

## Teens, Employment, and the Minimum Wage

By Nicole Rodriguez

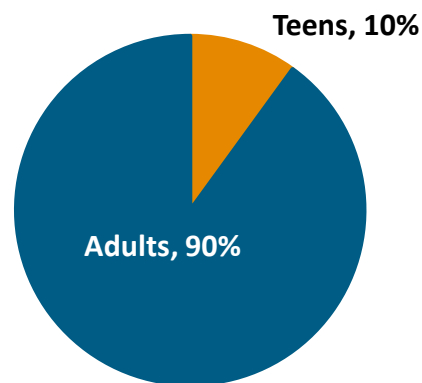
More than 104,000 teens (16- to 19-year-olds) work and actively contribute to the Massachusetts economy.<sup>1</sup> As working teens, they learn job skills and gain experience and responsibility. Many working teens also play important roles in helping meet financial needs for not only their families but also for themselves, like paying for college. Most teen workers (about 82 percent) earn near or at the minimum wage,<sup>2</sup> which as of January 2017 was \$11 an hour – finalizing a three-year phase-in of an \$11 an hour minimum wage in Massachusetts. Currently, teens make up 12 percent of minimum wage earners.<sup>3</sup> This brief looks at who teen workers are, their contributions to family income, how a subminimum wage could affect teen workers, and whether there have been adverse effects on teen employment from minimum wage increases.

### Who are teen workers in MA?

Teen workers make up three percent of the Massachusetts workforce. They typically work in retail trade, accommodation and food services, educational services, health care and social assistance, and arts, entertainment & recreation.<sup>4</sup> They also work as cashiers, retail salespeople, camp counselors, and servers in restaurants.<sup>5</sup> Most of these jobs pay the minimum wage.

While teens make up 12 percent of workers who currently earn the minimum wage, they only make up about 10 percent of workers that would be affected by a minimum wage increase to \$15 by 2022. Of all working teens in 2022, 89 percent would receive a raise to \$15 by 2022. Teens make up this slightly smaller share of workers affected by such an increase (compared to the current 12 percent share) because the increase would affect those at \$11 an hour as well as those between \$11 and \$15 – and teens make up a smaller share of that group.

**Teens make up 10 percent of workers who would benefit from a \$15 minimum wage increase.**



## What share of family income comes from teens?

In lower income families, the share of income that teens bring to families is significant. Data from the U.S. Census demonstrate that Massachusetts teen workers in low-income families (i.e. families in the lowest 20th percentile with total annual family income up to about \$47,000) account for 17.7 percent of their family income. Not surprisingly, the income from low-income teen workers accounts for a substantially larger share of family income than of teens in higher income families.

### Wages from Teen Workers Account For a Significant Share of Their Total Family Income

Average teen wage income as a share of their total family income in the lowest 20th percentile (incomes below \$47,000) and for all families, Massachusetts, 2011-2015



*MassBudget analysis of U.S. Census Bureau American Community Survey 2011-2015 Public Use Microdata Sample.*

This pattern of significant contributions to family income by low-income teens holds across racial and ethnic groups. Looking at the lowest quintile, where the wages of teen workers are the largest share of family incomes, both teens of color and white teens contribute significantly. Specifically, teens in families of color account for 20 percent to their family incomes, and white teens account for about 15 percent.

### Wages from Low-Income Teens of Color as well as White Teens Account For a Significant Share of Their Total Family Income

Average teen wage income as a share of their total family income at the lowest 20th percentile (income below \$47,000) by race/ethnicity, Massachusetts, 2011-2015



\*Any member of a family that reports race other than White Alone or reports Hispanic/Latinx origin.

