

# The 2018 Summer Job Outlook for American Teens

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April 2018



DREXEL UNIVERSITY

Center for

Labor Markets  
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## Introduction

The U.S. labor market has experienced strong and steady growth over the past few years after initially languishing in a slow growth recovery from the Great Recession of 2007-09. The number of job vacancies ready to be filled has reached 5.8 million during the last month of 2017, more than doubling in volume since the bottom of the 2009-2010 recession. The ratio of unemployed workers to vacant jobs fell to just 1.13 job seekers for every vacant job by the beginning of this year. This 1.13 to 1 ratio is the lowest unemployment to vacancy ratio since the end to the Reagan-Clinton era of rapid economic growth and a signal that the nation's labor market is near full-employment level given the near equality between the number of unemployed persons and the number of vacant jobs.

Labor force participation of prime-age workers (those between the ages of 25 and 54) have finally begun to recover from their recessionary low in 2013 as job prospects have improved and more adults have opted to rejoin the workforce. Indeed, labor force attachment of prime-age workers is back to its 2004-2005 level. Unemployment rates among prime-age workers averaged 3.5 percent during the first quarter of 2018; a level not seen since the end of the expansion of the 1990s. The result is the employment rate of prime-age workers has risen considerably from the 2010 recession trough level of 75 percent to 79.2 percent in the first quarter of 2018, and approaching its 2006 pre-recession peak of 80.1 percent

The movement toward full employment in the nation has greatly improved the job prospects of prime-age workers (and older workers as well) but job market gains for teens have been more modest. The proportion of teens with a job has increased from its recession bottom of 25.6 percent in 2010 to 30.7 percent during the first quarter of 2018. While an important rebound, the share of teens with a job remains sharply below pre-recession highs and is dramatically below those observed at the end of the sustained economic expansion of the 1980s and 1990s.

Despite some improvement in teen employment rates in recent years from a strong labor market, the labor force underutilization rate of teens in summer months as well throughout the year remains a serious problem. Employing teens is important since:

- Teen employment is highly path dependent - the more teens work today, the more likely they will work tomorrow. This has long-term implications for long-term labor supply, unemployment, and adult dependency.
- The more time that teens and young adults spend out of school and out of work, the higher the likelihood that they will be jobless, poor, or dependent on government welfare programs when they are 25- to 29-years-old.
- Lower labor force participation of teens reduces their future productivity, resulting in negative impacts on future GDP growth.
- Work experience provides young people with social skills like learning to work in an adult context with other staff and supervisors, meet and deal with adult customers, and develop relevant skills to negotiate these relationships at work.
- Compensated work experience where teens earn wages paid by employers in proportion to their contribution to the firm, helps teens accumulate human capital in several ways by exposing them to the world of work where they learn essential job and career skills.
- Early work experience can help young workers to go beyond entry-level jobs and gain experience in different workplace settings and gain knowledge of specific occupational skills.
- Employment during summer when most teens are not in school keeps them from engaging in risky behaviors, particularly teens from low-income families and from inner cities.
- Working while in high school substantially raises the expected level of future wealth accumulation of teens compared to those who do not work.

This paper provides projections of the teen employment rate this summer. It begins with an examination of longer-term trends (1999 to 2017) in the overall labor force participation rate and employment rate of teens in the United States. It then shifts focus to summer employment trends and assesses the experiences of different subgroups of teens (gender, race-ethnicity, and family income, metropolitan/non-metropolitan area) in finding summer work. The paper also examines the varying likelihood of teens working during the summer months and their labor force underutilization rates across states. The industry and occupation of employment in summer months of 2016-2017 is also examined for American teens.

