



**Maryland General Assembly 2014**  
*Legislative Impacts on the State's Genuine Progress Indicator*

**HB 295: Maryland Minimum Wage Act of 2014**

Prepared by:

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**About this series**

In 2010, Governor Martin O'Malley adopted the Genuine Progress Indicator (GPI) as an overall measure of economic performance. The GPI is an alternative to gross domestic product (GDP) and its state-level variant gross state product (GSP). Unlike those conventional metrics, the GPI takes inequality and the social and environmental costs of economic activity into account and thus is widely regarded as a superior measure of how well the economy is performing.

In this series, CSE examines the economic impacts of legislation passed by the 2014 General Assembly from the GPI perspective. In particular, CSE estimates what Maryland's GPI would be today if the subject legislation were fully implemented. These GPI impact notes build on and are intended to supplement the fiscal and policy notes now being prepared by the Department of Legislative Services. This work is made possible by generous funding from the Town Creek Foundation.

Center for Sustainable Economy  
Maryland General Assembly  
2014 Session

**GPI IMPACT NOTE**

(The Speaker, et al.; by request – Administration)

House Bill 295  
Economic Matters

Finance, Budget and Taxation

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**Maryland Minimum Wage Act of 2014**

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State Summary from the Fiscal and Policy Note<sup>1</sup>

This Administration bill requires employers in the State, as of January 1, 2015, to pay the greater of the federal minimum wage or a State minimum wage of \$8.20 per hour to employees subject to federal or State minimum wage requirements. The bill provides for subsequent annual increases in the State's minimum wage through January 1, 2017, and allows an exception for employers of amusement or recreational establishments under specified conditions.

The bill also expands the application of the Maryland Wage and Hour Law to an additional industry and class of workers, changes overtime laws for various industries, alters the tip credit that employers can apply against the direct wages paid to tipped employees, and provides for liquidated damages to be awarded under specified circumstances to employees who are paid less than the minimum wage.

The bill takes effect June 1st, 2015.

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**GPI Impact Summary**

**Anticipated positive impacts:** Increase in personal consumption expenditures for minimum wage beneficiaries. Decrease in the costs of inequality. Increases in the services from consumer durables and household capital for low-income households. Decrease in the cost of crime. Decrease in the cost of underemployment.

**Anticipated negative impacts:** Decrease in income and associated personal consumption expenditures for some business owners. Increase in defensive expenditures by state and local government.

**Anticipated net impacts:** Positive

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## Evaluation Matrix

GPI Indicator	No impact	Positive impact	Negative impact
Personal consumption expenditures		√	√
Income inequality		√	
Services of consumer durables and household capital		√	
Costs of underemployment		√	
Net capital investment	√		
Cost of water pollution	√		
Costs of air pollution	√		
Costs of noise pollution	√		
Costs of net wetland change	√		
Costs of net farmland change	√		
Costs of net forest cover change	√		
Costs of climate change	√		
Costs of ozone depletion	√		
Costs of non-renewable resource depletion	√		
Value of housework	√		
Costs of family changes	√		
Costs of crime		√	
Costs of personal pollution abatement	√		
Value of volunteer work	√		
Costs of lost leisure time	√		
Value of higher education	√		
Services of highways and streets	√		
Costs of commuting	√		
Costs of motor vehicle crashes	√		

### Discussion of anticipated positive impacts:

According to proponents, HB 295 will boost Maryland’s economic recovery with a strong minimum wage that gives working families more money to spend at local businesses.

Maryland’s minimum wage is currently just \$7.25 per hour, or roughly \$15,000 per year for a full-time worker. For tipped workers - like waitresses, carwash attendants, and nail salon workers - the base minimum wage is even lower – just 50 percent of the full minimum wage, or \$3.63 per hour. Workers must then rely on tips to get to the full minimum wage.

Raising Maryland’s minimum wage will help keep the state competitive with others. Twenty-one states – and the neighboring District of Columbia – have minimum wages that are higher than the federal minimum wage of \$7.25 per hour.