\*\*Non-Hispanic/Latinx origin

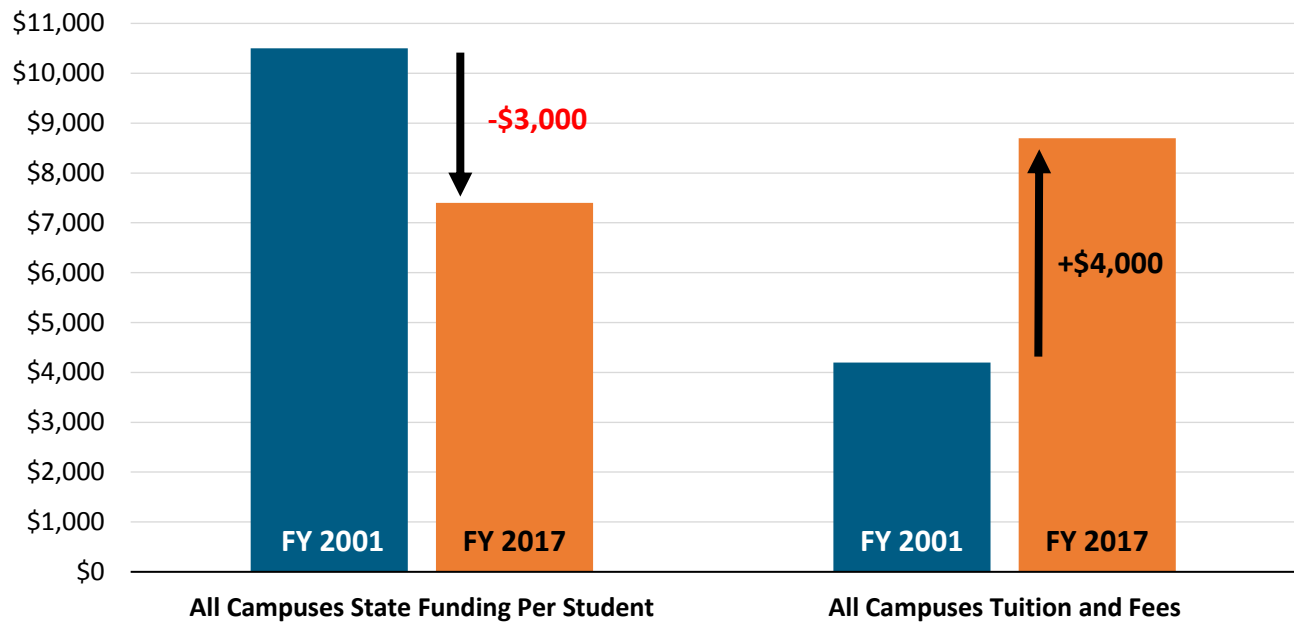
*MassBudget analysis of U.S. Census Bureau American Community Survey 2011-2015 Public Use Microdata Sample.*

## What are the challenges for teens in affording higher education?

Having a highly educated workforce is increasingly important for the state's economic strength.<sup>6</sup> Those attending public campuses are more likely to stay and work in Massachusetts after graduation.<sup>7</sup> However, being successful in higher education is increasingly difficult when one must work. Over the years, college in Massachusetts has become increasingly less affordable with tuition and fees rising faster than the rate of inflation.<sup>8</sup> For instance, Massachusetts has cut average per-student state funding by \$3,100 – a 30 percent decrease – since Fiscal Year (FY) 2001, see chart below. And as campuses receive less operating support from the state, they have increased tuition and fees.

### As State Higher Ed Funding Went Down...Tuition and Fees Went Up

Per-student state appropriations and in-state tuition and fees, adjusted for inflation (2017\$). School-based financial aid not funded by state appropriations is netted out of tuition and fees.



