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	4
2. REDUCED TAXES AND FEES	6
3. FISCAL RESPONSIBILITY	9
Performance Detail – Fiscal Responsibility	
4. GOVERNMENT REFORM	
5. IMPROVED QUALITY OF LIFE	
Significant Performance Trends - Education	
Significant Performance Trends – Public Safety	
Significant Performance Trends – Health and Human Services	
Significant Performance Trends - Environment	
Performance Detail – Improved 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 attached report is submitted in response to that requirement.

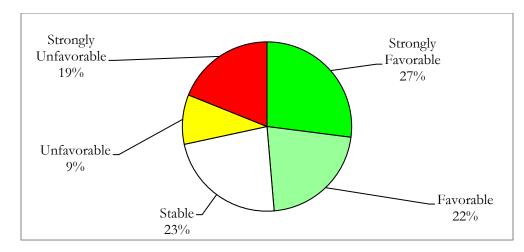
Data concerning each of the performance measures included in the State Plan are presented within the following Hogan Administration priority areas:

- 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.¹ 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. From report year 2016 to 2020, nearly half of the measures are moving in a favorable direction, 48.6%. Performance is stable for 23% of measures and, when combined, 71.6% of measures are either moving in a favorable direction or are stable. When comparing the data from 2019 to 2020, 85.1% of measures are either favorable or stable. Of note, 100% of education metrics 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. Note that the majority of exhibits and discussion refer to "report years" 2016 to 2020, as opposed to fiscal or calendar years, in order to normalize data for comparison.

¹ 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 Overview

Performance Status (percentages are rounded)	Number of Indicators	Percent
Favorable (Change >10%)	3	27.3%
Favorable (3% to 10%)	2	18.2%
Stable (-2% to 2%)	3	27.3%
Unfavorable (-3% to -10%)	1	9.1%
Unfavorable (< -10%)	2	18.2%
Total	11	100%

In the area of Economic Development and Jobs, 72.8% of Maryland indicators either performed favorably or held stable between the 2016 and 2020 report years. The next section highlights and explains the factors behind significant trends, but particularly notable favorable trends were seen in the following areas:

- annual growth in per capita income increased from 2.13% to 7.33%,
- total general cargo tonnage at Maryland Port Authority terminals grew by 13.4% over five years, from 9.7 million to 11.0 million tons,
- State sales tax revenue attributable to tourism jumped 4.7%, from \$425.9 million to \$446.0 million, and
- the number of passengers at BWI Marshall Airport reached a new record of 27.5 million, representing growth of 23.3% over five years.

The following section discusses significant trends in performance.

Significant Performance Trends

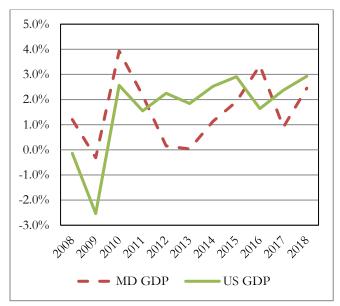
Indicator 1.1: Maryland's growth in total real gross domestic product (GDP) (in millions of chained [2012] dollars)

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 report year 2016 to 2020, Maryland's total real gross domestic product grew by 8.9%, just below growth nationwide.

Exhibit 1.1 displays the Maryland and nationwide GDP growth over the past decade. It shows that Maryland's economy generally performed more strongly than the U.S.

as a whole from calendar years 2008 to 2011, 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 government², a large part of slow GDP growth in Maryland was related to the pullback in federal spending between calendar years 2011 and 2014³. However, in the following four years, Maryland's growth has steadily rebounded, narrowing the gap between it and the national average. Maryland's rate of growth surpassed the national average in calendar year 2016 and again in 2018.

Exhibit 1.1 Annual Gross Domestic Product Growth, Maryland and the United States, Calendar Years 2008-2018



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.⁴ The annual total tonnage moving across MPA's terminals is a gross outcome measure of the attractiveness of MPA's infrastructure and facilities. Key investments in MPA have landed it repeatedly at the top of rankings among all U.S. ports.

MPA's general cargo tonnage set a new fiscal year record high in 2018 for the 8th consecutive year, at 11 million tons, and maintained this tonnage in 2019. The Port is also an economic engine for Maryland, generating approximately

⁴ Maryland Department of Transportation 2018 Annual Attainment Reports on Transportation System Performance.

² Maryland Department of Legislative Services. 2016. Spending

Affordability Briefing, October 25, 2016.

³ Maryland Board of Revenue Estimates. 2016. Estimated Maryland Revenues, December 8, 2016.

15,330 direct jobs, as well as about 139,180 jobs that are linked to Port activities.⁵ The FY 2021 budget includes investments to improve the Howard Street Tunnel that once completed will increase the productivity of the Port of Baltimore.

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

This performance measurement reflects revenue collected by the Comptroller in tourism-related sales tax categories such as restaurants, hotels, air travel and recreational activities. Total sales tax revenue attributable to tourism grew from \$401.4 million in report year 2015 to \$446.0 million in report year 2020.

The health of this indicator is driven by the annual number of visitors. While overall visitation decreased slightly to 41.9 million in calendar year 2018 from 42.5 million in calendar year 2017, there was a significant increase in visitors from targeted markets.⁶

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

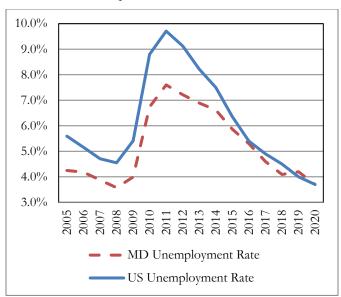
The overall condition of the State Highway Administration Network reflects how well asset management strategies, improved operations, and technology have sustained the quality and safety of existing roadways.⁷ A Composite Level of Service is assessed using the Maryland Condition Assessment Reporting System (MCARS). Twenty-one maintenance elements in four categories are assessed. The categories are shoulder, drainage, traffic control/safety, and roadside. Actual maintenance conditions are compared against desired conditions.⁸ Between 2016 and 2020, the State's performance has improved from 83.4% to 85.6%.

In response to the need for highway improvements, the Hogan Administration increased spending on maintenance from \$53.6 million in fiscal 2015 to \$68.5 million in fiscal 2021. In addition, overall capital projects funding to improve Maryland's transportation and infrastructure in fiscal 2021 is \$3.2 billion.

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

The ratio between Maryland's unemployment rate and the national rate has narrowed in recent years, from 0.92 in 2017 to 1.01 in 2020, as the state's economy aligned closer to the nationwide experience in the economic expansion. **Exhibit 1.2** compares the Maryland and U.S. employment rate over the past decade. In December 2019, Maryland's unemployment rate reached its lowest point in 11 years at 3.5%.

Exhibit 1.2 Maryland and United States Unemployment Rate, Report Years 2005-2020



Indicator 1.8: Employment Rate of WIOA adult program participants employed during the 2nd quarter after exit

Maryland's Department of Labor (Labor) is responsible for the state's administration of the federal Workforce Innovation and Opportunity Act (WIOA). The overarching purpose of WIOA is to support statewide and local workforce systems that increase the employment, retention, and earnings of participants, and increase occupational skill attainment by participants, and, as a result, improve the quality of the workforce, reduce welfare dependency, and enhance the productivity and competitiveness of the nation. Maryland began collecting WIOA data during fiscal 2017, but only began to report on these new measures for fiscal 2018.

⁵ "Port of Baltimore Sets Monthly Container Record," Maryland Port Administration Press Release

September 24, 2019.

⁶ "Tourism Spending Grows in Maryland," Maryland Department of Commerce Press Release November 14, 2018.

⁷ 2012 Annual Attainment Report on Transportation System Performance, Maryland Department of Transportation.

⁸ Managing for Results Performance Measure Profile Fiscal Year 2012, State Highway Administration, Maryland Department of Transportation.

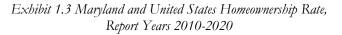
In fiscal 2019, Maryland's workforce systems assisted 48,938 jobseekers. Maryland exceeded the federal goal of 75% of adult program participants that are employed during the 2nd quarter after completion of program services with 75.9%.

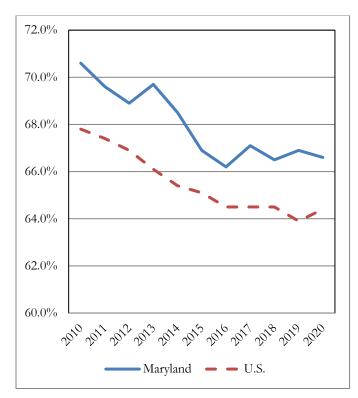
Indicator 1.9: Annual percent change in Maryland per capita personal income (estimated)

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 since 2013. The annual per capita change for the 2020 report year is 4.7%, a 52.4% increase over 2016's reported annual per capita change of 3.08%.

Indicator 1.10: Homeownership

Homeownership rates are another key economic measure, with higher rates indicating market stability. **Exhibit 1.3** displays that Maryland's homeownership rates have historically exceeded the U.S. rate. Maryland's homeownership rate has exceeded the U.S. rate by an average of 2.3% since report year 2016.