With respect to the Maryland Genuine Progress Indicator (GPI), there are five ways in which the minimum wage law is likely to affect the GPI (see Evaluation Matrix, above):

#### *Increasing personal consumption expenditures:*

Personal consumption expenditures (PCE) is the largest component of Maryland’s GPI and is included as a proxy for the economic well being associated with consumption of goods and services purchased in the marketplace. Raising the minimum wage would help boost personal

consumption expenditures because it would increase income for workers at and below the existing minimum wage, as well as wages for workers who earn close to it. According to the Economic Policy Institute (EPI) a minimum wage increase up to \$10.10/hour would result in raised wages for 455,000 workers who would receive at least \$721 million in additional wages on an annual basis once HB295 is fully implemented.<sup>2</sup>

According to Maryland's current GPI methodology, 81.21% of personal income is now passed on in the form of personal consumption expenditures (PCE).<sup>3</sup> This suggests a GPI boost for PCE of \$585.52 million. This new spending would also have a multiplier effect, generating additional income as money is circulated through the economy. Widely cited studies show that "every increased dollar received by low- and moderate-income families has a multiplier effect of between 1.5 to 2 times the original amount, in terms of its impact on the local economy and how much money is spent in and around the communities where these families live."<sup>4</sup> Much of this translates into increased local earnings. Adopting the low end of this range (1.5) as a proxy for the earnings multiplier suggests that the first round earnings increase associated with the new minimum wage would translate into an additional \$292.77 million for a total earnings impact of \$878.29 million. The GPI is reported in chained 2000 dollars, so expressed in 2000 dollars the GPI PCE boost is \$658.75 million.

There is one offsetting effect to consider. For some small business owners, the increased wage bill would be taken out of profits paid to them as income. To generate a rough estimate of this impact, this analysis assumes that this situation would only exist for businesses that employ less than 20 workers since the larger a business is, the more likely it is that the adjustment to a higher minimum wage would be made through other channels such as productivity improvements, cost cutting, or passing the increase on in the form of higher consumer prices. Moreover, the larger a business is, the less likely it is that it is owned locally at least by sole proprietors so a larger share of profits would be paid out to other partners and shareholders who may reside in other states.

According to the Small Business Administration, there are 92,700 business of this size in Maryland with an average of 4.11 employees.<sup>5</sup> EPI estimates that the minimum wage law would affect roughly one in five workers, so applying this percentage (20%) to these figures implies a total of 76,200 workers affected in small businesses in the 1-19 employee size range. EPI also estimates the average annual wage bill increase to be \$2,170 per employee, which translates into a wage bill increase of \$165.35 million in total. Of this, a portion (1/3) is assumed to be passed on in the form of higher prices, 1/3 in the form of productivity adjustments, cost cutting or cost savings associated with reduced turnover, and 1/3 in the form of reduced profit sharing with business owners. This translates into a reduction in business owner income of \$55.68 million and into reduced annual personal consumption expenditures of \$33.24 million in 2000 dollars.

Considering both positive and negative effects, the SB683 impact on personal consumption expenditures is expected to add \$625.51 million per year to Maryland's GPI in 2000 dollars.

#### *Reduced costs of income inequality*

Recognizing that spending by wealthy households has less of an economic impact to the State than consumer spending those least well off, the GPI includes an adjustment for the costs of

income inequality. In 2012, the cost of income inequality in Maryland was estimated to be \$42.88 billion in 2000 dollars. The cost of inequality as calculated in the GPI context is related to the Gini index, which is a measure of the distribution of income. A Gini coefficient of 1 represents perfect inequality – i.e. the top income bracket receives all the income – and a score of zero represents perfect equality, where each income bracket earns an equal slice of the income pie. The 2012 Gini index for Maryland was 0.4470.

To arrive at the cost of inequality, the GPI first creates an index income of income inequality based on the Gini, and then divides the current year's personal consumption expenditures (PCE) by this index. The index is created by dividing the current year's Gini coefficient by 0.3480, its historical lowpoint in recent decades. In 2012 the index is calculated to be 1.2759. By dividing a minimum wage enhanced PCE figure of \$193.55 billion<sup>6</sup> by this value we arrive at the baseline cost of inequality included in the 2012 GPI: \$42.87 billion.

Boosting the minimum wage, however, changes the income distribution. EPI has provided an estimate of the total wage increase by minimum wage beneficiaries in each of 13 income brackets ranging from families who earn less than \$10,000 per year to those that earn over \$150,000.<sup>7</sup> By combining these estimates of total wage increases with the current income distribution reported by the Comptroller of Maryland<sup>8</sup> a new estimate for the Gini coefficient post-minimum wage increase was made possible. The analysis suggests that the minimum wage increase would lower the Gini coefficient by 0.67%, resulting in a revised Gini of .4440. This implies an adjusted cost of income inequality of \$41.85 billion, a reduction of \$1.016 billion per year. This calculation is made on the assumption that consumption expenditures increase first, with the full effects of the income distribution change occurring after money has been circulated through the economy a year or two after the wage increases are fully implemented.