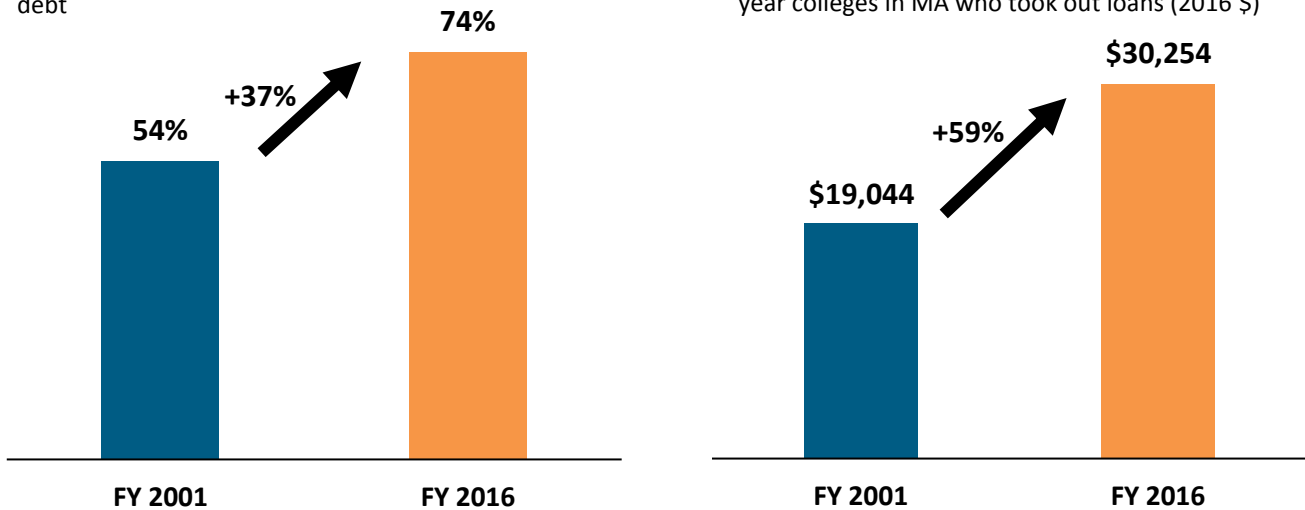
*MassBudget analysis of MA state budget data, unpublished data from the MA Department of Higher Education, and tuition data from the MA Department of Higher Education's Data Center.*

The decrease in public funding support and subsequent increase to tuition and fees, have increased the financial burden of loans and debt for students at public colleges and universities.<sup>9</sup> As a result, total student debt levels have also increased. The share of graduates of public four-year colleges in Massachusetts who have student loans increased from 54 percent in FY 2001 to 74 percent in FY 2016. And average student debt has increased 59 percent for graduates who took out student loans (see graph below).

## More Students Are Taking out Loans...and Student Debt Has Increased

Share of graduates from public 4-year colleges in MA with debt

Average student debt for graduates of public 4-year colleges in MA who took out loans (2016 \$)

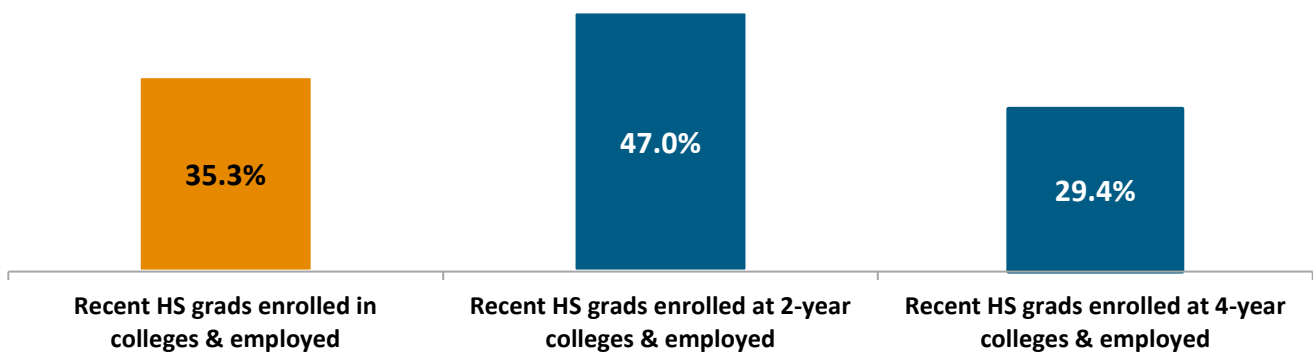


*The Institute for College Access & Success, College InSight, www.college-insight.org*

