland Model for School Readiness, Maryland State Department of Education.

#### Indicators 5.4 and 6.5: High school completion:

- Indicator 5.4: High school graduation rate
- Indicator 5.5: Percent of high school dropouts

Graduation rates and dropout rates are two sides of the same equation regarding high school completion. Completion of high school program requirements indicates students' readiness for post-secondary education and/or employment.<sup>18</sup> At the same time, failure to complete high school is closely linked with decreased employment opportunities, low pay, and limited paths to advancement.<sup>19</sup> Unemployment rates of high school dropouts are nearly three times higher than that of individuals with bachelor's degrees.<sup>20</sup>

From school years 2012 to 2016, Maryland performed strongly in both areas, with high school graduation rates growing from 83% to 87% and dropout rates declining from 11% to 8%. Part of this improved performance is likely due to laws that recently increased the high school drop-out age to 17.

#### Indicator 5.9: Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities

From 2012 through 2016, the percent of bachelor's degrees awarded to racial/ethnic minorities at Maryland colleges and universities increased by 20.6% (32.6% to 39.3%), exceeding the goal of 38% by 2018. The Maryland Higher Education Commission (MHEC) continues to work with the Segmental Advisory Council and representatives of its member campuses to discuss the merits and outcomes of plans designed to increase the degree attainment rate of minority students. MHEC's work on near completers, reverse transfer, and course redesign is expected to increase degree attainment, particularly for students from minority backgrounds. In addition, MHEC will continue to work with the Historically Black colleges and universities to revise and refine the summer bridge programs and other initiatives.

# Indicators 5.11 & 5.12: Percent of Maryland median family income required to cover tuition and fees

- Indicator 5.11: At Maryland public four-year institutions
- Indicator 5.12: At Maryland community colleges

<sup>&</sup>lt;sup>18</sup>Maryland Results for Child Well Being 2009.

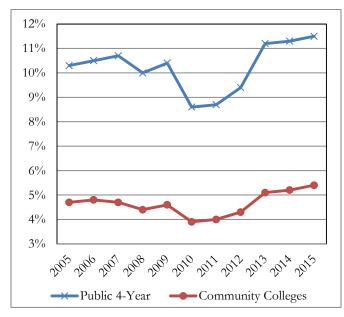
<sup>&</sup>lt;sup>19</sup>Maryland Results for Child Well Being 2009.

<sup>&</sup>lt;sup>20</sup>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

The State is committed to ensuring that more Marylanders have access to its postsecondary institutions, and keeping colleges and universities affordable is a major part of this effort. In fiscal 2006, Maryland's resident tuition at public four-year colleges and universities was the 8th highest in the United States, and resident tuition at Maryland community colleges was the nation's 9th highest. Due to the State freezing tuition at public four year colleges and universities from fiscal 2007 through 2010, and capping growth in tuition for in-state undergraduates at the University System of Maryland at 3% or less in subsequent years, Maryland's tuition costs declined to 24th highest and 15th highest respectively by fiscal 2016.<sup>21</sup>

Unfortunately, sluggish growth in median family income has resulted in unfavorable trends in these metrics in recent years. The percent of median family income required to cover tuition and fees at public four-year institutions has grown from 9.4% in 2012 to 11.5% in 2016, and for community colleges from 4.3% to 5.5%. **Exhibit 5.2** clearly shows this initial increase in college affordability, followed by a decline since the recession.

Exhibit 5.2 Percent of Maryland Median Family Income Required to Cover Tuition and Fees, FY 2005-2015



Given that tuition and fees are growing slightly but persistently faster than family or household income, the Maryland Higher Education Commission (MHEC) plans to consider new approaches to affordability in the development of the next State Plan for Higher Education. The Plan is set to be completed at the end of fiscal 2017.

# Indicator 5.13: Number of graduates in science, technology, engineering, and math (STEM) from Maryland's public and private higher educational institutions

Identifying workforce shortages and determining how to best meet them is important to maintaining a strong economy. STEM jobs represent an ever growing portion of the Maryland workforce, as shown by a report from 2015 ranking Maryland #1 in the nation in terms of STEM job concentration.<sup>22</sup> 15,039 students graduated from Maryland higher education institutions with degrees in a STEM field in fiscal 2016, 29.7% more than in fiscal 2012.

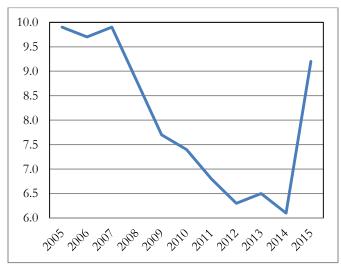
#### Significant Performance Trends - Public Safety

#### Indicator 5.15 and 5.16: Homicide rates per 100,000

- Indicator 5.15: Entire population
- Indicator 5.12: Children and youth ages 0 to 19

The rate of homicides in Maryland declined significantly from 2010 through 2014, with an overall drop of nearly 18% both in the general population and children and youth metrics. However, both metrics reversed trends in 2015. This trend reflects a nationwide one where murder rates grew nationally in 2015.<sup>23</sup> Exhibit 5.3 displays the entire population trend in Maryland through time.

Exhibit 5.3 Homicide Rate per 100,000 Population, 2005-14



<sup>&</sup>lt;sup>22</sup>U.S. Chamber of Commerce Foundation, 2015 Enterprising States Report. Retrieved from

<sup>&</sup>lt;sup>21</sup>College Board, Tuition and Fees by Sector and State over Time, Retrieved from <u>https://trends.collegeboard.org/college-</u> <u>pricing/figures-tables/tuition-fees-sector-state-over-</u> <u>time#Key%20Points</u>.

https://www.uschamberfoundation.org/enterprisingstates/.

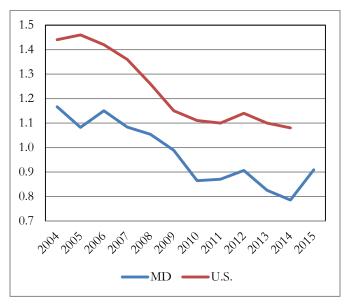
<sup>&</sup>lt;sup>23</sup> Federal Bureau of Investigation, 2015 Report - Crime in the United States.