## No Improvement in Labor Force Participation Rate among Teens in Recent Years

The teen labor force participation rate has remained at around 50 percent or higher throughout the post-World War II period through the end of the 20<sup>th</sup> century. Since then, the labor force attachment of all U.S. teens has been declining steadily. Academics, researchers, policy makers, and youth advocates have put forward many different arguments, trying to pinpoint the causes of such a precipitous decline in the labor force participation of U.S. teens. Some of the causes (of declining labor market participation of teens) include structural change in the economy, demographic change, displacement of teens in jobs by older workers and new immigrants with low levels of education, a weak labor market after the economic recession, and a steady rise in school enrollment both year-around and during summer when most teens work.<sup>1</sup> Improved options for automation in traditional teen labor markets including food services and some states mandating large gains in minimum wage are also likely to contribute to reduced teen employment rates.

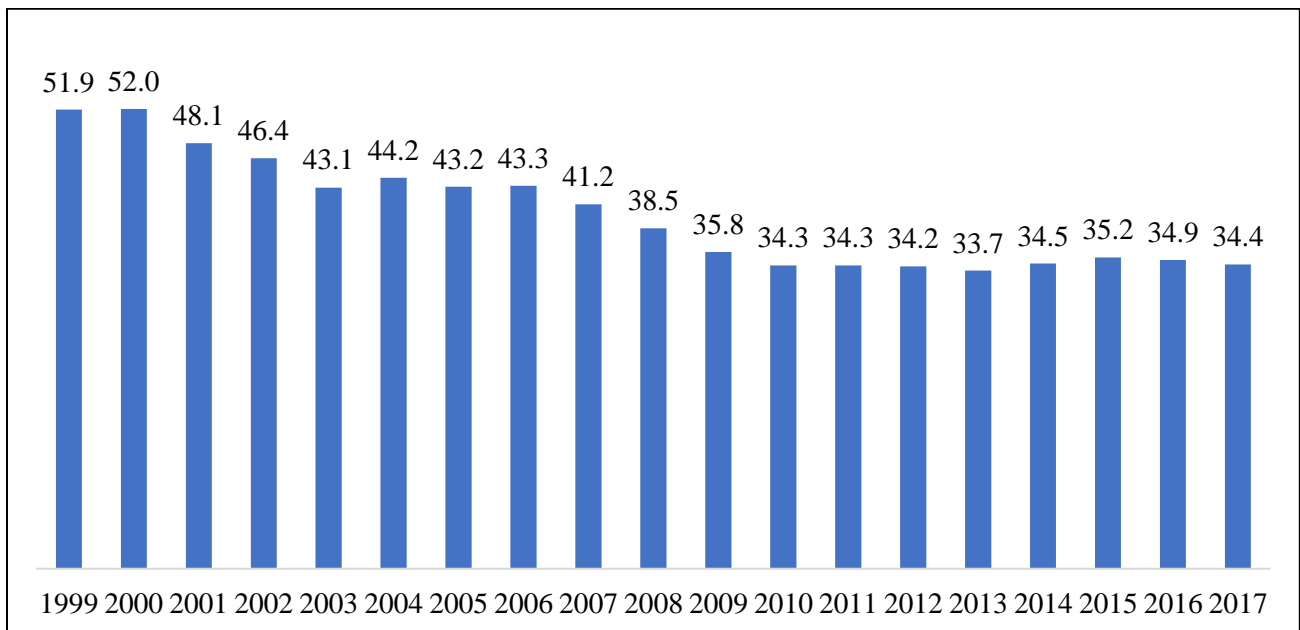
At the peak of the labor market boom in 1999 and 2000, more than half of all U.S. teens (52%) participated in the labor force in any given month. After a brief technology-led economic recession of 2001, the labor force participation rate of teens started to decline steadily and sharply, falling from 52 percent at the end of the 1990s to just 41 percent before the onset of the Great Recession of 2007-2009. During and in the aftermath of the Great Recession of 2007-2009, the labor force participation rates of U.S. teens continued to fall reaching to new historical lows despite the economic recovery. The labor force participation of teens has remained around 34 to 35 percent over the 2011 to 2017 period (Chart 1). It should be noted that workers in each