### *Reduced costs of underemployment*

As a deleterious side effect of growth that does not target full employment, the GPI includes the costs of underemployment in its calculations. Underemployment is a broader measure of labor force underutilization that takes into consideration workers who are unemployed, temporarily employed, involuntarily part time, discouraged, and marginally attached to their jobs.<sup>9</sup> The GPI calculates the cost of underemployment by multiplying the current estimate of underemployed by the average wage rate prevailing in Maryland economy-wide. In the 2012 GPI, the State estimates the number of underemployed to be 373,538 resulting in an annual cost of \$6.77 billion.

EPI predicts that the minimum wage increase will generate 1,600 new full time jobs as spending by beneficiaries circulates through the economy.<sup>10</sup> Assuming that these new employees all come from those that are now in the pool of underemployed and assuming that this increment in employment is sustained, it would imply a reduction in the annual costs of underemployment of \$28.67 million per year relative to the level that would otherwise exist.

### *Reduced costs of crime*

Social capital has been described as the network of relationships that bind us together and help build strong and resilient communities. When social capital is eroded, many social ills result, including crime. Thus, the GPI includes the cost of crime in its calculations as an indication of the costs we face as social capital is depleted in part, due to an unsustainable and inequitable economy. Crime costs are also included as a deduction in the GPI because the money we spend to replace stolen goods or rehabilitate injuries or trauma that results from crime is not welfare improving – it merely returns us to a baseline of well being that was present before the crimes were committed.

Maryland's GPI deducts costs associated with six types of serious crime in the State: murder, rape, robberies, aggravated assaults, breaking and entering, larceny, and motor vehicle theft. For each crime, the GPI multiplies the number of crimes committed during the year by an imputed social cost ranging from \$429 per larceny theft to over \$3 million per murder. The total cost of crime in the 2012 Maryland GPI is reported as \$1.35 billion.

Increasing Maryland's minimum wage can be expected to reduce crime in at least some select groups that have a high incidence of crime due to economic insecurity. Males under the age of 25 are a particularly important group, since they account for over 45% of serious crimes in these categories nationwide.<sup>11</sup> While studies relating increases in wages to crime are mixed, for this group, the relationship has been found to be long term and statistically significant. A longitudinal study by the National Bureau of Economic Research found that a ten percent increase in youth wages would reduce participation in crime by roughly 6 to 9 percent. Conversely, the study calculates that a 20 percent drop in wages leads to a 12 to 18 percent increase in youth participation in crime.<sup>12</sup> The minimum wage increase is expected to boost wages of beneficiaries by nearly 40%, and so if this relationship to crime holds there ought to be a measureable impact.

To estimate this effect in Maryland, the proportion of minimum wage beneficiaries that are male and under the age of 24 was first estimated based EPI data the most recent profile of minimum wage workers provided by the Bureau of Labor Statistics.<sup>13</sup> The proportion of all males under the age of 13 – 24 was also obtained from Maryland demographic statistics. From these figures an estimate of the number of minimum wage beneficiaries who would be statistically likely to be involved in crime were derived, as well as an estimate of the contribution of this cohort to the annual number of crimes reported by the GPI.<sup>14</sup>

Assuming that the incidence of crime amongst this group would decline by roughly 10% as wages increased, a new estimate of the costs of crime was derived in accordance with the GPI methodology. The analysis suggests that the overall costs of crime in Maryland would fall by at least \$11.49 million each year as the incidence of crime in just this one demographic responds favorably to a minimum wage increase. The actual effect could be much larger if crime in other demographic groups is addressed, however there are presently too few studies of these groups to extend the analysis accordingly.

### *Services from household capital*

As minimum wage beneficiaries receive more income, they are more able to spend it on new appliances, computers and home improvements. All these expenditures are treated as investments in the stock of household capital by the GPI, and are valued in terms of the services they provide (i.e. cars provide transportation services, refrigerators provide food preservation services, etc.) on an annual basis. The expected life of those services is related to the type of capital purchased: computers can be expected to last three to five years, for example, while refrigerators may often last twenty. The GPI assumes an overall average of 8 years.

To estimate the GPI impact of new spending on household capital by minimum wage beneficiaries, the expected net increase in personal consumption expenditures from above (\$625.51 million) was multiplied by the share of new spending that goes to household capital assumed by the GPI (10.15%). This amount (\$66.22 million) represents an addition to the stock of household capital that would, on average, have a life of 8 years before needing replacement. By adding this amount to the total household capital stock, calculating the value of annual services of this enhanced stock, and deducting purchase costs for new capital amortized over the average 8 year life, the additional household capital services attributable to the minimum wage increase are projected to be \$2.07 million per year.