# Indicator 5.17: Traffic fatality rate per 100 million miles traveled

As shown in **Exhibit 5.4**, Maryland's traffic fatality rate increased from 0.79 to 0.91 between 2014 and 2015 following a seven year decline. However, the **Exhibit** also shows that Maryland's fatality rate has continually remained below national averages. Even though national 2015 data is not yet available, preliminary data indicates that in 2015 the U.S. experienced the largest single-year increase in traffic deaths since 1966.<sup>24</sup>

To address traffic safety challenges, the Maryland Department of Transportation has 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. Recently enacted legislation has also enhanced traffic safety, including 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.<sup>25</sup>

Exhibit 5.4 Traffic Fatality Rate per 100 Million Miles Traveled, 2004-15



<sup>&</sup>lt;sup>24</sup> Gonzales, R. (2016). Traffic Deaths In 2015 Climb By Largest Increase In Decades. NPR.

# Indicator 5.18: Part I crime rate (offenses per 100,000 population)

Part I crimes include murder, rape, robbery, aggravated assault, breaking or entering, larceny-theft, motor vehicle theft, and arson. <sup>26</sup> Overall, the Part I crime rate declined by 21.0% from 2011 to 2015.

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. The Violence Prevention Initiative (VPI) continues to be a primary strategy to track and supervise the State's most violent offenders in a community setting.<sup>27</sup> The Initiative has been enhanced to include drug treatment, mental health counseling, family counseling, and job readiness training. Following the tragedy on September 11, 2001, the Maryland Coordination and Analysis Center (MCAC) was formed which coordinates the efforts of federal, state and local agencies to gather, analyze, and share intelligence information with law enforcement, public health, and emergency responder personnel. The Department of Public Safety and Correctional Services has also implemented a network of police officers and community supervision agents who work together to exchange real time information to respond effectively to non-compliant offender behavior.28

Exhibit 5.5 (next page) shows trends in this measure through time.

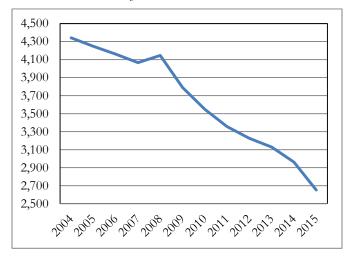
<sup>28</sup>Fiscal year 2014 and 2015 MFR Performance Discussion, Department of Public Safety and Correctional Services

<sup>&</sup>lt;sup>25</sup>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

 $<sup>^{26}\</sup>mbox{Department}$  of State Police, fiscal year 2012 MFR Data Definition and Control Procedures

<sup>&</sup>lt;sup>27</sup>Fiscal year 2015 MFR Performance Discussion, Department of Public Safety and Correctional Services

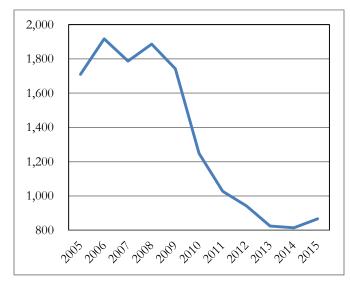
Exhibit 5.5 Maryland Part 1 Crime Rate, 2004-15



# Indicator 5.21: Rate per 100,000 of arrests of youth ages 10 to 17 for violent criminal offenses

Involvement in violent offenses increases the risk of injury or death, and continued criminal activity into adulthood. The violent offense arrest rate for youth has declined by 15.6% since 2011. Exhibit 5.6 shows trends in this measure over the past decade.

### Exhibit 5.6 Youth Age 10 to 17 Arrest Rate (per 100,000), 2005-15



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. The Department of Juvenile Services (DJS) is collaborating with other child serving local and State agencies to improve outcomes for youth. DJS initiatives include: the Juvenile Detention Alternatives Initiative, in which DJS works with courts to identify community alternatives to detention, the Youth Crossover Model, in which DJS and the Department of Human Resources coordinate services for youth in both systems, and the Under 13 Initiative, which provides wraparound services to pre-teens who have had contact with DJS.

#### <u>Significant Performance Trends – Health and</u> <u>Human Services</u>

# Indicator 5.25: Maryland's uninsured rate (estimated), individuals under 65

Prior to 2012, one-year data for this indicator was not available from the U.S. Census Bureau, necessitating a two-year estimated number which is not comparable to the now-available one-year number from the Census Bureau. In the past five years since the metric was revised, the uninsured rate for individuals under 65 in Maryland has declined from 14.4% to just 7.5%.

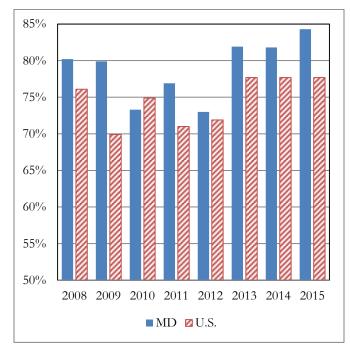
This significant improvement in metric performance reflects a national trend, and can be attributed largely to the Affordable Care Act. Most of the major provisions of the Act went into effect in January 2014, including the individual mandate which requires that most Americans obtain and maintain health insurance, or an exemption, each month or pay a tax penalty.

# Indicator 5.26: Percent of Maryland children fully immunized (by 24 months)

The immunization status of young children is a good predictor of avoidance of death, disability, or developmental delays associated with immunization-preventable diseases.<sup>29</sup> 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 are based on this series.

**Exhibit 5.7** (next page) displays how the immunization rate both in Maryland and the U.S. has trended through time. Note that 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. Maryland's immunization rate has exceeded the national rate in all years except 2010, and it has followed the generally improving nationwide rate in the last three years.