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<sup>1</sup> See: (i). Daniel Aaronson, Kyung-Hong Park, and Daniel Sullivan, “The Decline in Teen Labor Force Participation”, Federal Reserve Bank of Chicago, Economic Perspectives, 2006. First Quarter, pp. 2-18; (ii). “What Is Happening to Youth Employment Rates?” CBO Background Paper, Congressional Budget Office, November 2004. (iii). Christopher L. Smith, "Polarization, Immigration, Education: What's Behind the Dramatic Decline in Youth Employment?" Federal Reserve, October 2011. (iv). Andrew Sum, Paul Harrington, and Ishwar Khatiwada , “The Impact of New Immigrants on Young Native-Born Workers, 2000-2005”, Center for Immigration Studies, 2006, [www.cis.org/sites/cis.org/files/articles/2006/back806.html](http://www.cis.org/sites/cis.org/files/articles/2006/back806.html). (v). Teresa L. Morisi, “Teen Labor Force Participation Before and After the Great Recession and Beyond”, *Monthly Labor Review*, U.S. Bureau of Labor Statistics, February 2017, <https://www.bls.gov/opub/mlr/2017/article/pdf/teen-labor-force-participation-before-and-after-the-great-recession.pdf>, Grace Lorday and David Neumark, People Versus Machines: The Impact of Minimum Wages in Automatable Jobs, National Bureau of Economic Research, NBER paper 23667, January 2018; Jeffrey Clemens, The Minimum Wage and the Great Recession, Evidence from the Current Population Survey, National Bureau of Economic Research, NBER 21830, December 2015.

age group (16+) experienced a decline in their labor force participation rate during and after the Great Recession of 2007-2009, but the decline was the largest among teens. The U.S. Bureau of Labor of Labor Statistics has projected further declines in the teen labor force participation rate down to 31.7 percent in 2026.<sup>2</sup>

**Chart 1:**  
Trends in Civilian Labor Force Participation Rates of Teens (16- to 19-Years-Old) in the U.S.,  
1999-2017  
 (Seasonally Adjusted, CPS Annual Averages)



Source: Current Population Surveys (CPS), U.S. Bureau of Labor Statistics, 1999 through 2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

### Some Improvement in the Teen Employment Rate in Recent Years

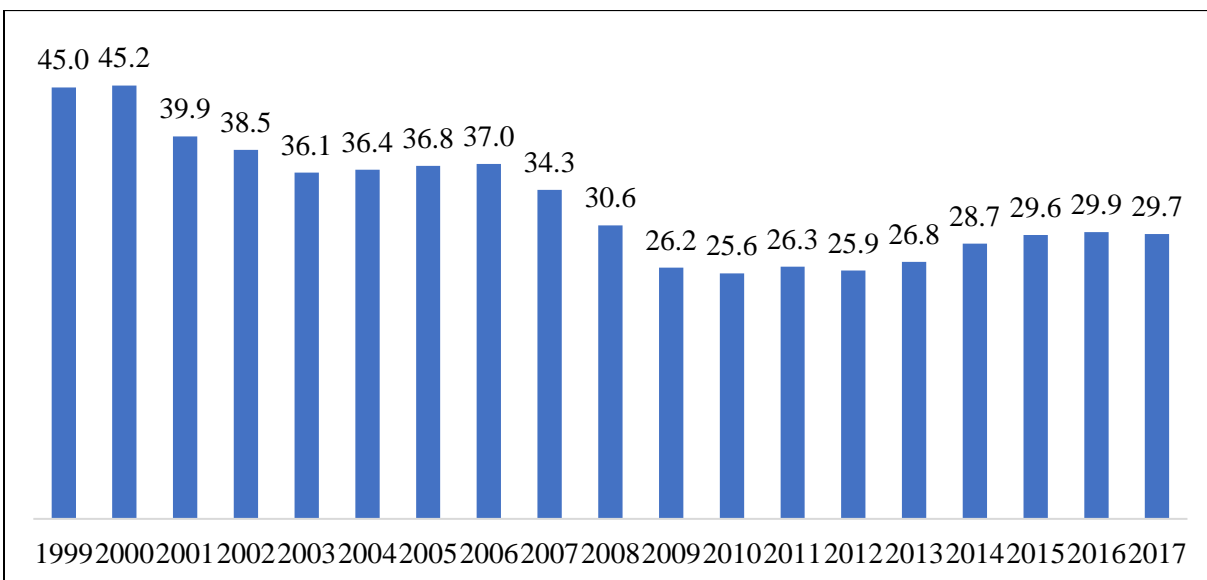
The employment rate of teens has been declining sharply since 2000, but the pace of decline was steep during and in the aftermath of the Great Recession of 2007-2009. What caused such sharp decline in teen employment rates? Certainly, a large job deficit was an important source of teen employment losses. At the trough of the recession there were more than 6 officially unemployed workers for every job opening, with millions more able-bodied individuals