### **Discussion of negative impacts:**

The Department of Legislative Services has prepared a fiscal note providing information on state and local government costs of implementing the minimum wage increase through FY 2019.<sup>15</sup> The fiscal note estimates two major categories of costs: (1) those related to expanded enforcement of the new minimum wage law, and (2) those related to spending on employees that are not now earning the minimum wage. In particular, the fiscal note identifies additional staffing needs at the Department of Labor, Licensing, and Regulation and additional payroll costs for certain employees under the University System of Maryland, the Maryland Department of Transportation, and the Maryland Department of Aging. The note also calls attention to increased costs for certain counties – Montgomery, Prince Georges, and Wicomico – associated with employees now paid less than the minimum wage.

The combined effect of these cost increases once HB 295 is fully implemented is estimated to be \$14.41 million (\$10.81 million in \$2000). Because county costs were only reported for two counties, these fiscal costs are likely to be greater. No other cost categories were incorporated, nor are any other expected from implementation of HB 295 from the GPI perspective except offsetting factors already discussed.

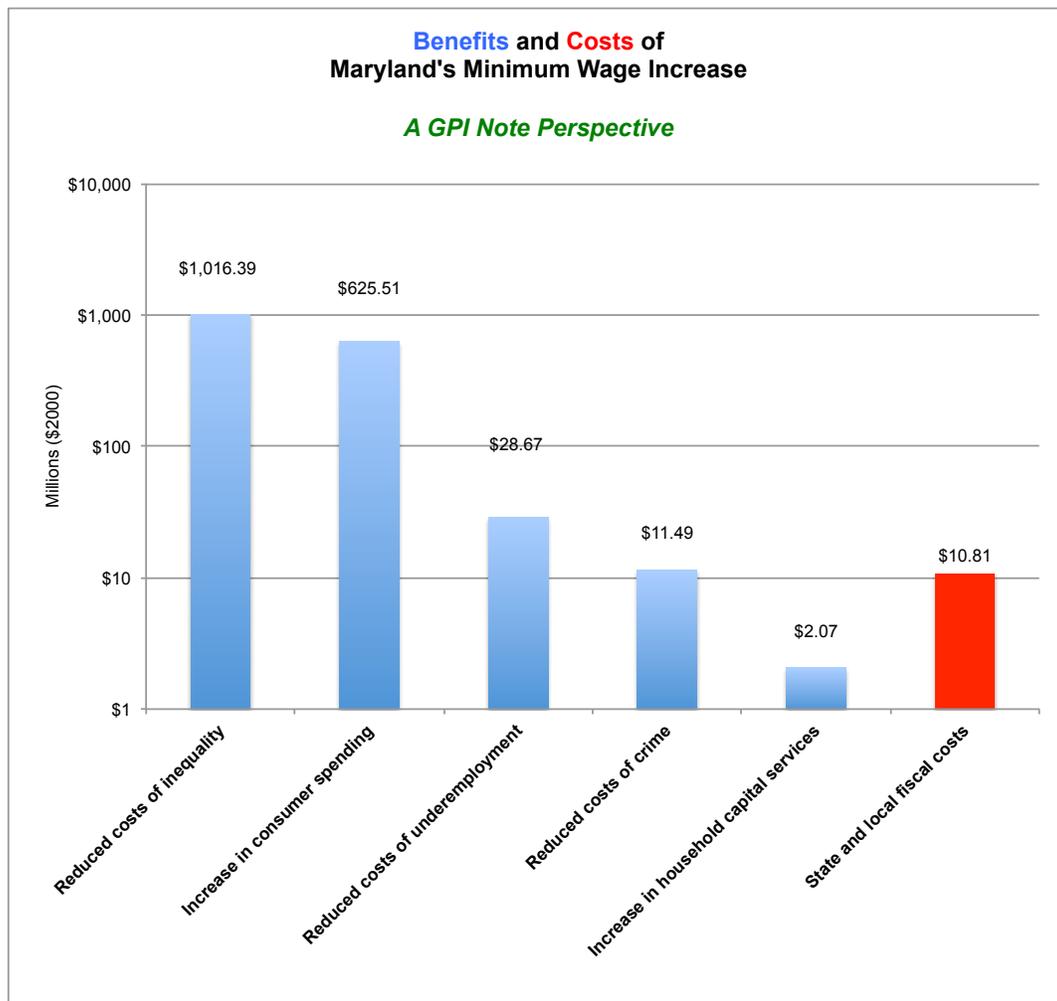
### **Discussion of net impacts:**

As the forgoing analysis suggests, GPI net impacts associated with HB 295 are expected to be substantially positive, in the order of \$1.7 billion per year. The most likely immediate and direct impact of this legislation will be to boost personal consumption expenditures in low to middle income households and to reduce the costs of income inequality. These two effects represent the lion's share of GPI benefits quantified in this analysis, and have a high likelihood of being

realized. Less certain, but nonetheless important are benefits associated with reduced underemployment, reduced costs of crime, and increases in the services of household capital. While more detailed analysis and modeling would be needed to refine these benefit categories, combined, they are likely to add over \$42 million to Maryland's GPI each year.