<sup>&</sup>lt;sup>29</sup>Maryland's Results for Child Well-Being 2010



# Exhibit 5.7 Children Fully Immunized in Maryland and the U.S., 2008-15

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.<sup>30</sup>

#### Indicators 5.27 and 5.28: High school health:

- Indicator 5.27: Cumulative percent change from the calendar year 2000 baseline for underage high school students who ever smoked a whole cigarette
- Indicator 5.28: Percent of public school students in grades nine through twelve who are current drinkers

The first measure is an estimate of the proportion of underage high school students who have ever smoked a whole cigarette. 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, with a decline of 65% from 2007 to 2014. The Maryland Cigarette Restitution Fund Tobacco Use Prevention and Cessation Program utilizes а 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."31 Other strategies that contribute to reduced tobacco use include restrictions on smoking in public places and increases in excise or sales taxes on tobacco products.32

Data for the second measure comes 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, the survey is administered 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.<sup>33</sup> The percentage of high school students drinking alcohol is in decline, down to 31.2% in 2013 (the most recent survey year) from 39.8% in 2005.

# Indicator 5.29: Overall cancer mortality rate per 100,000 persons (age adjusted to 2000 U.S. Standard Population)

Cancer is the second leading cause of death in Maryland and the nation, and accounted for 23.4% of all deaths in Maryland in 2014.<sup>34</sup> The overall cancer mortality rate in Maryland declined by 6% from 2011 to 2015, a reduction of 10 deaths per 100,000 persons. Maryland's cancer mortality rate was above the national rate prior to and including 2009, but in 2010 it slipped below the national rate and in 2013 it was 0.7 deaths per 100,000 persons below the national rate. **Exhibit 5.8** (next page) shows trends through time for both Maryland and the nation as a whole.

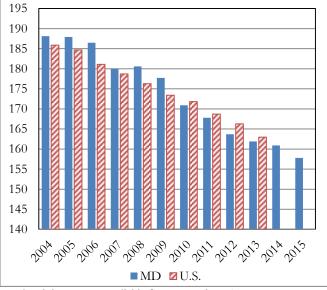
<sup>&</sup>lt;sup>30</sup>Maryland Department of Health and Mental Hygiene, Infectious Disease and Environmental Health Services

<sup>&</sup>lt;sup>31</sup>Strategies and Discussion of Program Performance, FY 2015 MFR submission, Cigarette Restitution Fund–Tobacco Use Prevention and Cessation Program - Family Health Administration

<sup>&</sup>lt;sup>32</sup> Strategies and Discussion of Program Performance, FY 2015 MFR submission, Cigarette Restitution Fund–Tobacco Use Prevention and Cessation Program–Prevention and Health Promotion Administration, Department of Health and Mental Hygiene

<sup>&</sup>lt;sup>33</sup>Maryland's Results for Child Well-Being 2011, Governor's Office for Children and the Children's Cabinet

<sup>&</sup>lt;sup>34</sup>Maryland Vital Statistics Annual Report 2014, Vital Statistics Administration, Department of Health and Mental Hygiene.



# Exhibit 5.8 Maryland and U.S. Cancer Mortality Rate (per 100,000 Persons), 2004-15

\*National data not yet available for 2014 and 2015.

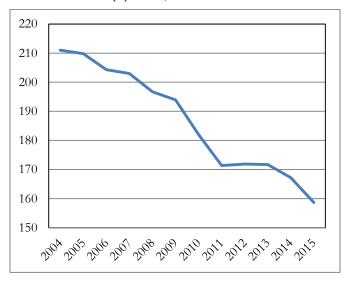
In September 2016, the Hogan Administration announced the update and signing of Maryland's Comprehensive Cancer Control Plan which is a "valuable roadmap for Marylanders involved in cancer prevention and treatment at every level."<sup>35</sup>

The Maryland Comprehensive Cancer Control Plan is a guide for professionals to reduce the burden of cancer in Maryland, and is updated every four years by the Maryland Department of Health and Mental Hygiene with input from 83 public and private stakeholders. The Cancer Plan is farreaching, and encourages any individual or organization whether they are involved in planning, directing, implementing, evaluating, or performing research on cancer control—to apply best practices and the appropriate strategies for better cancer control in Maryland. Primary strategies to address cancer mortality include continuing strong public health surveillance, education, prevention, screening, diagnosis and treatment efforts, and strong cancer research.

# Indicator 5.30: Heart disease mortality rate for all races per 100,000 population (age adjusted)

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.<sup>36</sup> Heart disease continued to be the leading cause of death in Maryland in 2015, accounting for 25% of all deaths. The age adjusted heart disease mortality rate was 158.7 per 100,000 population in 2015, 7.4% below the rate five years ago. **Exhibit 5.9** shows trends through time for heart disease mortality in Maryland.

### Exhibit 5.9 Heart Disease Mortality Chart (per 100,000 population), 2004-2015



Public health efforts contribute to Maryland's comprehensive approach in addressing heart disease mortality, including surveillance, screening, diagnosis, and treatment efforts.

#### Indicator 5.31: Rate of diagnoses and the percent change from the prior year level in the number of age adjusted new HIV diagnoses (per 100,000 population)

The rate of HIV diagnoses declined by 8.6% from 2011 through 2015. 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;

<sup>&</sup>lt;sup>35</sup> "Governor Larry Hogan Reaffirms State's Commitment to Fighting Cancer, Hosts Blood Drive," Press Release September 15, 2016.

<sup>&</sup>lt;sup>36</sup>Fiscal year 2012 MFR Data Definition and Control Procedures, Family Health Administration, Department of Health and Mental Hygiene

- 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.<sup>37</sup>

# Indicator 5.32: Rate of primary/secondary syphilis incidence (cases per 100,000 population)

Syphilis causes significant complications if untreated and facilitates the transmission of HIV. Cases of syphilis tend to be under reported as the disease goes undiagnosed in some individuals and unreported by some providers.<sup>38</sup> Maryland's rate of primary/secondary syphilis cases per 100,000 population has annually exceeded the national rate over the past decade, and Maryland currently ranks the fifth highest state in terms of the syphilis cases rate.<sup>39</sup>

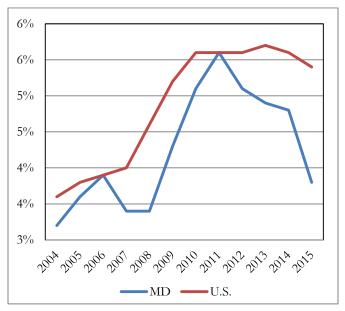
After the rate of syphilis incidence in Maryland dropped by 17.9% in 2009, it rebounded in 2011, increasing by 2 cases per 100,000 population over 2010, maintained that higher level for several years, and then jumped further by another 1 case per 100,000 in 2015. Much of this growth was driven by cases in the Baltimore City metropolitan area, where over 60% of Maryland syphilis cases are found. Maryland has focused on collaborative public health efforts to reduce communicable diseases.