With the costs of public higher education rising, many teens must work to help pay for college. According to the U.S. Bureau of Labor Statistics, 35.3 percent of recent high school graduates that are enrolled in college are also working, nationally.<sup>10</sup> For recent high school graduates enrolled at two-year colleges, nearly half are employed.<sup>11</sup> And 29.4 percent of recent high school graduates enrolled at four-year colleges are working as well.<sup>12</sup>

## Many Recent High School Graduates Enrolled in College are Working

Employment status of 2016 high school graduates enrolled in 2-year and 4-year colleges.



*U.S. Department of Labor, Bureau of Labor Statistics*

In Massachusetts, college students at public institutions work about 28 hours per week, on average.<sup>13</sup> Among those working students, 60.4 percent are working more than 20 hours a week. When students work too much, it can hurt their GPAs. For instance, as working hours per week increase, beyond 20 hours a week, GPA decreases.<sup>14</sup> And working too much can also significantly hinder degree completion.<sup>15</sup>

## Most Students in Massachusetts Public Higher Education Work

Percent of students at public higher education institutions in Massachusetts who work any hours and 20 or more hours, 2011-2015



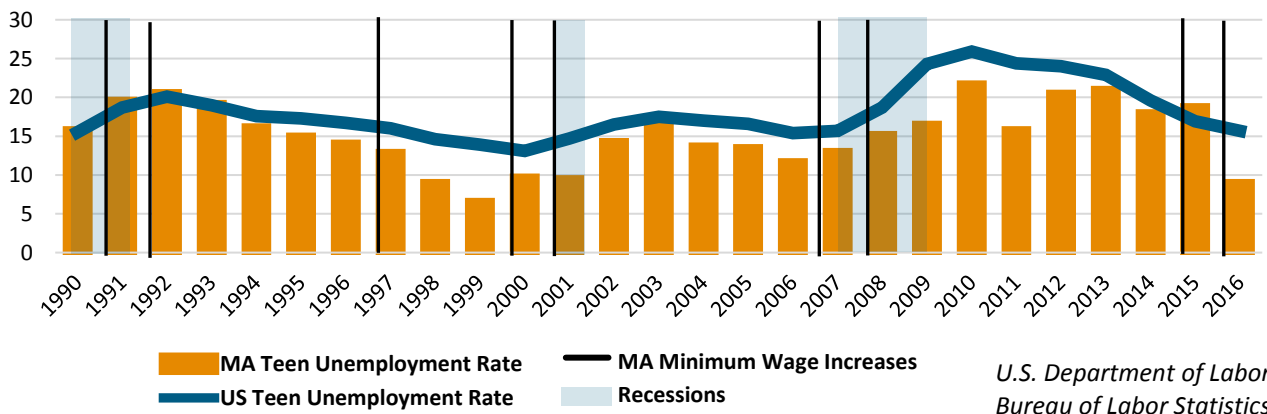
MassBudget analysis of U.S. Census Bureau American Community Survey 2011-2015 Public Use Microdata Sample.