Performance Detail – Economic Development and Jobs

Key Performance Area 1 – Data by Report Year

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
1.1. Maryland's growth in total real gross domestic product (in millions of chained [2012] dollars) (CY 2014 - 2018)	U.S. Commerce BEA	338,734	345,230	356,818	360,030	368,860	8.9%	N/A
1.2. State Economic Momentum Index (CY 2015 - 2019)	FFIS	-0.09	-0.07	0.17	-0.57	-0.50	-455.6%	N/A
1.3. Maryland Port Administration total general cargo tonnage, (millions) (FY 2015 - 2019)	MDOT	9.7	9.8	10.3	11.0	11.0	13.4%	N/A
1.4. Annual BWI Marshall passenger growth rate - Number of passengers (millions) (CY 2014 - 2018)	MDOT	22.3	23.8	25.1	26.4	27.5	23.3%	N/A
1.5. Total State sales tax revenue attributable to tourism (millions) (FY 2014 - 2018)	Commerce Comptroller	\$425.9	\$450.6	\$468.9	\$479.8	\$446.0	4.7%	N/A
1.6. Percent of MD State Highway Administration network in overall preferred maintenance condition (CY 2014 - 2018)	MDOT	83.4%	78.8%	78.6%	85.7%	85.6%	2.6%	Maintain at or above 84%
1.7. Ratio between Maryland's unemployment rate and the U.S. rate (FY 2015 - 2019)	U.S. DOL/BLS	0.9722	0.9239	0.9195	1.0654	1.0067	3.5%	N/A
1.8. Employment Rate of WIOA adult program participants employed during the 2nd quarter after exit (FY 2015 - 2019)*	Labor	N/A	N/A	N/A	76.9%	75.9%	-1.3%	72%
1.9. Annual percent change in Maryland per capita personal income (CY 2014 - CY 2018)*	U.S. Commerce BEA	3.08%	4.48%	3.31%	2.51%	4.70%	52.4%	N/A
1.10. Homeownership (CY 2014 - CY 2018)	U.S. Census	66.2%	67.1%	66.5%	66.9%	66.6%	0.6%	N/A

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
1.11. Number of jobs created/retained through Department of Commerce facility attraction and business technical assistance activities (FY 2015 - 2019)	Commerce	11,761	11,305	22,168	9,573	5,394	-54.1%	N/A

*Department of Labor no longer collects the prior metric. Maryland began collecting WIOA data during fiscal year 2017, but only began to report on these new measures in fiscal year 2018. DWDAL changed the measures to reflect the federal law in a previous submission.

2. REDUCED TAXES AND FEES

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."⁹

While tax and fee reductions do not easily lend themselves 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 enact tax relief legislation. The fiscal year 2021 budget marks the sixth year in a row of no tax or fee increases proposed by the Governor.

From 2015 to 2017, 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,
- repealing the automatic gas tax increases passed in 2013,¹⁰ and
- Introducing tax incentives for manufacturers and the state's cybersecurity industry.

While the General Assembly did not pass most of the Governor's proposed legislation, the Governor did sign the following measures into law:

- an increase in the military retirement income exemption (2015)
- repeal of the "rain tax" (2015)
- establishing a tax credit for aerospace, electronics, or defense contract businesses to encourage the development of these industries in Maryland (2016)

- 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 (2016)
- establishing the Maryland Small Business Retirement and Savings Program and exempting participating employers from paying annual filing fees (2016)
- reducing the annual interest rate on tax deficiencies and refunds, from the current rate of 13% to 9% by 2020, lowering the interest rate burden on taxpayers (2016)
- exempting retired law enforcement, fire, rescue or emergency personnel from tax on the first \$15,000 of retirement income specific to their service as a first responder (2017)
- establishing the More Jobs for Marylanders program to provide new manufacturing companies located in specific counties a ten-year tax credit against their income, property, and sales taxes (2017)

For the 2018 Legislative Session, the Hogan Administration introduced legislation to protect Marylanders from an increased tax burden as a result of the federal Tax Cuts and Jobs Act of 2017 by decoupling the State income tax from specified amendments to the federal Internal Revenue Code that result in increased State revenues. The General Assembly did not pass this legislation, but Governor Hogan did sign legislation to increase the State standard deduction in tax year 2018 from \$2,000 to \$2,250 for single taxpayers and from \$4,000 to \$4,500 for taxpayers filing jointly.

The Hogan Administration also introduced and the General Assembly passed Small Business Relief Tax Credit legislation to help small businesses with implementation of new paid sick leave requirements. Additional tax relief legislation passed in 2018 included:

- the Hometown Heroes and Veterans Act of 2018, which increased from \$10,000 to \$15,000 the maximum amount of military retirement income that can be excluded from Maryland income tax liability,
- repeal of the minimum age requirement for the Earned Income Tax Credit, and,
- an increase to \$7,000 in the value of the subtraction modification for volunteer fire, rescue or emergency medical services personnel.

During the 2019 Legislative Session, the Hogan Administration proposed additional tax relief legislation,

¹⁰"Governor Hogan Unveils Tax Relief Measures," Governor Hogan Press Release February 4, 2015.

⁹ "Governor Larry Hogan Announces Additional \$60 Million in Fee Cuts," Governor Hogan Press Release May 12, 2016.

including doubling the deduction for contributions to 529 trusts and investment plans; increasing to 100% the deduction on student loan interest; expanding the types of retirement investments defined as retirement income excluded from taxation; expanding the More Jobs for Marylanders tax credit to include Opportunity Zones; and expanding the Hometown Heroes tax credit.

The Opportunity Zone Incentive legislation ultimately passed by the General Assembly and signed by Governor Hogan extended the "More Jobs for Marylanders" program for two more years and authorized up to \$200 million in additional tax credits and refunds.

Additional tax relief legislation enacted by the General Assembly and supported by the Hogan Administration in 2019 included an expansion of the child and dependent care tax credit, and the extension of the job creation tax credit to January 2022.

Heading into the 2020 Legislative Session, the Hogan Administration is proposing the largest tax reduction in Maryland in more than two decades: an elimination of State income tax for retiree income up to \$50,000. The Retirement Tax Reduction Act of 2020 would lower taxes for more than 230,000 Marylanders and provide more than \$1 billion in tax relief.¹¹ In addition, the Administration is reintroducing legislation to expand the Hometown Heroes tax credit and exempt military retirement income.

The Administration also announced in November 2019 that for the fifth straight year, Maryland employers will receive the lowest possible unemployment insurance (UI) tax rates allowed under state law.

Fee Reductions

In May 2015, the Hogan Administration rolled back tolls statewide, saving Maryland citizens \$270 million over the next five years. In May 2018, the cost of an EZPass transponder for new customers was completely eliminated, saving Marylanders approximately \$46 million over 5 years. In a third round of historic toll relief, Governor Hogan announced in July 2019 that the Maryland Transportation Authority (MDTA) Board will consider new tolling options to save Marylanders an additional \$28 million over the next five years. These three actions result in a total of up to \$344 million in toll relief savings for Marylanders.

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 five years.¹² 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
- 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)
- 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 the state park boat launch fee for seniors with Golden Age Pass
- Elimination of child support income tax intercept fee

Since this initial action, 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 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.

¹²"Governor Hogan Eliminates or Cuts Fees Statewide," Governor Hogan Press Release September 15, 2015.

¹¹"Governor Hogan Announces More Than \$1 Billion in Tax Relief for Maryland Retirees," Governor Hogan Press Release January 16, 2020.

- In May 2016, the Hogan Administration announced 155 additional fee reductions and eliminations across state government, including 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.¹³
- The Medicaid Deficit Assessment is imposed on Maryland hospitals and passed onto patients in their hospital fees to support the State's Medicaid Program. Since fiscal year 2017 this assessment has been reduced by \$80 million. The Governor's fiscal year 2021 budget reduces the Medicaid Deficit Assessment level by another \$15 million, from \$309.8 million to \$294.8 million.

Since taking office, the Administration has delivered more than \$1.2 billion in tax, toll, and fee relief.¹⁴

¹³ "Governor Larry Hogan Announces Additional \$60 Million in Fee Cuts," Governor Hogan Press Release May 12, 2016.

3. FISCAL RESPONSIBILITY

Performance Overview

Performance Status (percentages are rounded)	Number of Indicators	Percent
Favorable (Change >10%)	1	16.7%
Favorable (3% to 10%)	1	16.7%
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 2016 and 2020 report years. The next section highlights and explains the factors behind significant performance trends.

Significant Performance Trends

Indicator 3.1: Bond ratings from three nationally recognized bond rating agencies for each issuance of State general obligation (GO) bonds

Maryland uses the proceeds from the issuance of GO 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 (CDAC). Under criteria imposed by CDAC, debt service on State tax-supported debt may not exceed 8% of revenues.

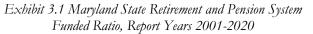
While staying below the 8% threshold, there was a 9.4% increase in the debt to revenue ratio from the 2016 to 2020 report due to increased debt service costs from prior issuances. Maintaining debt below the threshold has

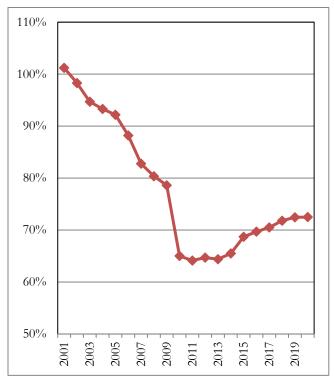
contributed to the continued triple-A bond ratings given by the bond rating agencies for Maryland's GO bond issuances. The Hogan Administration has continually proposed limiting capital budget borrowing either at or below the limit recommended by the Spending Affordability Committee in order to begin to bend the curve back towards sustainable, affordable levels.

Indicator 3.3: Asset to liability ratio for the Maryland 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 the results of that reform are starting to be realized. The funding level has steadily ticked up to 72.5% from a low of 64.1% in report year 2011.

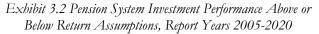


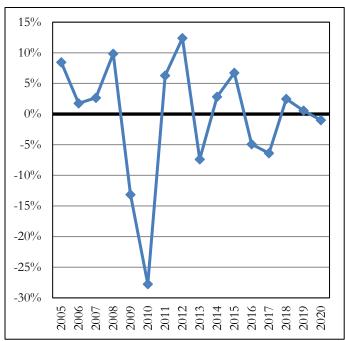


Indicator 3.4: Difference between the actual rate of return for the composite portfolio and the actuarial return assumption set by the State Retirement Agency (SRA) Board of Trustees over one year

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. The System's portfolio returned 6.46% on investments for fiscal year 2019-falling short of the plan's 7.45% assumed actuarial return rate. The fund's performance raised the assets of the System to \$54.2 billion, an increase of \$2.2 billion over the previous fiscal year

Exhibit 3.2 shows the degree to which the system either fell below (-%), met (0%), or exceeded (+%) this assumption over the past fourteen years. In ten 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.