#### Indicator 5.35: Maryland prevalence of householdlevel very low food security (3 year average)

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 are derived from responses to a survey conducted by the U.S. Census Bureau.<sup>40</sup> In most households with very low food security, the survey respondent reported that he/she was hungry at some time during the previous twelve months but did not eat because there was not enough money for food. Prevalence rates of food insecurity vary widely state to state. Therefore, a 3-year average is used to provide more reliable statistics at the state level.

**Exhibit 5.10** shows that, over the past decade, Maryland's prevalence of household-level very low food security was equal to or below the U.S. level. The recession was a significant factor contributing to household level food insecurity, but Maryland has continually driven down food insecurity since then. As of 2015, Maryland's rate reached pre-recession levels.

Exhibit 5.10 Maryland and U.S. Prevalence of Household-Level Very Low Food Security, 2004-2015



Over the last several years, Maryland has identified and implemented successful strategies to connect children and families to the School Breakfast and Summer Food Service Programs, and other programs, while drawing down millions of additional dollars in federal funding. Governor Hogan has charged his Children's Cabinet with four major initiatives, one of which is to continue efforts to reduce the incidence of child hunger.

The Governor has highlighted hunger initiatives through numerous other efforts. He has been a strong supporter of the Maryland Food Bank, packaging meals for those in need in January 2015 and visiting families impacted by the unrest in Baltimore that spring. In June 2015, the Governor launched the "Maryland Unites: Day of Service" in an effort to help encourage volunteerism across the State, resulting in State employees and law enforcement officials coming together at the Food Bank throughout the summer to help fight hunger. In his first Capital Budget, the Governor included a state investment of \$3.5 million for expansion of the Maryland Food

<sup>&</sup>lt;sup>37</sup>Fiscal year 2014 and 2015 MFR Strategies and Discussion of Program Performance, Infectious Disease and Environmental Health Services–Prevention and Health Promotion Administration, Department of Health and Mental Hygiene

<sup>&</sup>lt;sup>38</sup>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

<sup>&</sup>lt;sup>39</sup>Centers for Disease Control and Prevention, 2013 Sexually Transmitted Diseases Surveillance

<sup>&</sup>lt;sup>40</sup>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).

Bank's facilities. For these efforts, the Governor was honored with a 2015 Hunger Advocate Award.<sup>41</sup>

# Indicator 5.36: Rate of live births to adolescents between 15 and 19 years of age (per 1,000 women)

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, having developmental problems, and experiencing poverty.<sup>42</sup> 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 in the last decade. In the last five years, the Maryland rate has declined by 32.8%, reflecting a national trend.

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.<sup>43</sup>

# Indicator 5.41: Heroin overdose-related deaths in Maryland

The heroin epidemic in the U.S. has gained increasing media and policy attention over the past year, and Maryland is no exception to this epidemic. In the past five years, the number of heroin overdose-related deaths in Maryland grew from 247 to 748 (202.8%).

In response, Governor Hogan issued Executive Orders 01.01.2015.12 and 01.01.2015.13, and State resources have been devoted to confronting this heroin and opioid epidemic through a comprehensive approach that includes education, treatment, improvements to quality of care, law enforcement, alternatives to incarceration, and overdose prevention. Over 300 State employees are working on this health crisis in some capacity.<sup>44</sup> A Heroin & Opioid Emergency Task Force was convened, chaired

by Lieutenant Governor Rutherford and the Task Force held six regional summits throughout the State to hear testimony from those with substance use disorders, family members, educators, faith leaders, elected officials, law enforcement, addiction treatment professionals, and other stakeholders.

The Task Force issued its final report December 2015, including contributions from 431 stakeholders and 33 recommendations. The Hogan Administration included \$4.8 million in new funding in the fiscal 2017 budget to implement Task Force recommendations, in addition to \$341.9 million in the budget dedicated to already existing substance use disorder and addition programs, and that funding has continued in fiscal 2018. The new funds are being used to enhance quality of care, expand access to treatment and support services, boost overdose prevention efforts, and strengthen law enforcement options. The Administration also provided \$3 million in fiscal 2017 supplemental funding for additional 8-507 treatment beds. The Governor's fiscal 2018 allowance includes an additional \$4 million to address the opioid crisis.

#### Significant Performance Trends - Environment

#### Indicator 5.42: Chesapeake Bay Habitat Health Index - Maryland

The Chesapeake Bay Habitat Health Index measures the progress of three water quality indicators and three biotic indicators<sup>45</sup> against scientifically derived ecological thresholds or goals. The six indicators are combined into one overarching Bay Health Index. The health of the Chesapeake Bay is reported annually in the Chesapeake Bay Report Card. The data presented is for both the Maryland portion<sup>46</sup> of the Chesapeake Bay and the Bay-wide number.

In the period from 2011 to 2015, Maryland's score rose from 33% to 48%. At the same time, the score for the entire Chesapeake Bay rose from 38% to 53%. As **Exhibit 5.11** (next page) shows, Maryland and Bay-wide scores can vary widely from year to year depending on trends in weather, etc.

<sup>&</sup>lt;sup>41</sup>Maryland Food Bank, Celebrating Our 2015 Hunger Advocate Award Winners: Larry Hogan, September 23, 2015.