<sup>2</sup> See: Employment Projections: Civilian Labor Force Participation Rate, by Age, Sex, Race, Ethnicity, 1996, 2006, 2016 and Projected 2026, [https://www.bls.gov/emp/ep\\_table\\_303.htm](https://www.bls.gov/emp/ep_table_303.htm) and for a discussion of an earlier round of teen labor force projection; Mitra Toossi, “Labor force projections to 2024: the labor force is growing, but slowly,” *Monthly Labor Review*, December 2015, <https://www.bls.gov/opub/mlr/2015/article/pdf/labor-force-projections-to-2024.pdf>.

who had left the job market or were underemployed—especially recent college graduates who were likely to work in traditional teen labor market segments including retail trade and restaurants, preferring mal-employment (or under employment) to unemployment. Employer preference, displacement by older workers and foreign-born adults, school enrollment preference associated with increases in the college degree wage premium, and structural changes in the economy also contributed to declines in teen employment, A convincing body of research also indicates that higher minimum wages are an important factor in explaining changes in the schooling and employment behavior of teens since 2000.<sup>3</sup> In 2000, teens held 1 out of every 20 jobs in the nation. By 2017, teens held only 1 out of every 30 jobs in the nation.

No group of U.S. workers has experienced such a sharp decline in their employment rate since 2000. In a given month in 2000, 45 percent of teens were employed (Chart 2). The teen

Chart 2:  
Trends in the Employment Rate of Teens (16- to 19-Years-Old) in the U.S., 1999-2017  
(Seasonally Adjusted CPS Annual Averages)



Source: Current Population Surveys (CPS), U.S. Bureau of Labor Statistics, 1999 through 2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

<sup>3</sup> See: David Neumark and Cortnie Shupe, “Declining Teen Employment: Minimum Wages, Other Explanations, and Implications for Human Capital Investment,” Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, 2018.

employment rate declined during the 2001 recession and continued its decline during the jobless recovery of 2002-2004. Yet even as labor markets moved towards near full employment conditions, the employment rates of teens continued to fall. During the business cycle peak in 2007, the teen employment rate had dropped to 34 percent and then reached historical lows after the massive job losses associated with the Great Recession of 2007-2009. In 2010-2011, only about 25 percent of teens had a job in a given month (Chart 2). Despite the labor market recovery since 2011, the employment rate of teens has increased slowly; rising to 30 percent in 2016 and 2017 from lows of 26 percent in 2010 and 2011. The U.S. labor market has added more than 18 million jobs since 2010, but these findings indicate that U.S. teens have not seen much improvement in their likelihood of employment. The share of teens with a job in 2016 and 2017 remained well below the share in 2007 (34.3 percent) and 2000 (45 percent).