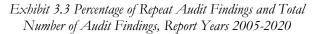


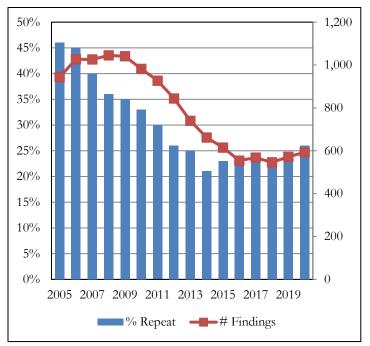


Indicator 3.5: Percent of repeat audit findings for State agencies

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 the 2005 report, the overall percentage of repeat audit findings has decreased from 45% to 26%. While the percentage of repeat findings has remained virtually unchanged since the 2013 report, the number of findings declined over the same period. 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 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.





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 97.6% to just 93.2%, 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 the 2015 Performance Report.

The fiscal 2018 budget, however, faced growth in Medicaid spending, softening revenues and new mandated spending enacted in the 2016 and 2017 sessions. Due to a combination of these factors, at the end of the 2017 session a three-quarter billion dollar structural gap was estimated for fiscal 2019, significantly larger than the budget as introduced by the Administration.

With a cash surplus of \$91 million in fiscal 2018 coming out of the 2017 session, Governor Hogan set out a fiscally prudent course of action to once again shore up the state's finances. He directed state agencies to find spending efficiencies at the end of FY 2017 and prepare budget reduction options for FY 2018 to ensure that the budget would stay in balance. State agencies were successful in turning back \$246 million to the General Fund at the end of FY 2017, \$90 million more than estimated. The state was able to close FY 2017 with a balance of \$258 million -- nearly three times greater than expected -- a direct result of agency actions, along with slightly higher than estimated revenues.

Despite higher than expected revenues at the end of FY 2017, revenue collections grew at a slower pace than expected at the beginning of FY 2018; therefore, the administration moved forward with implementing a plan to make mid-year budget reductions. The administration set forth an \$80 million plan to help offset potential revenue reductions, which was approved by the Board of Public Works. Shortly after, the Board of Revenue Estimates revised General Fund revenues downward by \$53 million. In December 2017, the Board revised revenues downward by another \$73 million for FY 2018.

The Administration then began finalizing work on the fiscal 2019 budget in a much better position than had these actions not been taken, and the magnitude of reductions

needed to balance the fiscal 2019 budget was lessened. Governor Hogan was able to resolve the remaining fiscal 2019 budget shortfall through thoughtful cost containment strategies including limiting growth of legislative mandates, realizing favorable trends in Medicaid and employee health insurance spending, and using bond premiums to offset debt service costs.

The state closed FY 2018 with a surplus of \$589 millionnearly \$400 million larger than estimated. The budget surplus was primarily the result of higher than estimated revenues, and secondarily because state agencies returned more funds to the Treasury than estimated for the fourth consecutive year. When combined with moderating enrollment in entitlement programs such as Medicaid and Temporary Assistance for Needy Families, this set the stage for a smoother than anticipated short-term budget outlook than just one year prior.

The State general fund budget was structurally balanced in FY 2018 and is structurally balanced again in FY 2019. Due to higher than estimated revenues, the FY 2019 budget closed with a fund balance of \$974.2 million—almost \$256 million higher than expected. The FY 2020 budget is estimated to close with a fund balance of \$414 million.

The FY 2021 budget as introduced recognizes that the economy is in a long period of sustained growth with potential spending pressures on the horizon. As a result, the FY 2021 balances having reserves for the future with making targeted investments in the future.

Performance Detail – Fiscal Responsibility

Key Performance Area 3 – Data by Report Year

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
3.1. Bond rating from all three nationally recognized bond rating agencies for each issuance of State General Obligation bonds (maintain AAA rating) (CY 2015 - CY 2019)	Treasurer's Office	AAA	AAA	AAA	AAA	AAA	No change	Maintain AAA
3.2. Capital debt service as a percent of State revenue (FY 2015 - FY 2019)	CDAC	6.90%	7.27%	7.53%	7.64%	7.55%	9.4%	At or below 8%
3.3. Asset to liability ratio for the MD State Retirement and Pension System (funded ratio) (FY 2015 – FY 2019)	State Retirement and Pension System	69.7%	70.5%	71.8%	72.5%	72.5%	4.0%	100% funded by 2039
3.4. 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 2015 - FY 2019)	State Retirement and Pension System	-4.9%	-6.4%	2.5%	0.56%	-0.99%	79.9%	0.0% or higher
3.5. Percent of repeat audit findings for State agencies (FY 2015 - FY 2015)	DBM	23%	23%	23%	24%	26%	13.0%	N/A
3.6. Projected percentage of ongoing revenues covering ongoing spending based on the Governor's 5-year plan included in the budget allowance (FY 2017 - FY 2021)	DBM	97.6%	93.9%	93.8%	92.0%	93.2%	-4.5%	N/A

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.

Regulatory Reform

In July 2015, the Governor signed Executive Order 01.01.2015.20, establishing the 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 the and commission research. The second of Commission's three reports was released in December 2016 and highlighted over 180 regulations which were subsequently eliminated or streamlined bv the Administration.

In December 2017, the Hogan Administration announced the third and final report of the Regulatory Reform Commission, identifying an additional 657 regulations for elimination or streamlining. Among those identified for reform were:

- the repeal of over 200 obsolete regulations in the Maryland Department of Health,
- the repeal of a \$500 fee charged to towing companies applying for a permit by the Maryland Transportation Authority, and
- allowing the Maryland Department of the Environment to issue one single permit for toxic substances and pesticide application rather than two separate permits under current regulations.

In addition, the Governor signed Executive Order 01.01.2017.33, mandating that all state agencies use new, more precise guidance formulated by the Advisory Council on the Impact of Regulations on Small Business when estimating the compliance cost and economic impact of regulations affecting Maryland small business.

During the 2019 Legislative Session, the Hogan Administration introduced legislation requiring the Department of Budget and Management to facilitate training for State agencies regarding economic impact analysis of proposed regulations (HB 157). Though this legislation was not passed by the General Assembly, CH 212 of 2019 requires this training and was signed by the Governor.

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 existing process for procurement was unpredictable and discouraged 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, and 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.

During the 2017 Legislative Session, the Hogan Administrative introduced and the General Assembly passed a three-bill package implementing the Commission's recommended reforms, including:

- increasing the agency small procurement dollar threshold from \$25,000 to \$50,000,
- eliminating the statutory preference for competitive sealed bidding, allowing multiple other procurement strategies at the agencies discretion, and
- increasing the Small Business Reserve Program goal and making the goal applicable to all state agencies

The Administration also supported other significant procurement reform legislation passed by the General Assembly, including the creation of a Chief Procurement Officer for the State and the consolidation of all nontransportation State agency procurement into the Department of General Services. This merged Office of State Procurement was effective in FY 2020, and the Hogan Administration has invested an additional \$1.8 million over two years in the FY 2021 budget to expand the office as it continues efforts to modernize state procurement practices, get the best value for taxpayers, and make it easier for vendors to work with the State.

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 initially 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.

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. In fiscal 2019, the Workgroup received nearly 60,000 customer survey responses (a 17.6% increase in survey responses from fiscal 2018), and 87% expressed satisfaction with the level of customer service they had received – up from 81.7% in fiscal 2017.¹⁵

Ethics Reform

In January 2017, Governor Hogan introduced major legislation representing the first significant overhaul of State ethics law in 15 years.¹⁶ The Public Integrity Act of 2017 was passed on a bipartisan basis by the General Assembly. Among other provisions, the legislation:

- bans former State legislators, Governors, and all other State constitutional officers from lobbying for oneyear after leaving office,
- requires ethic disclosures made by State officials be made available online to the public for free,
- increases the mandatory fine for State officials found guilty of bribery,

- strengthens financial disclosure requirements for State officials to include spouses and all major business activities, and,
- establishes the Citizens' Advisory Board for Legislative Ethics to offer recommendations to changes in public ethics laws.

Government Efficiency and Transparency

The Hogan Administration has taken 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, deteriorating 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 annually saves State tax dollars and improves efficiency.

The Governor's Office of Performance Improvement (GOPI) was established in October 2015 (Executive Order 01.01.2015.26) to improve business processes throughout Maryland State agencies through greater accountability. GOPI strives to increase the responsiveness and level of customer service of State agencies and departments; regularly review procedures, rules, and regulations of State agencies and departments to increase their efficiency and effectiveness; and promote business process improvement strategies to make government more efficient and responsive to taxpayers.

GOPI also helps to curate the Maryland Open Data Portal. Since 2015 the state has nearly tripled the number of datasets (more than 1,000) available on the portal, providing constituents with more self-service access to state data than ever before. In 2018, GOPI launched a new Data Analytics initiative to support state agencies with improved access to business intelligence tools and to drive better management insights. As a result of this work, there are currently a dozen analytics apps available to state agencies through a secure portal.

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

¹⁵ Governor's Annual Customer Service Initiative Annual Report 2019.

¹⁶ "Governor Larry Hogan Announces Integrity in Government Initiative" Governor Hogan Press Release January 19, 2017.

legislation reflects the ongoing effort of the Hogan Administration to modernize and streamline state government, including the removal of archaic and duplicative regulations.

In another important step in fiscal transparency and keeping the Governor's promise to make State government accessible and convenient, the Governor unveiled the Maryland Transparency Portal (http://mtp.maryland.gov) in August 2019. The website makes navigating the State budget easy to understand for all constituents, with searchable databases of payments the State makes to vendors as well as grants and loans awarded by State agencies. The level of budget detail provided on the website is more than required by law to be published in the annual budget books – a user can navigate down to individual subprograms (such as a specific State Park) and subobjects (such as vehicle purchases or office supplies).