## Have minimum wage increases impacted teen employment?

The most carefully designed studies on employment effects of minimum wage increases for teens have found little to no effect. While some scholars found modest employment effects (on the order of a two percent decline in teen employment for a 10 percent increase in the minimum wage),<sup>16</sup> studies that control more carefully for other factors that affect employment growth found minimum wage increases did not lead to a meaningful decline in teen employment. The difference between these studies has to do with the fact that states with higher minimum wages are not randomly distributed across the country. Comparing teen employment growth in states with higher minimum wages to states with lower minimum wages ignores that factors other than minimum wage rates could be affecting teen employment growth. In fact, higher minimum wage states experienced slower employment growth overall before minimum wage increases – which is inconsistent with the idea that minimum wage increases cause slower employment growth in those states. When researchers control for geographic variation in employment trends they typically find no negative employment effects in the years following minimum wage increases.<sup>17</sup>

The pattern in Massachusetts appears to be consistent with evidence from the most thorough national studies. As shown below, teen unemployment rates since 1990 in the U.S. and Massachusetts track the overall movements of the economy - rising when the economy is weak, and falling when it is strong. The data also show that, in 2016, teen unemployment in Massachusetts and overall unemployment rates fell to their lower rates in the past 18 years – despite minimum wage increases during this same period.

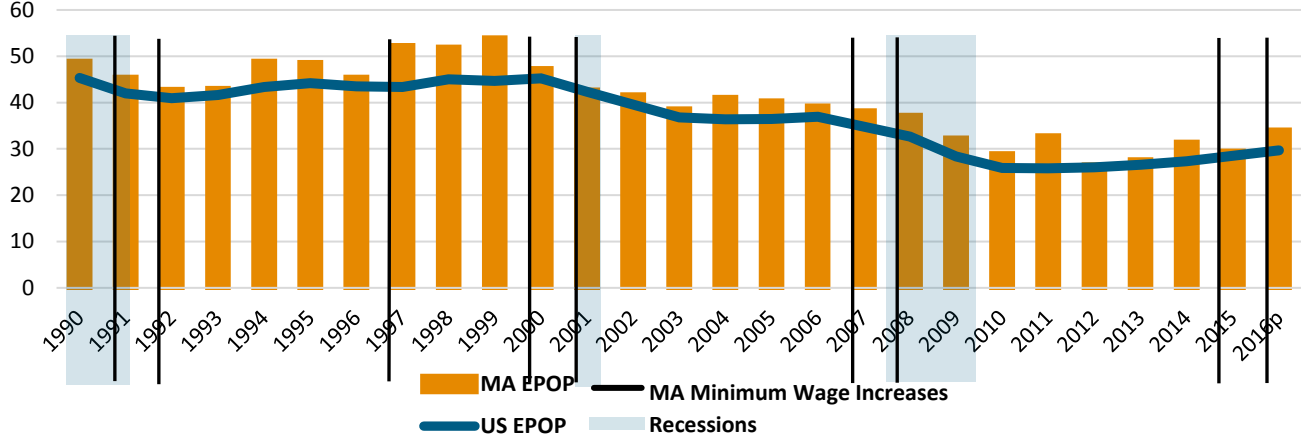
### Teen Unemployment Rates Generally Coincide with Overall Economic Trends and Not



Another, more comprehensive way to examine teen employment is to look at teen employment as a percent of teen population. This is called the employment to population ratio, or EPOP, which looks at how many people are working, compared to the population for that age group. While teen employment (as a percent of population) has declined over the past few decades, there has been a recent uptick U.S.-wide and in Massachusetts. Much like with unemployment rates, EPOP for the U.S. and Massachusetts have also been driven by overall movements of the economy.