<sup>&</sup>lt;sup>42</sup>Maryland's Results for Child Well Being 2009; State Profiles of Child Well-being, 2011 Kids Count Data Book, The Annie E. Casey Foundation

<sup>&</sup>lt;sup>43</sup>Fiscal year 2013 MFR Strategies and Discussion of Program Performance, Family Health Administration, Department of Health and Mental Hygiene

<sup>&</sup>lt;sup>44</sup>Heroin & Opioid Emergency Task Force. (2015). Final Report. Retrieved from https://governor.maryland.gov/ltgovernor/wpcontent/uploads/sites/2/2015/12/Heroin-Opioid-Emergency-Task-Force-Final-Report.pdf.

<sup>&</sup>lt;sup>45</sup>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.

<sup>&</sup>lt;sup>46</sup>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 is not affected much by including data for parts of Virginia.

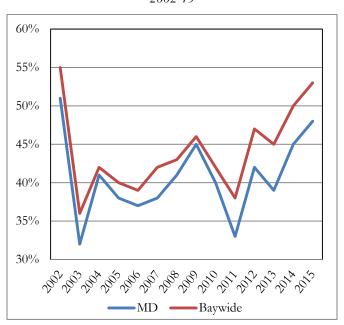


Exhibit 5.11 Maryland and Bay-wide Report Card Score, 2002-15

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. Maryland, as well as the other five jurisdictions in the Bay watershed, has prepared Phase I and Phase II Watershed Implementation Plans (WIP) detailing how the State will accomplish its portion of the pollution diet. These Plans identify how the Bay jurisdictions will achieve nutrient and sediment clean-up goals.

# Indicator 5.43: Acres of submerged aquatic vegetation (SAV)

Restoring underwater grasses to the rivers, streams and shallow waters of the Chesapeake Bay will dramatically improve the Bay ecosystem. Grass beds provide food and shelter to fish, crustaceans and other species, add oxygen to the water, absorb nutrient pollution, reduce shoreline erosion and help suspended particles of sediment settle to the bottom. Over the past five years, SAV acreage has grown by 11% in the Maryland portion of the Bay reflecting a Bay-wide improvement in acreage. Experts attribute this trend "to the recovery of wild celery and other species in the fresher waters of the upper Bay, the continued expansion of widgeon grass in the moderately salty waters of the mid-Bay and a modest recovery of eelgrass in the very salty waters of the lower Bay."<sup>47</sup>

# Indicator 5.44: Dredge Survey Index of stock size (crabs) – estimated

Total stock size refers to the total number of crabs of all sizes in the over-wintering crab population, i.e. 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.<sup>48</sup>

The Index value declined by 26.6% over the five year period from 2012 to 2016, with fluctuating values during the intervening years. After reaching a 19 year high in 2012,<sup>49</sup> the Maryland blue crab population dropped below the 2009 level in 2013, declining 59.5% from 2012. It has since rebounded to above the ten-year average. As **Exhibit 5.12** (next page) shows, the blue crab population can vary dramatically from year to year. Crabs are vulnerable to extreme cold, particularly prolonged cold winter temperatures.

Bills were passed during the 2011 legislative session that increased enforcement authority and penalties for certain violations of rules related to striped bass, oyster, and blue crab. Legislation passed in 2012 aimed at the Bay's water pollution problems including curtailing septic pollution, allowing upgrades to sewage treatment plants, etc.<sup>50</sup> In 2012 and 2013, DNR facilitated the initiation of a Blue Crab commercial fishery harvest accountability pilot. Commercial harvest tracking is critical to well managed fisheries and can provide flexibility for harvesters.<sup>51</sup> In fishery management, it can take years for new policies to result in improved performance, and the stock size growth between 2013 and 2016 is likely an indication that these policies are having an impact.

<sup>&</sup>lt;sup>47</sup> Chesapeake Bay Program. (2016). Underwater Bay Grass Abundance (Baywide). Retrieved from

http://www.chesapeakebay.net/indicators/indicator/bay\_grass\_abun dance\_baywide.

 <sup>&</sup>lt;sup>48</sup>Maryland Department of Natural Resources, Fisheries Service, Data Definition and Control Procedures, fiscal year 2012 and 2013.
<sup>49</sup>Office of the Governor, More Blue Crabs newsletter, May 3, 2012.
<sup>50</sup>Office of the Governor, More Blue Crabs newsletter, May 3, 2012.
<sup>51</sup>Maryland Department of Natural Resources, Fisheries Service, MFR Performance Discussion, fiscal year 2015.

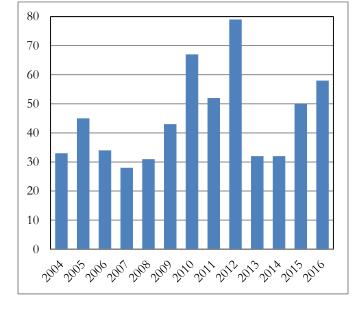


Exhibit 5.12 Dredge Survey Index - Crab Stock Size, 2004-16

Indicator 5.47: Acres of cover crops planted

The Maryland Chesapeake Bay Tributary Strategy Implementation Plan, 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 primary efforts to reduce nutrient and sediment loads to the Chesapeake Bay.

Through the Cover Crop Program, farmers plant nonharvested cereal crops on agricultural land to control soil erosion and absorb unused nitrogen and phosphorus remaining in the soil following the fall harvest.<sup>52</sup> The Cover Crop Program provides cost share assistance to farmers to implement this best management practice.<sup>53</sup> Through the cover crop program, the number of acres planted has increased dramatically. A record number of acres of cover crops were planted during 2012 to 2016, increasing by 24.2% during that timeframe, with 2016 representing an all-time high.

#### Indicator 5.48: Number of waters impaired by nutrients per the Integrated Report of Surface Water Quality

The Federal Clean Water Act requires states to identify waters assessed as not meeting water quality standards

WWW.eco-check.org/reportcard/chesapeake/2010/overview/

and compile a List of Impaired Surface Waters (the historical 303(d) List) that includes impaired waters for which a Total Maximum Daily Load (TMDL) is required. A TMDL is the maximum amount of a pollutant that can enter a water body and still allow the water quality standards to be met.<sup>54</sup> In general, TMDLs set pollutant limits for all sources by dividing, or "allocating," the maximum allowable pollutant loads among those sources.