Other Improvements to 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 in October 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 cutting-edge research.¹⁷ The end result is a Department that better serves both Maryland's businesses and its citizens.

Information Technology Enhancements

In December 2017, the Maryland Department of Information Technology (DoIT) completed a Hogan Administration initiative to launch an online portal that allows Maryland residents and visitors to find information on state-issued licenses and permits through a single website called Maryland OneStop. This is a major improvement over the preexisting situation where public applicants had to navigate through a myriad of web pages within the agency site to find relevant information such as license requirements, the application cost, approval criteria, etc. Through the OneStop project, paper-based processes will be upgraded to electronic forms that citizens can fill and submit online, pay any associated fees, and check the status of their requests. As a result, the licenses will be easier to apply for and processing costs will drop, resulting in savings to the taxpayers of Maryland.

Since fiscal 2017, the Department of Human Services (DHS) has been working with DoIT to develop MD THINK, which will replace all of DHS's legacy IT systems and integrate them with the human services systems at the Department of Juvenile Services, the Maryland Health Benefit Exchange, and the Maryland Department of Health. This is a shift from program-centric systems to a client-centric platform. MD THINK will include a cloud-based shared infrastructure and a data repository. This allows for a modular approach to systems in which an agency can develop an application that is much more adaptable to changing requirements.

The Hogan Administration continues to work to identify aging systems in need of replacement to dramatically improve processes for Marylanders. The Strategic Enterprise Application Network (SEAN) will allow tax credit applicants to self-check the status of their submissions, receive automated and individualized communications from the Department of Assessments and Taxation, and more easily facilitate necessary corrections or updates based on those submissions. Customers will have access to an online, interactive help guide and receive an instant receipt when working with the application, providing better customer service to the applicants.

¹⁷"Governor Larry Hogan Announces Formation of Maryland Department of Commerce," Press Release, October 1, 2015.

5. IMPROVED QUALITY OF LIFE

Performance Overview

Performance Status (percentages are rounded)	Number of Indicators	Percent
Favorable (Change >10%)	16	28.1%
Favorable (3% to 10%)	13	22.8%
Stable (-2% to 2%)	13	22.8%
Unfavorable (-3% to -10%)	4	7.0%
Unfavorable (< -10%)	11	19.3%
Total	57	100%

The final major Hogan Administration priority, improving quality of life, encompasses many areas of performance across the State. Overall, 73.7% of related indicators either performed favorably or held stable between the 2016 and 2020 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 students receiving grades 3, 4, or 5 on AP Exams increased from 61.0% to 66.8%.
 - The percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities jumped by 14.5%.
 - The number of higher education graduates in science, technology, engineering, and math (STEM) fields grew by 30.5%, from 13,850 to 18,076.
- Public Safety
 - 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 9.1%.
 - The Part I crime offense rate per 100,000 went from 2,960 to 2,515, a decline of 15.0%.
 - The number of offenders under Department of Public Safety and Correctional Services (DPSCS) jurisdiction declined by 10%.
 - The rate of referral for non-violent and violent youth felony offenses decreased by 16.1%.

- Health and Human Services
 - $\circ~$ Maryland's uninsured rate was reduced by more than half in the past seven years, from 14.1% to 7.0 %.
 - The rate of new HIV diagnoses dropped 21.8%.
 - The rate of live births to adolescents between 15 and 19 plummeted by 26.4 % in the past five years.
 - The rate of children placed in out-of-home care dropped from 9.9 per 100,000 to 7.1, a decline of 28.3%.
- Environment
 - Acreage of submerged aquatic vegetation (SAV) in the Maryland portion of the Bay grew by 65.6% to 65,263 acres.
 - The dredge survey index of stock crab size grew by 24.0%.
 - The estimated nitrogen load to the Chesapeake Bay dropped by 5.3%.
 - Percent of vehicles registered in the state that are alternative fuel, electric, or hybrid-electric increased by 13.9%.
 - The number of children under 6 years of age with elevated blood lead levels dropped by 13.5%.

The following section discusses significant trends in performance.

Significant Performance Trends - Education

Indicator 5.2: Percent of AP exams with a passing score of 3 or above

Maryland high schools have experienced a large increase in the amount of passing Advanced Placement (AP) exam scores. These exams test students in advanced level topics on a score of 1 to 5, with a score of 3 or higher typically being accepted as college credit to many nation-wide colleges and universities.¹⁸ Students in the state experienced an increase in the rate of passing scores from 61.0% in 2016 to 66.8% in 2020, a jump of 9.5%.

At the nation-wide level, the State of Maryland had the 11th highest passing student body score in calendar year 2018,¹⁹ showing a state-wide educational trend that places high emphasis on excellence, dedication, and improvement. Students with AP credit moving into their college career

https://research.collegeboard.org/programs/ap/data/participa tion/ap-2018

¹⁸ AP Students, College Board.

¹⁹ AP Program Participation and Performance Data 2018, Retrieved from

can have quicker graduation rates and movement into the workforce.²⁰

Indicator 5.3: Prekindergarten enrollment

Prekindergarten enrollment in the State of Maryland has grown from 30,385 students in 2016 to 30,947 students in 2020, an increase of 1.8%. In FY 2020, the Hogan Administration dedicated \$80.5 million in funding to support and expand prekindergarten with an additional \$13.2 million of support committed in FY 2021. Under the Hogan Administration, state funding to expand access to prekindergarten education has grown by 2,179%.

Numerous studies have shown that prekindergarten programs have beneficial and lasting impacts on all children, with an additional emphasis on those from lowincome and disadvantaged families.21 Children enrolled in prekindergarten programs are less likely to be held back through middle and elementary school, and have statistically higher high school graduation rates.²² The Hogan Administration acknowledges difficulties that disadvantaged families face with accessibility to prekindergarten programs and is investing in meaningful ways to help all families.

Indicators 5.4 and 5.5: High school completion

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

High school graduation rates have improved slightly in recent years, from 86.4% in 2016 to 87.1% in 2020, an increase of 0.7%. At the same time, high school dropout rates have remained roughly flat at 8.4%.

Completion of high school program requirements indicates students' readiness for post-secondary education and/or employment.23 At the same time, failure to complete high school is closely linked with decreased employment opportunities, low pay, and limited paths to advancement.24 Unemployment rates of high school dropouts are more than three times higher than that of individuals with bachelor's degrees.25

Maryland high schools have experienced favorable trends in the past five years which can be attributed to revised dropout policies, funding opportunities, and educational advancement.

Indicators 5.8 and 5.10: Higher education completion

- Indicator 5.8: Six year graduation rate of first-time, full-time students at public four-year colleges and universities
- Indicator 5.10: Four-year transfer and graduation rate of first-time community college students

Graduation rates of those pursuing higher education after high school in the state have also increased in recent years. From report years 2016 to 2020, the six-year graduation rate for those in four-year colleges and universities has increased by 8.0% while the transfer and graduation rate for those at community colleges has increased by 14.6%.

Part of this growth rate can be attributed to low tuition and fee costs at public institutions for State residents. In FY 2006, Maryland's resident tuition and fees at public fouryear colleges and universities were the 8th highest in the United States.²⁶ Since then, the State has incorporated many initiatives and financial investments to cap tuition growth for in-state undergraduate students in the University System of Maryland (USM). From 2011 to 2020, Maryland's public four-year in-state tuition and fees increased by a total of 13.0%, while the national average growth rate during this same time was 20.3%, a stark difference that shows the continuing commitment and investment that the State has made in its students.

In addition, from 2015 to 2020, strategic investments in the State's community colleges has slowed tuition growth, making the growth rate of in-district tuition at public twoyear community colleges in the State the 20th lowest in the nation.27

Exhibit 5.1 compares the average public four-year in-state tuition and fees for Maryland to the nationwide average. Of note, the State-wide average for Maryland has fallen slightly below the national average since 2012.

institutions by state, retrieved from

^{20 &}quot;Are AP Students More Likely to Graduate from College on Time?" College Board, 2013.

²¹ The Current State of Scientific Knowledge on Pre-Kindergarten Effects, 2017.

²² The Current State of Scientific Knowledge on Pre-Kindergarten Effects, 2017.

²³ Maryland Results for Child Well Being, 2009.

²⁴ Maryland Results for Child Well Being, 2009.

²⁵ US Bureau of Labor Statistics, 2017. Retrieved from:

https://www.bls.gov/opub/ted/2017/unemployment-rate-2-point-5-

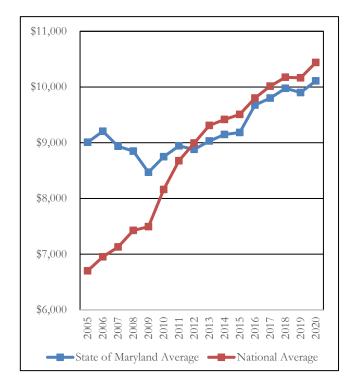
percent-for-college-grads-7-point-7-percent-for-high-school-dropoutsjanuary-2017.htm

²⁶ College Board, Tuition and Fees by Sector and State over Time, Retrieved from https://trends.collegeboard.org/college-

pricing/figures-tables/tuition-fees-sector-state-over-time ²⁷ College Board, in-district tuition and fees at public two-year

https://research.collegeboard.org/trends/college-pricing/figurestables/published-district-tuition-and-fees-public-two-year-institutionsstate

Exhibit 5.1 Average Public Four-Year In-State Tuition and Fees for Maryland Compared to the National Average, Report Years 2005 – 2020, in 2018 Dollars.²⁸



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

From report years 2016 to 2020, the percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities increased by 14.5%, from 37.4% to 42.8%.

The Maryland Higher Education Commission (MHEC) continues to work with the Segmental Advisory Council and representatives of it member campuses to discuss the merits and outcomes of plans designated to increase the degree attainment rate of minority students. MHEC's work on near completers, reverse transfers, and course redesign is expected to increase degree attainment, particularity for students from minority backgrounds.