### **Modest Improvement in Teen Employment Rates in Summer Months of Recent Years**

Teens aspire to work more during the summer months to gain both earnings and work experience as they have many more potential weeks and hours to work compared to other months of the year when they are enrolled in high school and college; so teen employment rates are much higher during summer than at other times of the year. As noted in a previous section, summer jobs provide teens with numerous benefits. Summer jobs provide teens with exposure to the world of work and help them develop occupational and soft skills needed at work. Evidence shows that urban youth who did not work during summer were more likely than their employed peers to commit violent crimes, to be at risk of social isolation, and engage in risky, deviant, delinquent, and violent behaviors.<sup>4</sup> Evidence also reveals that summer job programs reduce violent crimes committed by African-American teens.<sup>5</sup> In addition, summer employment is also found to contribute to better academic outcomes.<sup>6</sup> While working in the summer may have

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<sup>4</sup> See: (i). Andrew Sum, Mykhaylo Trubskyy, and Walter McHugh, "The Summer Employment Experiences and the Personal/Social Behaviors of Youth Violence Prevention Employment Program Participants and Those of a Comparison Group", Center for Labor Market Studies, Northeastern University, Prepared for Youth Violence Prevention Funder Learning Collaborative, Boston, July 2013.

<sup>5</sup> See: Sara B. Heller, "Summer jobs reduce violence among disadvantaged youth", *Science*, Vol 346, 5 December 2014; Gelber Alexander, Adam Isen, Judd B. Kessler, *The Effects of Youth Employment: Evidence From New York City Summer Youth Employment Program Lotteries*, NBER Working Paper 20810, December 2014.

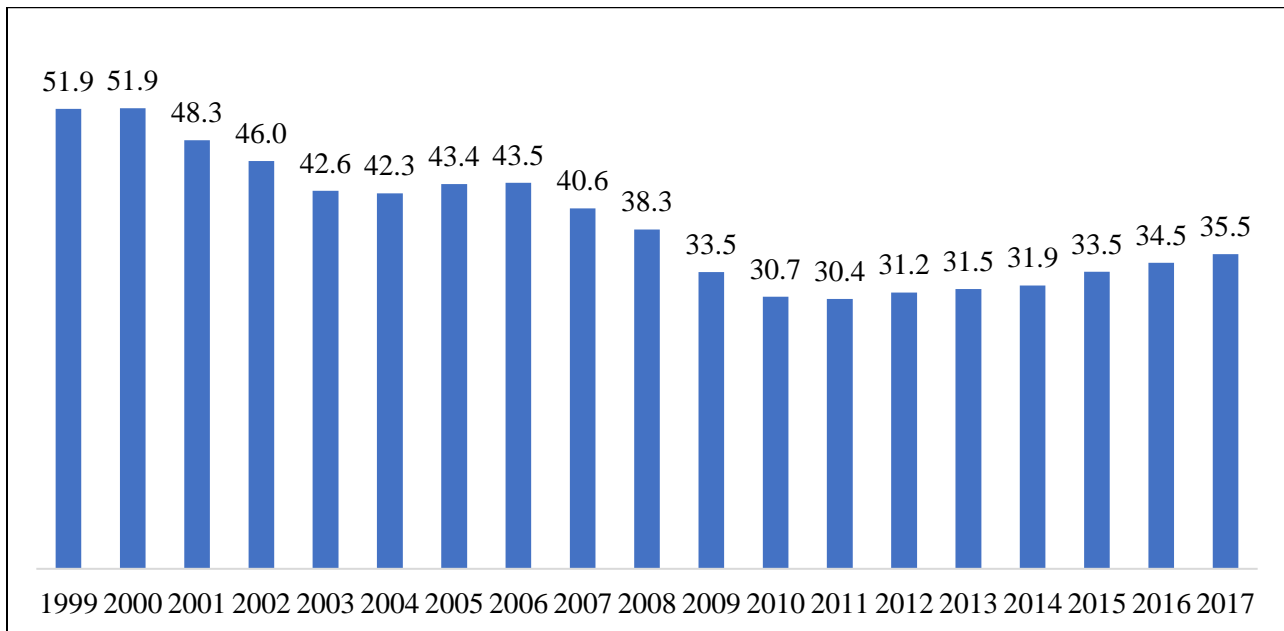
<sup>6</sup> Jacob Leos-Urbel, "What is a Summer Job Worth? The Causal Impact of Summer Youth Employment on Academic Outcomes: Evidence from a Large-Scale Lottery," *Journal of Policy Analysis and Management*, Volume 33, Issue 4, pages 891-991, Fall 2014.



considerable benefits for teens, the share of teens with summer jobs has declined from its historically higher levels.