### Teen Employment to Population Ratio Rises and Falls with Overall Economic Trends

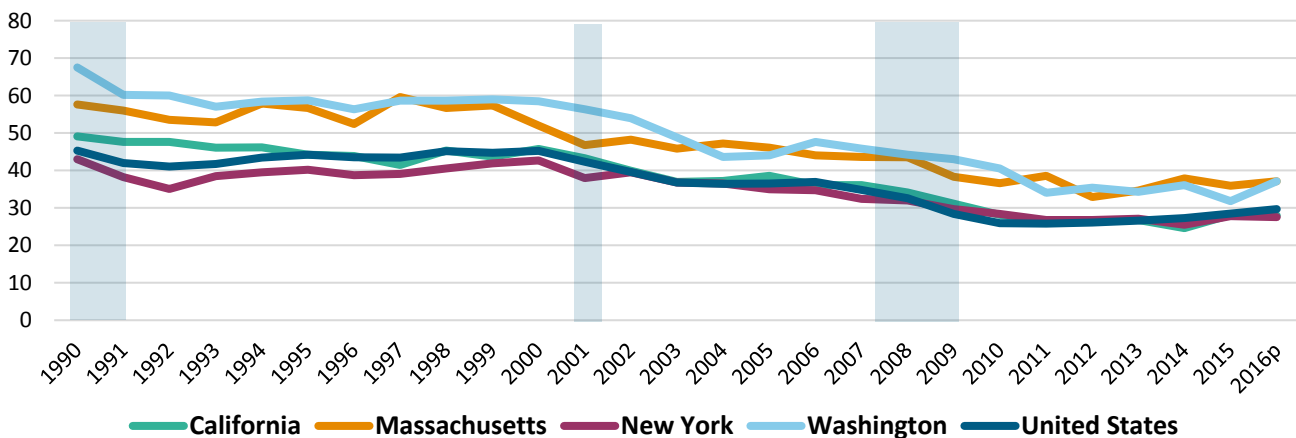
Employment to Population Ratio of Teen (ages 16-19) in MA and U.S., 1978-2016



U.S. Department of Labor, Bureau of Labor Statistics

Similar overall trends in EPOPs can be observed for states – California, New York, and Washington – with minimum wages comparable to Massachusetts, some of which will reach the \$15 wage floor in the next few years. In these states, EPOPs are in line with overall economic movements as well as with the U.S. average. Like in Massachusetts, teen employment (as a percent of population) has declined over the past few decades in California, New York, Washington, and U.S.-wide.

### EPOPs of Higher Minimum Wage States are in Line with General Economic Trends and U.S. Average

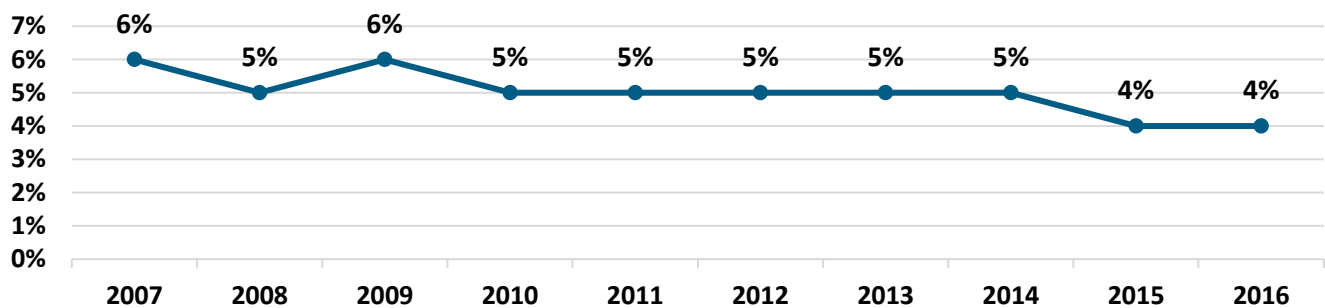


US Department of Labor, Bureau of Labor Statistics

Finally, another area for analysis is the rates of youth disconnection, which is when young people are neither attending school nor working. These youth typically lack strong social networks that provide assistance in the form of employment connections and other supports.<sup>18</sup> Without attachment to work or school, disconnected youth can experience negative outcomes as they transition to adulthood.<sup>19</sup> Fortunately, the rates of disconnected youth have steadily declined over the past 10 years, while minimum wages increased. This is not to suggest that a growing minimum wage has decreased the rates of disconnected youth, but the increase appears not to have caused any adverse effects.