In addition, MHEC will continue to work with the Historically Black Colleges and Universities (HBCU) to

revise and refine the summer bridge programs and other initiatives.

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

The number of graduates in science, technology, engineering, and math (STEM) from Maryland's public and private higher educational institutions has increased from 13,850 in 2016 to 18,076 in 2020, a jump of 30.5%. STEM graduates are particularly important for a developing workforce and STEM job concentration has been noted as remarkably high in the State since 2015.²⁹

To continue this trend, the State has continually included investments into the University System of Maryland for STEM initiatives and has emphasized the need to have a workforce that is not only competitive but remarkably educated in the ever-changing needs of this century.

In FY 2021, the State has committed \$30 million to continue the support of these initiatives and \$1.9 million to provide graduates from the Pathways in Technology Early College High School (P-TECH) Program with a high school diploma and a two-year postsecondary degree in a STEM field from an accredited community college. The Hogan Administration has recognized that these investments in STEM education are not only worthwhile, but necessary to make a growing and competitive workforce in the State for years to come.

Significant Performance Trends – Public Safety

Indicator 5.15: Homicide rate per 100,000

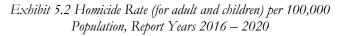
The rate of homicides in Maryland declined significantly from 2005 through 2013, with an overall drop of 34% among adult rates and nearly 40% in the children and youth homicide metrics. However, both metrics reversed trends in 2015, and increased further through report year 2019. This trend mirrors nationwide data, where murder rates grew nationally in 2015 and in 2016.³⁰ Both metrics saw a slight improvement with these trends reversing in report year 2020 – from report year 2019 to report year 2020, adult homicides declined by 4.1% and youth homicides declined by 18.8%.

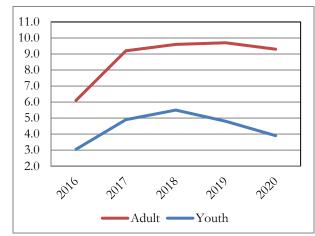
²⁸ College Board, Tuition and Fees by Sector and State over Time, Retrieved from <u>https://trends.collegeboard.org/college-pricing/figures-tables/tuition-fees-sector-state-over-time</u>

²⁹ Maryland Commission on Higher Education, 2017-2021 State Plan for Postsecondary Education, Retrieved from

http://www.mhec.state.md.us/About/Documents/2017.2021%20Ma ryland%20State%20Plan%20for%20Higher%20Education.pdf ³⁰ Federal Bureau of Investigation, 2017 Report - Crime in the United States.

Exhibit 5.2 displays both youth and adult homicide trends in Maryland through time.

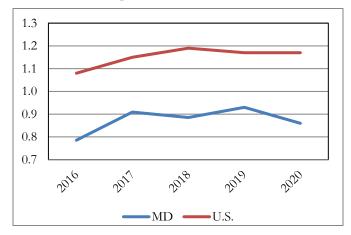




Indicator 5.17: Traffic fatality rate per 100 million miles traveled

The State of Maryland has consistently achieved a lower traffic fatality rate than the national average, as shown in **Exhibit 5.3**. From report year 2018 to 2020 Maryland's traffic fatality rate has decreased from 0.93 to 0.86, a 7.5% reduction.

Exhibit 5.3 Traffic Fatality Rate per 100 Million Miles Traveled, Report Years 2016 – 2020



To address traffic safety challenges, the Maryland Department of Transportation worked with multiple agencies and jurisdictions to develop a five-year, statewide coordinated safety plan known as the Maryland Strategic

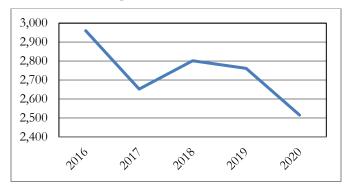
Highway Safety Plan (SHSP) 2016-2020, which provides a framework for reducing transportation fatalities and serious injuries on all public roads. This plan aims to reduce statewide traffic fatalities per 100 million miles traveled to 0.64 or fewer by calendar year 2020 and 0.53 by calendar year 2030.³¹

Recently enacted legislation has enhanced traffic safety. Improvements include combating driving under the influence of alcohol and drugs, establishment of a task force to study bicycle safety in Maryland, 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, and strengthening the graduated licensing process.³²

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. Overall, the Part I crime rate declined by 42% since 2004. **Exhibit 5.4** shows a decrease of 15% from report years 2016 to 2020.

Exhibit 5.4 Maryland Part I Crime Rate, Report Years 2016 - 2020



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

Maryland Department of Transportation, e-mail correspondence, September 28, 2010, Maryland Department of Transportation fiscal years 2011, 2012, and 2013 MFR Performance Discussions

³¹Maryland Department of Transportation, 2015 Report - The Maryland Strategic Highway Safety Plan, Retrieved from <u>https://www.roads.maryland.gov/Index.aspx?PageId=240</u>

³²Maryland Department of Transportation, 2010, 2011, and 2017 Annual Attainment Reports on Transportation System Performance,

violent offenders in a community setting.³³ The Initiative has been enhanced to include drug treatment, mental health counseling, family counseling, and job readiness training.

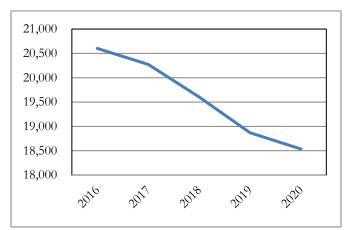
Following the tragedy on September 11, 2001, the Maryland Coordination and Analysis Center (MCAC) was formed which coordinates the efforts of federal, state and local agencies to gather, analyze, and share intelligence information with law enforcement, public health, and emergency responder personnel.

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.³⁴

Indicator 5.19: Offenders under Correctional Jurisdiction

Incarcerated offenders under Department of Public Safety and Correctional Services jurisdiction have continued to decline. As shown in **Exhibit 5.5**, offenders in correctional institutions have declined by 10% since report year 2016. Currently, the number of incarcerated offenders is at its lowest level since 1992.

Exhibit 5.5 Maryland Offenders under Correctional Jurisdiction, Report Years 2016-2020



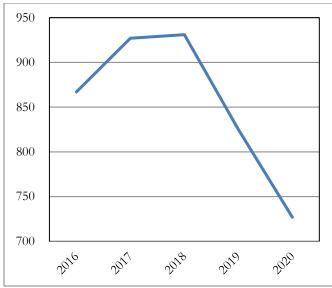
Over this time period the Maryland General Assembly passed the Justice Reinvestment Act (JRA), which is a nationwide, data-driven approach to public safety seeking

to reduce corrections spending and reinvest savings in evidence-based strategies to decrease crime and reduce recidivism. Key provisions of the bill include the elimination of mandatory minimum sentences for certain drug convictions, enhanced administrative release procedures, and greater emphasis on drug treatment diversionary programs for defendants while expanding penalties for violent offenders and high-level drug traffickers.³⁵ As the Justice Reinvestment Act matures, it will manifest further decreases to correctional populations.

Indicator 5.21: Rate of referral for non-violent and violent felony offenses per 100,000 youth between ages 11 and 17³⁶

Involvement in felony offenses increases the risk of injury or death, and continued criminal activity into adulthood. The referrals for violent and non-violent offenses for youths declined by 21% since 2013 and 16% since 2016. Juvenile referrals includes adult court transfers, citizen referral (such as parents or teachers), police arrest and violation of probation. **Exhibit 5.6** shows positive trends in this measure over the report period.

Exhibit 5.6 Rate of Referral for Violent and Non-violent Youth Felonies (per 100,000), 2016 - 2020



Success in assessing the needs of juveniles (physical and mental health services, drug abuse services, improved education, or social services) and treating troubled

³³Fiscal year 2015 MFR Performance Discussion, Department of Public Safety and Correctional Services.

³⁴Fiscal year 2014 and 2015 MFR Performance Discussion, Department of Public Safety and Correctional Services.

³⁵Governor's Office of Crime Control and Prevention, "Governor Larry Hogan Announces Implementation of Justice Reinvestment Act," 3 October 2017, Retrieved from

http://goccp.maryland.gov/governor-larry-hogan-announcesimplementation-justice-reinvestment-act/

³⁶ This metric was previously reported as juveniles ages 10 to 17 and has been updated to track juveniles 11 to 17. Additionally, this metric has been updated to include both violent and non-violent felony offenses, measuring "referrals" instead of "arrests," based on how the Department of Juvenile Services now collects and tracks this data.

juveniles for their needs are important factors in preventing juvenile crime.

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 Services 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

The uninsured rate for individuals under 65 in Maryland declined by fifty percent since calendar year 2012 as only 7% remain uninsured in 2018.

This significant improvement in metric performance reflects a national trend and can be attributed largely to the Affordable Care Act. The State's Reinsurance Program has also contributed to stabilizing the uninsured rate as it has helped lower health insurance premiums in the individual market in Maryland, with a decline of 23.5% over the past two years.

Indicators 5.27 and 5.28: High school student 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 estimates the proportion of underage high school students who have ever smoked a whole cigarette and is from a survey administered every two years. The percent change from the calendar year 2000 baseline for underage high school students who ever smoked a whole cigarette is on a steady downward trend, with a decline of 212.1% since the start of the survey.

The Maryland Cigarette Restitution Fund Tobacco Use Prevention and Cessation Program utilizes a comprehensive tobacco-use prevention strategy that includes "school-based programs, community-based programs, youth access enforcement, tobacco-use cessation programs, media messages promoting the availability of cessation assistance and the health benefits of cessation generally, surveillance (tobacco surveys) of under-age tobacco use behaviors, and ongoing evaluation of programmatic efforts."³⁷ 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.³⁸

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. Starting in 2005, the survey is administered every two years.

Early use of alcohol 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.³⁹ The percentage of high school students drinking alcohol is in decline, down to 25.5% in report year 2019 (the most recent available survey) from 42.9% in 2009.