Over the past five years, the number of impaired bodies without a TMDL declined by 65.0%. This strong performance 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 Watershed Implementation Plan (WIP), and has finalized with additional updates and refinements the Phase II WIP. MDE has worked extensively with interjurisdictional 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.<sup>55</sup> 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.

#### Indicator 5.49: Percent of Marylanders served by public water systems in significant compliance with all new and existing regulations

Water systems are evaluated for compliance with technical and health-based rules, as well as compliance with health-based drinking water standards. Technical violations include items such as monitoring and reporting of compliance reports, failure to issue public notification, and failure to complete corrective actions for treatment technique requirements. Health-based standards are established for over eighty regulated contaminants such as bacteria, nitrates, arsenic, lead and copper, disinfection byproducts, and radionuclides.

Performance in this category has improved by 6.5% over the past five years (from 92% to 98% compliance). This

<sup>&</sup>lt;sup>52</sup>Overview, Chesapeake Bay Report Card, 2010, Chesapeake EcoCheck

<sup>&</sup>lt;sup>53</sup>Cost-share support is administered through Maryland Agricultural Water Quality Cost-Share (MACS) program, Maryland's Chesapeake Bay Tributary Strategy Implementation Plan, January 2008

<sup>&</sup>lt;sup>54</sup>A water quality standard is the combination of a designated use for a particular body of water and the water quality criteria designed to protect that use (Maryland Department of Environment's Web site about the Integrated Report of Surface Water Quality found at: http://www.mde.maryland.gov/programs/Water/TMDL/Integrated3 03dReports/Pages/Programs/WaterPrograms/TMDL/Maryland%20 303%20dlist/index.aspx

<sup>&</sup>lt;sup>55</sup>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

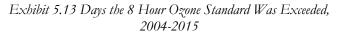
improvement is largely due to the fiscal 2016, implementation of a new federal regulation called the Revised Total Coliform Rule. All public water systems were required to comply with this stricter regulatory standard by April 1,  $2016.5^{6}$ 

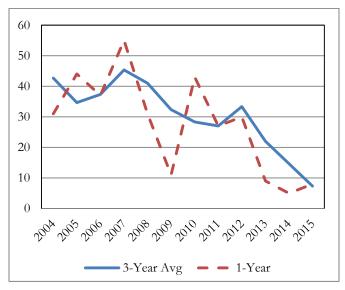
# Indicator 5.50: Three-year average of days the eight hour ozone standard was exceeded

Breathing ozone, a primary component of smog, can trigger a variety of health problems. Other impacts of air pollution are reduced visibility; damaged crops, forests and buildings; and acidified lakes and streams. Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the causes of ozone forming pollutants. Maryland's ozone levels are not only due to ozoneforming pollutants being emitted by sources within Maryland, but from ozone formed in other states that is delivered to Maryland by prevailing winds.

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) enacted in July 2007, at the time the toughest power plant emission law on the east coast.

The three year average of days the eight-hour ozone standard was exceeded declined significantly (72.8%) from 2011 to 2015. **Exhibit 5.13** (next page) displays the one-year and three-year trends through time. MDE attributes the improvement in performance to the continuing addition of pollution controls at existing power plants west of Maryland, more power plants actually running their pollution controls, the conversion of coal-fired power plants to natural-gas-fired plants, and the absence of the large-scale weather patterns that typically allow high pressure systems to develop and sit in place over the southeast U.S., which is when dirty air from the Ohio River valley area principally gets transported into Maryland.<sup>57</sup>





Indicator 5.56: Number of children under 6 years of age with elevated blood lead levels (>5ug/dl)

The major source of child exposure to lead is paint dust from deteriorated lead paint or from home renovation. Elevated blood lead levels are associated with a number of detrimental effects including behavioral and neurodevelopmental effects in childhood such as learning and behavioral problems and lowered intelligence, and seizures and death depending on the levels of blood lead. The number of children with elevated blood lead levels (above 5 ug/dl) declined sharply from 2011 to 2015, dropping by 32.1%.

The decline in blood lead levels is expected to continue due to the multitude of intervention strategies as well as the gradual reduction in the number of residences with lead paint hazards. 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.<sup>58</sup> A key change in Maryland's lead law – expanding the type of properties covered by the law to include rental units built prior to 1978 – took effect January 1, 2015.<sup>59</sup> Moving to protect more children from the health risks associated with lead paint poisoning, MDE began registering newer rental properties that will for the first time be required to comply with the provisions of Maryland's lead law.

<sup>&</sup>lt;sup>56</sup> EPA. Revised Total Coliform Rule And Total Coliform Rule. Retrieved from https://www.epa.gov/dwreginfo/revised-totalcoliform-rule-and-total-coliform-rule.

<sup>&</sup>lt;sup>57</sup>Fiscal year 2017 Performance Discussion, Maryland Department of the Environment.

<sup>&</sup>lt;sup>58</sup>Maryland Department of the Environment, Lead Poisoning Prevention Program Childhood Blood Lead Surveillance in Maryland, Annual Report 2010, August 2011

<sup>&</sup>lt;sup>59</sup>Fiscal year 2017 Performance Discussion, Maryland Department of the Environment.