The only costs of significance reported by DLS and others associated with implementing HB 295 are financial costs to state and local government associated with enforcement of the new legislation and increased payroll costs. However, the analysis of fiscal impacts did not consider the increase in tax and sales revenues that are likely to accompany a minimum wage increase, and so the negative fiscal impact is less certain. Given that the anticipated positive impacts are more direct, more likely, and more immediate the overall net impact on the GPI is expected to be positive by a wide margin.

### Graphical Summary



## Endnotes

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- <sup>1</sup> The full text of HB 295 and the Fiscal and Policy Note is available online at: <http://mgaleg.maryland.gov/webmga/fmMain.aspx?id=hb0295&stab=01&pid=billpage&tab=subject3&ys=2014RS>
- <sup>2</sup> Cooper, David. 2014. Raising the Maryland Minimum Wage Will Benefit Nearly Half A Million Workers and Modestly Boost the State's Economy. Washington, DC: Economic Policy Institute.
- <sup>3</sup> For a column by column overview of Maryland's GPI and its underlying methods, please visit: <http://www.dnr.maryland.gov/mdgpi/>.
- <sup>4</sup> United States Conference of Mayors, Council for the New American City. 2009. Dollar Wise: Best Practices, Earned Income Tax Credit, 2<sup>nd</sup> Edition. Available online at: [www.dollarwiseonline.org/eitc.asp](http://www.dollarwiseonline.org/eitc.asp).
- <sup>5</sup> Small Business Administration. 2013. Small Business Profile: Maryland. Washington, DC: Small Business Administration, Office of Advocacy.
- <sup>6</sup> The 2012 PCE expenditure estimate included in the GPI is \$192.89 billion. Adding to this the boost in spending associated with the minimum wage increase yields a revised estimate of \$193.55 billion.
- <sup>7</sup> Cooper, David and Doug Hall. 2013. Raising the Minimum Wage to \$10.10 Would Give Working Families, and the Overall Economy, A Much-Needed Boost. Appendix 1: Characteristics of workers who would be affected by increasing the federal minimum wage to \$10.10 by July 1, 2015, Maryland. Washington DC, Economic Policy Institute.
- <sup>8</sup> Comptroller of Maryland, 2013. Income Tax Summary Report, 2012. Annapolis, Comptroller of Maryland, Revenue Administration Division.
- <sup>9</sup> Bureau of Labor Statistics. 2013. Alternative Measures of Labor Underutilization for States, Fourth Quarter of 2012 through Third Quarter of 2013 Averages. Available online at: <http://www.bls.gov/lau/stalt.htm>.
- <sup>10</sup> Cooper 2014, Op. cit. note 2.
- <sup>11</sup> U.S. Department of Justice, Office of Justice Programs. 2006. Bureau of Justice Statistics Special Report: State Court Processing Statistics, 1990-2002 Violent Felons in Large Urban Counties. Washington, DC: USDOJ. July 2006, NCJ 205289
- <sup>12</sup> Grogger, Jeffrey. 1997. Market Wages and Youth Crime. NBER Working Paper No. 5983. Washington, DC: National Bureau of Economic Research.
- <sup>13</sup> Bureau of Labor Statistics. 2013. Characteristics of Minimum Wage Workers, 2012. Washington, DC: Bureau of Labor Statistics.
- <sup>14</sup> Specifically, the estimates of the reduced number of crimes was calculated as: existing number of crimes per category – (existing number of crimes per category\*percent MW male under-24 beneficiaries of Maryland State population male 13 - 24\* percent of GPI crimes committed by males 24 and under)\*percent reduction of crimes in response to higher wages. So for robberies, the baseline number of crimes in Maryland is reported by the GPI to be 10,171. After taking the minimum wage boost into account the expectation is that this will fall to 10,084 based on this formula.
- <sup>15</sup> Rudby, Heather. 2014. Fiscal and Policy Note for HB 295. Annapolis: Department of Legislative Services.