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 21.6% of all deaths in Maryland in calendar year 2018.⁴⁰ The overall cancer mortality rate in Maryland declined by 7.6% from calendar year 2014 to 2018, a reduction of twelve deaths per 100,000 persons.

Maryland's cancer mortality rate has remained below the national rate since 2010, except for 2016 when it was 0.8 above the national rate. **Exhibit 5.7** shows trends through time for both Maryland and the nation as a whole.

Exhibit 5.7 Maryland and U.S. Cancer Mortality Rate (per 100,000 Persons), Calendar Years 2014 - 2018

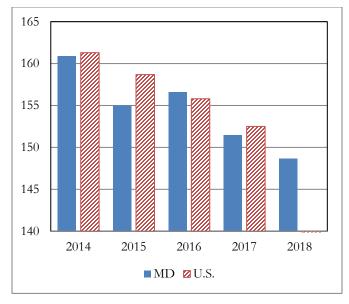
³⁷Strategies and Discussion of Program Performance, FY 2015 MFR submission, Cigarette Restitution Fund–Tobacco Use Prevention and Cessation Program - Family Health Administration.

³⁸ Strategies and Discussion of Program Performance, FY 2015 MFR submission, Cigarette Restitution Fund–Tobacco Use Prevention and

Cessation Program–Prevention and Health Promotion Administration, Maryland Department of Health.

³⁹Maryland's Results for Child Well-Being 2011

⁴⁰Maryland Vital Statistics Annual Report 2018, Vital Statistics Administration, Maryland Department of Health.



*National data not yet available for calendar year 2018.

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."⁴¹

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 with input from 83 public and private stakeholders. The Cancer Plan is far-reaching, 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.

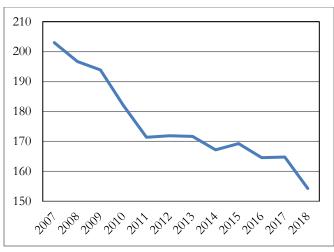
Primary strategies to address cancer mortality include continuing strong public health surveillance, education, prevention, screening, diagnosis and treatment efforts, and strong cancer research.

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 disease, hypertensive heart disease, or ischaemic heart disease.⁴² Heart disease continued to be the leading cause of death in Maryland in calendar year 2018, accounting for 23.1% of all deaths. The age adjusted heart disease mortality rate was 154.3 per

100,000 population in 2018, 7.7% below the rate five years ago. **Exhibit 5.8** shows trends through time for heart disease mortality in Maryland.

Exhibit 5.8 Heart Disease Mortality Chart (per 100,000 population), Calendar Years 2007-2018



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

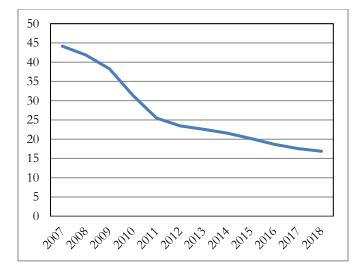
Indicator 5.31: Rate of diagnoses and the percent change from the prior year level in the number of age adjusted new HIV diagnoses (per 100,000 population)

The rate of HIV diagnoses declined by 21.8% from calendar years 2014 through 2018. Strategies to reduce the rate of new HIV diagnoses include:

- increased collaboration among State agencies and community based organizations to enhance access to and use of needed prevention services by disproportionately affected populations;
- reduced drug and alcohol use associated with HIV risk behaviors among adults and youth by expanding work with substance abuse providers;
- among the current providers, increased skills and support to deliver quality HIV interventions;
- increased supply of free and sterile needles among injection drug users; and
- access to condoms among sexually active youth and adults engaging in HIV risk behaviors.⁴³ Exhibit 5.9 Rate of New HIV Diagnoses (per 100,000 population), Calendar Years 2007-2018

⁴³Fiscal year 2017 MFR Strategies and Discussion of Program Performance, Infectious Disease and Environmental Health Services– Prevention and Health Promotion Administration, Maryland Department of Health

 ⁴¹ "Governor Larry Hogan Reaffirms State's Commitment to Fighting Cancer, Hosts Blood Drive," Press Release September 15, 2016.
 ⁴²Fiscal year 2012 MFR Data Definition and Control Procedures, Family Health Administration, Maryland Department of Health



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.⁴⁴ Maryland's rate of primary/secondary syphilis cases per 100,000 population historically exceeded the national rate over the past decade. Maryland currently ranks the twelfth highest state in terms of the syphilis cases rate, down from fifth place in 2013.⁴⁵

The rate of syphilis incidence in Maryland increased by 62.7 percent since calendar year 2014. From 2015 to 2016 the rate remained stable but increased by 1 case per 100,000 population in 2017, reflective of national trends. Maryland continues to focus on collaborative public health efforts to expand the infrastructure and expertise of Sexually Transmitted Infection (STI) prevention staff and to connect patients to timely treatment to interrupt the spread of the infection and contribute to the long-term reduction of the syphilis epidemic.

The governor's fiscal 2021 budget includes more than \$124 million for HIV/STI prevention and treatment programs to help address this epidemic.

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.⁴⁶ In most households with very low food security, the survey respondent reported that they were 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 from state-to-state. Therefore, a 3-year average is used to provide more reliable statistics at the state level.

Over the past decade, Maryland's prevalence of household-level very low food security was equal to or below the U.S. level, in 2018 this trend reversed as Maryland's rate exceeded the U.S. level by 0.6 percent. The recession was a significant factor contributing to household level food insecurity, but Maryland continues to maintain food insecurity rates below peak recession levels. Since 2011 the prevalence of household-level food insecurity declined by 7%.

Over the last several years, Maryland 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 charged his Children's Cabinet with four major initiatives, one of which is to continue efforts to reduce the incidence of child hunger. In May of 2017 the Governor signed the Hunger-Free Schools Act, extending a provision to allow high-need schools in Maryland to provide free school breakfast and lunch to all students⁴⁷. During the 2018-2019 school year nearly 390,000 students received free or reduced meals throughout Maryland⁴⁸. Further, the Governor's fiscal 2021 budget includes \$931 million in federal Supplemental Nutrition Assistance Program (SNAP) benefits to serve more than 346,000 households.

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

⁴⁴Fiscal year 2013 MFR Data Definitions and Control Procedures, Infectious Disease and Environmental Health Administration, Maryland Department of Health; CDC Sexually Transmitted Diseases in the United States, 2008, November 2009

⁴⁵Centers for Disease Control and Prevention, 2018 Sexually Transmitted Diseases Surveillance

⁴⁶The 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).

⁴⁷ "Governor Larry Hogan Signs Hunger-Free Schools Act of 2017" Retrieved From: http://www.mdhungersolutions.org/press/governorhogan-signs-hunger-free-schools-act-of-2017/

⁴⁸ "Free and Reduced Price Meal Statistics" SY 2018-2019 Retrieved from: http://marylandpublicschools.org/programs/pages/schoolcommunity-nutrition/freereducedpricemealstatistics.aspx

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.⁴⁹ Maryland's rate of live births to adolescents between 15 and 19 years of age compared favorably to the U.S. rate for each year in the last decade. In the last five years, the Maryland rate declined by 26.4%, reflecting a national trend.

Maryland uses a multifaceted approach to prevent teen pregnancy including health education and counseling, access to health care, outreach, and public awareness.

Indicator 5.41: Heroin overdose-related deaths in Maryland

The heroin epidemic in the U.S. gained increasing media and policy attention over the past several years, and Maryland is no exception. At the peak level in calendar year 2016 the number of heroin overdose-related deaths in Maryland was 1,212 or 209% more deaths than in 2012.

In response, Governor Hogan issued Executive Orders 01.01.2015.12 and 01.01.2015.13, and State resources are 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.

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 in December 2015, including contributions from 431 stakeholders and 33 recommendations. It is a major priority of the Hogan Administration to implement these recommendations.

In January 2019, the Governor signed Executive Order 01.01.2019.02 establishing the Commission to Study Mental and Behavioral Health in Maryland. The Commission is chaired by the lieutenant governor and includes representatives from each branch of state government, representatives from the state departments of Health, Public Safety and Correctional Services, and Human Services, as well as the Maryland State Police, the Maryland Insurance Administration, the Opioid Operational Command Center, and six members of the public with experience related to mental health. The commission is tasked with studying mental health in Maryland, including access to mental health services and the link between mental health issues and substance use disorders.

The governor's fiscal 2021 budget continues to demonstrate a strong commitment to combating the opioid crisis with record level spending on mental health and substance use disorders. In fiscal 2021 more than \$862 million in state funds are dedicated to various mental health and substance use programs, this includes an additional \$57.5 million (500% over the fiscal 2016 funding level) for residential treatment services for substance abuse.

Governor Hogan declared a State of Emergency in March 2017 in response to the heroin and opioid crisis and established the Opioid Operational Command Center (OOCC) to lead the state's response and coordinate directly with all 24 local jurisdictions. The OOCC launched Before It's Too Late, the state's effort to bring awareness to the heroin and opioid epidemic-and to mobilize resources for effective prevention, treatment, and recovery.

In keeping with the governor's five-year \$50 million commitment, the FY 2021 budget includes the fourth installment of \$10 million to fund activities of the OOCC. The Governor's continued commitment for funding the OCCC and mental health and substance use programs has contributed to the 31.5 decline in heroin overdose-related deaths since 2016. Marylanders grappling with a substance use disorder can find help at BeforeItsTooLateMD.org and 1-800-422-0009, the state crisis hotline.

⁴⁹Maryland's Results for Child Well Being 2009; State Profiles of Child Well-being, 2011 Kids Count Data Book, The Annie E. Casey Foundation

Significant Performance Trends - Environment

Indicator 5.42: Chesapeake Bay Habitat Health Index – Maryland

The Chesapeake Bay Habitat Health Index (Bay Health Index) measures the progress of three water quality indicators and three biotic indicators⁵⁰ 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 portion⁵¹ of the Chesapeake Bay and the Bay-wide number.