#### Performance Detail - Improved Quality of Life

#### Key Performance Area 5– Data by Report Year

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
Education								
<b>5.1.</b> Percent of students entering Kindergarten demonstrating Full Readiness on the Kindergarten Readiness Assessment (AY 2015- 2016) – <i>test new in 2015</i>	MSDE				47%	45%	N/A – test has changed	Annual increase from 2015 (47%)
<b>5.2.</b> AP Exams – Percent receiving grade 3, 4, or 5 (AY 2012 - 2016)	MSDE	61.3%	60.3%	61.0%	61.0%	62.0%	1.2%	Annual increase
<b>5.3.</b> Prekindergarten enrollment (AY 2012 - 2016)	MSDE	<b>28,85</b> 0	29,671	29,811	30,385	30,891	7.1%	N/A
<b>5.4.</b> High School Graduation Rate (AY 2011 - 2015)	MSDE	82.82%	83.57%	84.97%	86.39%	86.98%	5.0%	88.49% by 2020
<b>5.5.</b> Percent of children in grades 9 through 12 who drop out of school in an academic year (AY 2011 - 2015)	MSDE	11.22%	10.22%	9.36%	8.35%	8.08%	-28.0%	N/A
<b>5.6.</b> Percent of core academic subject classes staffed with highly qualified teachers (AY 2012 - 2016)	MSDE	93.1%	93.8%	92.4%	91.6%	91.1%	-2.1%	92.1% by 2017
<b>5.7.</b> Average percentage of schools surveyed by the Interagency Committee for School Construction in the past six years that received Superior, Good, or Adequate ratings for school maintenance (FY 2012 - 2016)	IAC	97.2%*	97.2%	97.3%*	97.1%*	97.2%	0.0%	N/A
<b>5.8.</b> Six year graduation rate of first-time, full-time students at public four-year colleges and universities (all groups) (FY 2012 - 2016)	MHEC	63.3%	61.6%	63.8%	63.7%	66.4%	4.9%	67% by 2018
<b>5.9.</b> Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities (FY 2012 - 2016) – <i>definition has changed since last year's report</i>	MHEC	32.6%*	35.9%*	36.4%*	37.4%*	39.3%	20.6%	38% by 2018
<b>5.10.</b> Four-year transfer and graduation rate of first-time community college students (FY 2012 - 2016)	MHEC	35.8%	33.5%	33.7%	33.9%	33.1%	-7.5%	N/A

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
<b>5.11.</b> Percent of Maryland median family income required to cover tuition and fees at Maryland public four- year institutions (FY 2012 - 2016)	MHEC	9.4%	11.2%	11.3%	11.5%	11.5%	22.3%	Below 10% by 2018
<b>5.12.</b> Percent of Maryland median family income required to cover tuition and fees at Maryland community colleges (FY 2012 - 2016)	MHEC	4.3%	5.1%	5.2%	5.4%	5.5%	27.9%	Below 4% by 2018
<b>5.13.</b> Number of graduates in science, technology, engineering, and math (STEM) from Maryland's public and private higher educational institutions (FY 2012 - 2016)	MHEC	11,592	11,850	13,082*	13,850	15,039	29.7%	Above 13,000 by 2018
<b>5.14.</b> Post-secondary degree attainment rate for Marylanders ages 25 to 64 (FY 2012 - 2016)	MHEC	44.7%	44.2%	44.8%	45.0%	45.2%	1.1%	N/A
Public Safety								
<b>5.15.</b> Homicide rate per	State	6.8	6.3	6.5	6.1	9.2	-35.3%	Below
100,000 (CY 2011 - 2015) <b>5.16.</b> Rate of homicide deaths of children and youth ages 0 to 19 (per 100,000 population) (CY 2011 - 2015)	Police State Police	4.2	4.3	3.5	3.0	4.9	16.7%	6.49 N/A
<b>5.17.</b> Traffic fatality rate per 100 million miles traveled (CY 2011 - 2015)	State Police	0.87060	0.90620	0.82540	0.78546	0.90909	4.4%	N/A
<b>5.18.</b> Part I crime rate (offenses per 100,000 population) (CY 2011 - 2015)	State Police	3,355	3,226	3,128	2,960	2,652	-21.0%	N/A
<b>5.19.</b> Offenders under Department of Public Safety & Correctional Services jurisdiction (FY 2012 - 2016)	DPSCS	22,113	21,101	20,868	20,602	20,274	-8.3%	N/A
<b>5.20.</b> Percent of all cases closed where the offender was employed at closing (FY 2012 - FY 2016)	DPSCS	28%	30%	30%	28%	33%	17.9%	At least 31%
<b>5.21.</b> Rate per 100,000 of arrests of youth ages 10 to 17 for violent criminal offenses (CY 2011 - 2015)	Children's Cab. Inter- agency Fund	1,027	942	825	814	867	-15.6%	N/A
<b>5.2</b> 2. Youth Recidivism: Percent of youth re- adjudicated within one year after release from all residential (FY 2011 - 2015)	DJS	19.4%	16.0%	18.53%	19.0%	17.6%	-9.4%	23.5%

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
Health and Human Ser	vices							
<b>5.23.</b> Percent of live births for which prenatal care was initiated during the first trimester (CY 2011 - 2015)	DHMH	67.7%	67.9%	67.0%	66.6%	71.1%	5.0%	At least 80% by 2015
<b>5.24.</b> Infant mortality rate for all races (per 1,000 live births) (CY 2011 - 2015)	DHMH	6.7	6.3	6.6	6.5	6.3	-6.0%	No more than 6.1 by 2015
<b>5.25.</b> Maryland's average annual uninsured rate among the nonelderly (under age 65; estimated) (CY 2011 - 2015)	DHMH	14.4%	14.1%	11.7%	6.5%	7.5%	-47.9%	N/A
<b>5.26.</b> Percent of Maryland children fully immunized (by 24 months) (CY 2011 - 2015)	CDC	76.9%	73.0%	81.9%	81.8%	84.3%	9.6%	At least 80%
<b>5.27.</b> Cumulative percent change from the calendar year 2000 baseline for underage high school students smoking cigarettes (CY 2006, 2008, 2010, 2012, 2014) (biannual)	DHMH	-39.0%	-41.7%	-49.9%	-53.7%	-64.4%	65.0%	N/A
<b>5.28.</b> Percent of public school students in grades nine through twelve who are current drinkers (AY 2005, 2007, 2009, 2011, 2013) (biannual) – <i>this is data from</i> <i>last year's report as new data is</i> <i>not yet available.</i>	Children's Cab. Inter- agency Fund	39.8%	42.9%	37.0%	34.8%	31.2%	-21.6%	N/A
<b>5.29.</b> Overall cancer mortality rate per 100,000 persons (age adjusted to 2000 U.S. Standard Population) (CY 2011 - 2015)	DHMH	167.8*	163.7	161.9	160.9*	157.8	-6.0%	No more than 156.1 by 2015
<b>5.30.</b> Heart disease mortality rate for all races per 100,000 population (age adjusted) (CY 2011 - 2015)	DHMH	171.4	171.9	171.7	167.2*	158.7	-7.4%	No more than 163.3 by 2015
<b>5.31.</b> Rate of age adjusted new HIV diagnoses (per 100,000 population) (CY 2011 - 2015 estimated)	DHMH	25.5*	23.6*	22.4*	24.6*	23.3	-8.6%	N/A
<b>5.32.</b> Rate of primary/secondary syphilis incidence (cases per 100,000 population) (CY 2011 - 2015)	DHMH	7.8	7.3	7.7	7.5	8.5	9.0%	N/A
<b>5.33.</b> Percent of children with no recurrence of maltreatment within 6 months of first occurrence (FY 2012 - 2016)	DHR	87.0%	89.2%	89.8%	90.1%	87.6%	0.7%	90.9% or more by FY 2017