### Rates of "Disconnected" Teens have Steadily Declined Over the Past 10 Years

MA teenagers between age 16 and 19 who are not enrolled in school (full- or part-time) and not employed (full- or part-time), 2007-2016



*Population Reference Bureau, analysis of data from the U.S. Census Bureau, 2008-2016 American Community Survey, accessed via the Kids Count Data Center.*

### What are teen subminimum wages?

States considering minimum wage increases sometimes consider subminimum wages for teens. This practice would allow employers to pay teens at a lower wage. The rationale for such proposals is to incentivize employers to hire teens. Proponents of subminimum teen wages posit that minimum wage increases could hurt teen employment because employers would select candidates with more job experience and higher skills. But as discussed above, the most recent and most thorough studies do not find that minimum wage increases lead to a meaningful decline in teen employment.

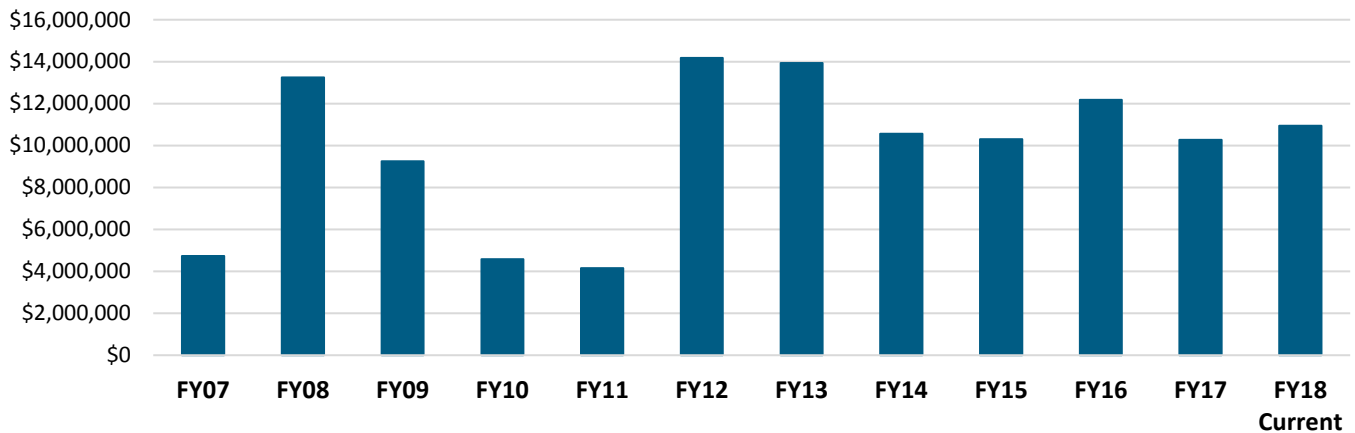
Adopting subminimum wages can lead to harmful consequences. Creating a system in which employers can pay teens less than the minimum wage can reduce the earnings of young workers – many of whom provide important income for their families and, in a number of cases, are working their way through school. A subminimum wage policy could also be harmful to adults and seniors who could be replaced by teens working at a subminimum wage, overall harming the employment prospects of older adults. Large shares of working adults over 65 years old work in many of the same occupations as teen workers, such as cashiers, and retail salespeople.<sup>20</sup> Lastly, exempting teens from the full value of the minimum wage may cause them to work more hours. If exempted teens are in college, working longer hours can affect their graduation and dropout rates, causing them to take longer to graduate, and take on more debt – all of which can be exacerbated by rising tuition and decreasing financial support in Massachusetts.

## What are other strategies to boost teen employment?

Youth engagement programs help teens find their path to a promising career. They foster engagement in the community and provide training or employment. Specifically, an effective way to boost teen employment levels is to expand support for targeted and subsidized hiring programs, like Massachusetts' [YouthWorks](#) program. While funding has fluctuated over the years, YouthWorks has been successful in subsidizing jobs with public, private, and non-profit employers for teens and young adults in cities with the highest number of youth in poverty.