From calendar year 2013 to calendar year 2018 the Bay Health Index showed steady progress, but 2019 (report year 2020) was a down year for the Bay. Maryland's score fell to 40% from 50% the previous year. The score for the entire Chesapeake Bay also decreased in report year 2020, from 54% to 47%. Maryland and Bay-wide scores can vary widely from year to year depending on trends in weather, etc.

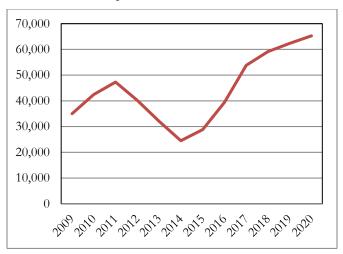
In 2018, the greatest improvement of the fifteen regions scored in the Bay Health Index was in the Elizabeth, James, and Choptank Rivers.⁵² While there is still improvement to be made in this region, the implementation of Enhanced Nutrient Reduction (ENR) technologies at wastewater treatment facilities along the rivers and elsewhere in Maryland will make the process of nutrient removal more effective going forward.⁵³

As Maryland begins implementing the Phase III Watershed Implementation Plan (WIP), it will continue to strategize how best to reduce nutrient loads into the Chesapeake Bay. In addition to fully funding the 2010 Chesapeake and Atlantic Coastal Bays Trust Fund, the Hogan Administration has also dedicated funding from the Bay Restoration Fund for the Clean Water Commerce act, which will jump-start nutrient trading markets in the State and region.

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. In 2020, aquatic grasses covered 65,263 acres across the Bay. This is a 5% increase from the 2019, and a 66 percentage point improvement from the 2016 acreage total of 39,400 (**Exhibit 5.10**).

Exhibit 5.10 Acres of Submerged Aquatic Vegetation (SAV) Report Years 2009 - 2020



A scientific article titled: *Long-term nutrient reductions lead to the unprecedented recovery of a temperate coastal region*, published in the Proceedings of the National Academy of Science in March 2018, shows that reductions in discharges of nitrogen, phosphorus, and other pollutants have led to a resurgence of underwater grasses in recent years.⁵⁴

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 within a 1,000 metered square area, 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

⁵⁰The 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.

⁵¹It 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.

⁵² UMCES. 2018. Chesapeake Bay Report Card 2018.

⁵³ Maryland Department of the Environment. 2017. The Evolution to Enhanced Nutrient Removal Technology

⁵⁴ Jonathan S. Lefcheck, et al. 2018. Long-term nutrient reductions lead to the unprecedented recovery of a temperate coastal region. Proceedings of the National Academy of Sciences of the United States of America. https://www.pnas.org/content/115/14/3658

are average catches per tow, after the catches have been corrected for the efficiency of the dredge gear and overwintering mortality.⁵⁵

Total blue crab abundance estimated by the 2019 Bay Wide Winter Dredge Survey increased 51% from calendar year 2018 to 594 million crabs which is above the 30 year survey average of 457 million crabs. The abundance of spawning age females increased 30% from calendar year 2018 to 191 million crabs which is slightly below the target abundance of 215 million. Annual harvest of blue crabs for CY 2019 was below the target which is the 2nd consecutive year harvest has been at or below target fishing levels.

The increase in crab density in calendar year 2019 was highly driven by environmental factors. Specifically, there was below average winter mortality of adult crabs in calendar year 2019, among the lowest in recent years. Additionally, recruitment (number of juvenile crabs) was well above the abundance threshold. Recruitment is mostly determined by environmental factors, but having a large population of female crabs increases the chances of having a large recruitment event. The female exploitation fraction has been below the threshold of 34 percent for the eleventh consecutive year since calendar year 2008.

As **Exhibit 5.11** shows, the blue crab population can vary dramatically from year to year. Crabs are vulnerable to extreme cold, particularly prolonged cold winter temperatures.

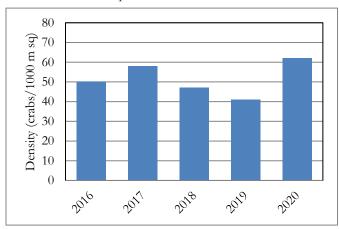


Exhibit 5.11 Dredge Survey Index - Crab Stock Size, Report Years 2016-2020

Indicator 5.47: Acres of cover crops planted

In 2010, the U.S. Environmental Protection Agency established nutrient and sediment limits for the Chesapeake Bay known as the Total Maximum Daily Load (TMDL). Cover crops are one of the most cost-effective strategies to meet nutrient and sediment TMDL reduction targets outlined in Maryland's Watershed Implementation Plan to protect and restore the Chesapeake Bay by 2025.Through the Cover Crop Program, farmers plant non-harvested cereal crops on agricultural land to control soil erosion and absorb unused nitrogen and phosphorus remaining in the soil following the fall harvest.⁵⁶ The Cover Crop Program provides cost share assistance to farmers to implement this best management practice.⁵⁷

In recent years the number of acres planted has remained steady, with cover crops planted dipping slightly from 359,873 acres last year to 359,702 acres this year. Over the past decade, the number of acres planted has increased dramatically. From 2010 to 2020, the number of acres of cover crops planted has increased by 91.9%, from 187,479 acres to 359,702 acres.

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 healthbased 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 fell from 96% in fiscal year 2014 to 92% in fiscal year 2019. This decrease is due to several large water systems, which each serve over 10,000 people, experiencing violations during fiscal year 2019. As of fiscal year 2019, most of the violations that caused this decrease in compliance for community water systems have been resolved. The majority of the violations were technical violations for monitoring and reporting that do not impact public health.

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

 ⁵⁵Maryland Department of Natural Resources, Fisheries Service, Data Definition and Control Procedures, fiscal year 2012 and 2013.
 ⁵⁶Overview, Chesapeake Bay Report Card, 2010, Chesapeake EcoCheck. Retrieved from

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

⁵⁷Cost-share support is administered through Maryland Agricultural Water Quality Cost-Share (MACS) program, Maryland's Chesapeake Bay Tributary Strategy Implementation Plan, January 2008

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 ozone-forming 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 has increased from its low in 2016 but remains below the 2014 average of 22 days. MDE attributes the improvement in performance in 2016 to the continuing addition of pollution controls at existing power plants west of Maryland, more power plants actually running their pollution controls, and the conversion of coal-fired power plants to natural-gas-fired plants.⁵⁸

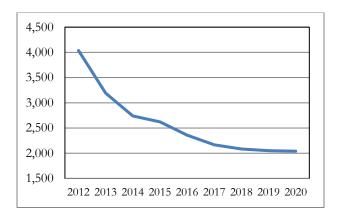
However, there has been a recent increase in days of 8hour ozone standard exceedances, which MDE attributes to air pollution transported into Maryland from states west of the Maryland border. To address this issue of out of state air pollution impacting Marylanders, Maryland is pushing EPA to require large coal-fired power plants in other states to reduce their emissions through legal means provided under the federal Clean Air Act. Maryland also continues to work with other states on efforts to reduce the amount of pollution that blows upwind from other states, which impacts Maryland's ozone performance.⁵⁹

In April 2018, Governor Larry Hogan called upon federal environmental regulators to drop plans to weaken vehicle emissions standards. The Hogan Administration urged the EPA to leave the current greenhouse gas emissions standards for light-duty vehicles in place and to allow states like Maryland to continue to adopt vehicle emissions standards that are more protective than federal standards.

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 2016 to 2020, dropping by 13.5% (Exhibit 5.12).





The number of children with elevated blood levels is at its lowest level since data began being collected in 1993. 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.60 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, 2015.61 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.

⁶¹Fiscal year 2021 Performance Discussion, Maryland Department of the Environment.

⁵⁸Fiscal year 2021 Performance Discussion, Maryland Department of the Environment.

⁵⁹ MDE. Maryland Clean Air 2017 Progress Report. Retrieved from http://mde.maryland.gov/programs/Air/Documents/MDCleanAirPr ogress2017.pdf

⁶⁰Maryland Department of the Environment, Lead Poisoning Prevention Program Childhood Blood Lead Surveillance in Maryland, Annual Report 2010, August 2011

Performance Detail – Improved Quality of Life

Key Performance Area 5 – Data by Report Year

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
Education								
5.1. Percent of students entering Kindergarten demonstrating Full Readiness on the Kindergarten Readiness Assessment (AY 2016- 2019) – <i>test new in 2015</i>	MSDE	46.8%	45.2%	42.7%	45.0%	47.2%	0.9%	Annual increase from 2015
5.2. AP Exams – Percent receiving grade 3, 4, or 5 (AY 2015 - 2019)	MSDE	61.0%	62.0%	63.5%	65.4%	66.8%	9.5%	Annual increase
5.3. Prekindergarten enrollment (AY 2015 - 2019)	MSDE	30,385	31,868	32,088	30,422	30,947	1.8%	N/A
5.4. High School Graduation Rate (AY 2014- 2018)	MSDE	86.39%	86.98%	87.61%	87.67%	87.12%	0.8%	88.49% by 2020
5.5. Percent of children in grades 9 through 12 who drop out of school in an academic year (AY 2014 - 2018)	MSDE	8.35%	8.08%	7.97%	8.21%	8.38%	0.4%	N/A
5.6. Number of teachers with National Board for Professional Teaching Standards Certification (AY 2015 - 2019)	MSDE	2,728	2,785	2,818	3,056	3,205	17.5%	N/A
5.7. Average percentage of schools surveyed by the Interagency Commission on School Construction in the past six years that received Superior, Good, or Adequate ratings for school maintenance (FY 2015-2019)	IAC	97.1%	97.2%	97.5%	96.5%	96.3%	-0.8%	Annual increase
5.8. Six year graduation rate of first-time, full-time students at public four-year colleges and universities (all groups) (FY 2015 - 2019)	MHEC	63.7%	66.1%	65.5%	67.0%	68.8%	8.0%	67% by 2018
5.9. Percent of bachelor's degrees awarded to racial/ethnic minorities at public and private Maryland colleges and universities (FY 2015 - 2019)	MHEC	37.4%	39.3%	40.0%	41.3%	42.8%	14.5%	N/A
5.10. Four-year transfer and graduation rate of first-time community college students (FY 2015 - 2019)	MHEC	33.9%	33.1%	35.8%	37.0%	38.8%	14.6%	N/A