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
<b>5.34.</b> Percent of related children and youth under age 18 whose families have incomes below the poverty level (estimated) (CY 2011 - 2015)	U.S. Census	13.2%	13.5%	13.3%	12.7%	12.9%	-2.3%	N/A
<b>5.35.</b> Maryland prevalence of household-level very low food security (3 year average) (2009-2011 to 2013-2015)	USDA	5.6%	5.1%	4.9%	4.8%	3.8%	-32.1%	End by 2015
<b>5.36.</b> Rate of live births to adolescents between 15 and 19 years of age (per 1,000 women) (CY 2011 - 2015)	Children's Cab. Inter- agency Fund	24.7	22.1	19.3	17.8	16.6	-32.8%	No more than 15.8 by 2015
<b>5.37.</b> Statewide percent of current child support paid (FFY 2012 - FFY 2016)	DHR	65.68%	66.78%	67.75%	68.55%*	68.98%	5.0%	1% increase each year until 80%
<b>5.38.</b> Rate of children placed in out-of-home care (per 100,000 children) (2010 - 2014) – this is data from last year's report as new data is not yet available.	Children's Cab. Inter- agency Fund	11.6	11.2	12.3	11.2	9.9	-14.7%	N/A
<b>5.39.</b> Percent increase in employment of adults at completion of substance abuse treatment (2012- 2016)^	DHMH	45%	43%	41%	43%	31%	-31.1%	44% by FY 2016
<b>5.40.</b> Percent of adults with serious mental illness who receive mental health services (FY 2012 - 2016)	DHMH	23.1%	24.2%	25.6%	26.9%	26.8%	16.1%	26.5% by FY 2016
<b>5.41.</b> Heroin overdose- related deaths in Maryland (CY 2011 - 2015)	DHMH	247	392	464	578	748	202.8%	N/A
Environment								
<b>5.42.</b> Chesapeake Bay Habitat Health Index- MD (CY 2011 - 2015)	UMCES EcoCheck	33%	42%	39%	45%	48%	45.5%	N/A
<b>5.43.</b> Acres of submerged aquatic vegetation (CY 2011 - 2015)	DNR	48,000	24,512	28,905	39,912	53,277	11.0%	114,034 acres of SAV
<b>5.44.</b> Dredge survey index of stock size - crabs (2012 - 2016)	DNR	79	32	32	50	58	-26.6%	N/A
<b>5.45.</b> Oyster biomass index (2012 - 2016)	DNR	1.2	1.6	2.1	2.1	1.8	47.5%	10
<b>5.46.</b> Estimated nitrogen load to the Chesapeake Bay from Maryland (in million lbs.) (FY 2012 - 2016)	DNR	50.15	47.57	49.81	48.09	47.47	-5.3%	45.48 in 2017
<b>5.47.</b> Acres of cover crops planted (CY 2012 - 2016)	MDA	402,222	413,826	415,550	427,458	499,531	24.2%	N/A

Indicator	Agency/ Data Source	2013	2014	2015	2016	2017	4 Year Change	Specific Target
<b>5.48.</b> Waters impaired by nutrients per the Integrated Report of Surface Water Quality (2012 - 2016) – note report done biannually	MDE	20	20	7	7	7	-65.0%	N/A
<b>5.49.</b> Percent of Marylanders served by public water systems in significant compliance with all new and existing regulations (2012 - 2016)	MDE	92%	98%	96%	90%	98%	6.5%	At least 97%
<b>5.50.</b> 3 year average of days the 8 hour ozone standard was exceeded (CY 2012 - 2016)	MDE	27.0	33.3	22.0	14.7	7.3	-72.8%	0
<b>5.51.</b> Maryland's recycling rate (CY 2012 - 2016)	MDE	45%	44%	44%	44%*	45%	-1.8%	N/A
<b>5.52.</b> Total acres preserved by all land preservation programs (CY 2012 - 2016)*	DNR	1,475,125	1,484,348	1,504,982	1,525,539	1,531,883	3.8%	N/A
<b>5.53.</b> Energy consumption by all State government facilities (owned and leased) (CY 2012 - 2016)	DGS	11.90	11.59	12.06	12.25	11.54	-3.0%	15% reduction by 2015
<b>5.54.</b> Maryland per capita electricity consumption in megawatt hours (CY 2011 - 2015)	MEA	11.7	11.2	11.1	10.9	11.0	-6.3	15% reduction by 2015
<b>5.55.</b> Percent of vehicles registered in the state that are alternative fuel, electric or hybrid-electric (FY 2012 - 2016)	MVA	1.6%	1.5%	1.7%	1.7%	1.8%	11.5%	N/A
<b>5.56.</b> Number of children under 6 years of age with elevated blood lead levels (CY 2011 - 2015)*	MDE	3,192	2,739	2,622	2,359	2,166	-32.1%	N/A
<b>5.57.</b> Maryland rapid transit trips (including Maryland Transit Administration (MTA), Washington Metropolitan Area Transit Authority (WMATA), and Locally Operated Transit Systems (LOTS)). (thousands) (CY 2012 - 2016)	MDoT	285,786*	282,817*	277,735*	278,270*	263,771	-7.7%	N/A

\*Numbers have been updated since last year's report. ^ These services changed in 2016 from grant-based to fee-for-service-based, therefore data from prior years is not seen as comparable.