### Inconsistent Funding for YouthWorks over the Past 10 Years

State funding levels of YouthWorks (7002-0012) since FY 2007, adjusted for inflation



MassBudget's Budget Browser



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- <sup>1</sup> Economic Policy Institute analysis of Current Population Survey Outgoing Rotation Group microdata, 2016.
- <sup>2</sup> Economic Policy Institute analysis of Current Population Survey Outgoing Rotation Group microdata, 2016.
- <sup>3</sup> Economic Policy Institute analysis of Current Population Survey Outgoing Rotation Group microdata, 2016.
- <sup>4</sup> University of Massachusetts Donahue Institute, Economic & Policy Research group. (2016). [The Young Adult Labor Force in Massachusetts](#). Pages 23-24.
- <sup>5</sup> ACS 2011-2015 PUMS, Massachusetts; <https://www.bls.gov/opub/reports/minimum-wage/2016/home.htm>, Table 4.
- <sup>6</sup> MassBudget. (2013). [A Well-Educated Workforce is Key to State Prosperity](#).
- <sup>7</sup> MassBudget. (2016). [In 16 Charts: Higher Education Funding in Massachusetts](#).
- <sup>8</sup> [College Board, Annual Survey of Colleges; NCES, IPEDS Fall Enrollment data](#).
- <sup>9</sup> MassBudget. (2016). [In 16 Charts: Higher Education Funding in Massachusetts](#).
- <sup>10</sup> Bureau of Labor Statistics. (2017). [College Enrollment and Work Activity of 2016 High School Graduates](#). Economic News Release.
- <sup>11</sup> Bureau of Labor Statistics. (2017). [College Enrollment and Work Activity of 2016 High School Graduates](#). Economic News Release. Table 1.
- <sup>12</sup> Bureau of Labor Statistics. (2017). [College Enrollment and Work Activity of 2016 High School Graduates](#). Economic News Release. Table 1.
- <sup>13</sup> MassBudget Analysis of U.S. Census Bureau, American Community Survey 2011-2015 Public Use Microdata Sample.
- <sup>14</sup> Studies: King, T., and E. Bannon. (2002). [At what cost? The price that working students pay for a college education](#). Washington, DC: United States Public Interest Research Group; King, J. (2006). [Working their way through college: Student employment and its impact on the college experience](#). ACE issue Brief, ACE Center for Policy Analysis, American Council on Education; Furr, S. R., and T. W. Elling. (2000). [The influence of work on college student development](#). NASPA Journal 37: 454-470; and Pascarella, E. T., and P. T. Terenzini. (2005). [How College Affects Students Revisited: A Third Decade of Research](#). San Francisco, CA: Jossey-Bass.
- <sup>15</sup> Hovdhaugen, E. (2015). ["Working While Studying: The Impact of Term-Time Employment on Dropout Rates,"](#) Journal of Education and Work, Vol. 28, No. 6: 631-651.; Roksa, J. (2011). [Differentiation and work: inequality in degree attainment in U.S. higher education](#). Page 300.
- <sup>16</sup> Neumark, D., Sala, J.M., and Wascher, W. (2014). [More on recent evidence on the effects of minimum wages in the United States](#). NBER Working Paper No. 20619. Page 22.
- <sup>17</sup> Washington Center for Equitable Growth. (2016). [Credible research designs for minimum wage studies](#). Page 4.
- <sup>18</sup> Congressional Research Service. (2015). [Disconnected Youth: A Look at 16 to 24 Year Olds Who Are Not Working or In School](#). Page 1.
- <sup>19</sup> Congressional Research Service. (2015). [Disconnected Youth: A Look at 16 to 24 Year Olds Who Are Not Working or In School](#). Page 1.
- <sup>20</sup> ACS 2011-2015 PUMS, Massachusetts.