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
5.11. Percent of Maryland median family income required to cover tuition and fees at Maryland public four-year institutions (FY 2015 - 2019)	MHEC	11.5%	11.5%	12.0%	11.5%	11.5%	-0.2%	Below 10%
5.12. Percent of Maryland median family income required to cover tuition and fees at Maryland community colleges (FY 2015 - 2019)	MHEC	5.4%	6.0%	6.0%	5.5%	5.4%	-0.8%	Below 4%
5.13. Number of graduates in science, technology, engineering, and math (STEM) from Maryland's public and private higher educational institutions (FY 2015 - 2019)	MHEC	13,850	15,039	15,923	16,378	18,076	30.5%	Above 13,000
5.14. Post-secondary degree attainment rate for Marylanders ages 25 to 64 (FY 2015 - 2019)	MHEC	45.0%	45.2%	46.0%	47.3%	48.4%	7.6%	N/A
Public Safety								
5.15. Homicide rate per 100,000 (FY 2015 - 2019)	State Police	6.1	9.2	9.6	9.7	9.3	52.5%	N/A
5.16. Rate of homicide deaths of children and youth ages 0 to 19 (per 100,000 population) (CY 2014 - 2018)	Governor's Office of Crime Prevention, Youth, and Victim Services	3.0	4.9	5.5	4.8	3.9	27.9%	N/A
5.17. Traffic fatality rate per 100 million miles traveled (CY 2014 - 2018)	State Police	0.78546	0.90909	0.88514	0.93001	0.86000	9.5%	N/A
5.18. Part I crime rate (offenses per 100,000 population) (CY 2014 - 2018)	State Police	2,960	2,652	2,801	2,762	2,515	-15.0%	Below 4,800
5.19. Offenders under Department of Public Safety & Correctional Services jurisdiction (FY 2015 - 2019)	DPSCS	20,602	20,274	19,604	18,869	18,535	-10.0%	N/A
5.20. Percent of all cases released from supervision where the offender was employed at closing (FY 2015 - FY 2019)	DPSCS	28%	32%	31%	32%	28%	1.6%	At least 31%
5.21. Rate of referral for non-violent and violent felony offenses per 100,000 youth between ages 11 and 17 (CY 2014 - 2018)	DJS	867	927	931	825	727	-16.1%	N/A

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
5.2 2. Youth Recidivism: Percent of youth re- adjudicated within one year after release from all residential (FY 2014 - 2018)	DJS	20.9%	18.7%	20.3%	19.0%	19.0%	-9.1%	23.5%
Health and Human Se	rvices							
5.23. Percent of live births for which prenatal care was initiated during the first trimester (CY 2014 - 2018)	MDH	66.6%	66.9%	67.8%	69.6%*	73.9%	11.0%	At least 78% by CY 2021
215.24. Infant mortality rate for all races (per 1,000 live births) (CY 2014 - 2018)	MDH	6.5	6.7	6.5	6.3	6.2	-4.6%	No more than 5.7 by CY 2021
5.25. Maryland's average annual uninsured rate among the nonelderly (under age 65; estimated) (CY 2014 - 2018)	MDH	6.5%	7.5%	7.5%	6.6%	7.0%	7.7%	N/A
5.26. Percent of Maryland children fully immunized (19-35 months) (CY 2014- 2018)	CDC	81.8%	84.3%	80.1%	80.1%	80.1%+	-2.1%	At least 80%
5.27. Cumulative percent change from the calendar year 2000 baseline for underage high school students smoking cigarettes (CY 2010, 2012, 2014, 2016, 2018) (biannual)	MDH	-49.9%	-53.7%	-62.2%	-64.4%	-66.5%	7.0%	N/A
5.28. Percent of public school students in grades nine through twelve who are current drinkers (AY 2009, 2011, 2013, 2015, 2017 (biannual)	CDC	37.0%	34.8%	31.2%	26.1%	25.5%	-31.1%	N/A
5.29. Overall cancer mortality rate per 100,000 persons (age adjusted to 2000 U.S. Standard Population) (CY 2014 - 2018)	MDH	160.9	155.0	156.6	151.5*	148.7	-7.6%	No more than 140.7 by CY 2021
5.30. Heart disease mortality rate for all races per 100,000 population (age adjusted) (CY 2014- 2018)	MDH	167.2	169.3	164.5	164.8*	154.3	-7.7%	No more than 142.4 by CY 2021
5.31. Rate of age adjusted new HIV diagnoses (per 100,000 population) (CY 2014 - 2018 estimated)	MDH	21.6	20.2*	18.7	17.6	16.9	-21.8%	N/A
5.32. Rate of primary/secondary syphilis incidence (cases per 100,000 population) (CY 2014 – 2018)	MDH	7.5	8.5	8.5	9.5	12.2	62.7%	N/A

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
5.33. Percent of children with no recurrence of maltreatment within 6 months of first occurrence (FY 2015 - 2019)	DHS	90.1%	87.6%	90.1%	89.8%	90.2%	0.1%	90.9% or more by FY 2020
5.34. Percent of related children and youth under age 18 whose families have incomes below the poverty level (estimated) (CY 2014 - 2018)	U.S. Census	12.7%	12.9%	12.4%	11.7%	11.7%+	-7.9%	N/A
5.35. Maryland prevalence of household-level very low food security (3 year average) (CY 2012-2014 to 2016-2018)	USDA	4.8%	3.8%	3.9%	4.3%	5.2%	8.3%	N/A
5.36. Rate of live births to adolescents between 15 and 19 years of age (per 1,000 women) (CY 2014 - 2018)	MDH	19.3	17.8	16.9	15.9	14.2	-26.4%	No more than 13 by CY 2021
5.37. Statewide percent of current child support paid (FFY 2015- FFY 2019)	DHS	68.55%	68.98%	68.74%	68.73%	68.99%	0.6%	1% increase each year
5.38. Rate of children placed in out-of-home care (per 100,000 children) (2014 – 2018)	Children's Cab. Inter- agency Fund	9.9	7.5	5.3	6.7	7.1	-28.3%	N/A
5.39. Percent increase in employment of adults at completion of substance abuse treatment (2015- 2019)^	MDH	43%	31%	39%	36%	36%	-16.0%	40% or more by FY 2020
5.40. Percent of adults with serious mental illness who receive mental health services (FY 2015 – 2017)**	MDH	26.9%	26.8%	26.3%	N/A	N/A	N/A	N/A
5.41. Heroin overdose- related deaths in Maryland (CY 2014- 2018)	MDH	578	748	1,212	1,078	830	43.6%	N/A
Environment								
5.42. Chesapeake Bay Habitat Health Index- MD (CY 2015 - 2019)*	UMCES EcoCheck	45%	48%	50%	50%	40%	-11.1%	N/A
5.43. Acres of submerged aquatic vegetation (CY 2013 - 2017)*	DNR	39,400	53,783	59,131	62,356	65,263	65.6%	114,034 acres of SAV
5.44. Dredge survey index of stock size - crabs (2014 - 2018)	DNR	50	58	47	41	62	24.0%	N/A
5.45. Oyster biomass index (2014 - 2018)*	DNR	2.1	1.8	1.4	1.4	1.8	-15.2%	10
5.46. Estimated nitrogen load to the Chesapeake Bay from Maryland (in million lbs.) (FY 2014 - 2018)	DNR	55.44	55.45	54.22	52.75	52.50	-5.3%	45.48 in 2017
5.47. Acres of cover crops planted (CY 2014 - 2018)	MDA	427,458	499,531	558,918	359,873	359,702	-15.9%	N/A

Indicator	Agency/ Data Source	2016	2017	2018	2019	2020	4 Year Change	Specific Target
5.48. Waters impaired by nutrients per the Integrated Report of Surface Water Quality (2014 - 2018) – note report done biannually	MDE	7	7	7	8	8	14.3%	N/A
5.49. Percent of Marylanders served by public water systems in significant compliance with all new and existing regulations (FY 2014 - 2018)	MDE	90%	98%	99%	90%	92%	2.2%	At least 97%
5.50. 3 year average of days the 8 hour ozone standard was exceeded (CY 2014- 2018)	MDE	15	7	13	17	20	34.1%	0
5.51. Maryland's recycling rate (CY 2014 - 2018)*	MDE	43.2%	42.9%	44.1%	44.7%	45.3%	4.9%	N/A
5.52. Total acres preserved by all land preservation programs (CY 2014 - 2018)*	DNR	1,586,957	1,599,541	1,645,192	1,687,120	1,734,410	9.3%	N/A
5.53. Energy consumption by all State government facilities (millions of MMBTU's) (owned and leased) (CY 2014 - 2018)	DGS	12.25	11.54	11.4	11.770	11.670	-4.7%	N/A
5.54. Maryland per capita electricity consumption in megawatt hours (CY 2013 - 2017)	MEA	10.9	11.0	10.7	10.5	10.7	-2.1%	N/A
5.55. Percent of vehicles registered in the state that are alternative fuel, electric or hybrid-electric (FY 2014 -2018)*	MVA	11.4%	11.9%	11.9%	12.0%	13.0%	13.9%	N/A
5.56. Number of children under 6 years of age with elevated blood lead levels (CY 2013 - 2017)	MDE	2,359	2,166	2,084	2,050	2,040	-13.5%	N/A
5.57. Maryland rapid transit trips (including Maryland Transit Administration, Washington Metropolitan Area Transit Authority, and Locally Operated Transit Systems) (thousands) (CY 2014 - 2018)	MDoT	278,270	263,771	248,281	237,879	225,290	-19.0%	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.

** No longer being reported. DBM will find a replacement measure next year.
+ Data was not available for 2020 report year