Although the summer employment prospects of U.S. teens have improved modestly over the past few years, the rise in the teen employment rate has not been nearly as strong as in the late 1990s when the U.S. labor market was at its peak.<sup>7</sup> In the summer months of 1999-2000, more than half of the nation’s teens were employed. The employment rates of teens (during summer months and year-round) started to decline at the beginning of the dot.com recession in 2001. By 2006-2007, the summer employment rate of teens had plummeted to 41 to 43 percent at the same time as the national economy recovered from the dot.com recession during the 2003 to 2007 period. Indeed, it seems that teens absorbed a disproportionate share of jobs losses during the dot.com recession, but got none of the jobs that were regained during the recovery (Chart 3).

**Chart 3:**  
**Trends in the Summer Employment Rate of Teens (16- to 19-Years-Old), U.S., 1999-2017 (CPS June-July-August Averages, Not Seasonally Adjusted)**



Source: Current Population Surveys (CPS) public use data files, 1999 to 2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

<sup>7</sup> For review of 2017 summer employment reports, see: Neeta Fogg, Paul Harrington and Ishwar Khatiwada, "The 2017 Summer Jobs Outlook for Teens in the US," Working paper, Center for Labor Markets and Policy, Drexel University, May 2017; (ii). Paul Wiseman, "Kids today: They don't work summer jobs the way they used to", Associated Press, June 23, 2017; (ii). Megan Woolhouse, "Affluent Teens Twice as Likely to Find Seasonal Work: Teens Facing a Jobs Gap As Well", *The Boston Globe*, May 28, 2015, pp. C1-C7; (iii). Kaomi Goetz, "Teens Hoping For More Jobs, Higher Wages This Summer", *All Things Considered*, NPR, New York, June 2015.

During and in the aftermath of the Great Recession of 2007-2009, the employment prospects of teens further deteriorated and the teen employment rate reached a historical low. In the summer months of 2010-2011, only 30 percent of teens were employed; the lowest teen summer employment rate ever recorded. Since then, the summer employment rate of teens has risen, but the gains have been very modest. In the summer months of 2017, 35.5 percent of U.S. teens were able to find some type of paid employment. The employment rate of U.S. teens in 2017 was only 5 percentage points above the historically lowest level that it had reached in 2011.

### **Summer Employment Rates Gains across All Groups of Teens**

After hitting a historical low in 2010-2011, the employment rates of teens started to increase slowly as the job gains across the U.S. remained strong and steady. All teens across gender, race-ethnicity, and age groups experienced an increase in their summer employment rates. Table 1 compares teen summer employment rates in 2016-2017 with 2010-2011. In the summer of 2016-2017, 35 percent of U.S. teens were employed. This employment rate was 4.5 percentage points higher than the lowest recorded teen summer employment rate (30.5%) in 2010-2011. The summer employment rate of teens in 2016-2017 was nearly identical for male and female teens (34.7% among males versus 35.3% among females). Among male teens, the summer employment rate over the 2010-2011 and 2016-2017 increased by 4.8 percentage points, which was slightly higher than summer employment rate increase among female teens (4.1 percentage points).

There was substantial variation in the summer employment rate of teens across race-ethnicity groups; varying from highs of 39 to 40 percent among non-Hispanic White and teens in the “Other”<sup>8</sup> race-ethnic groups to lows of 22 percent and 26 percent among Asian and African-American teens, respectively. Among Hispanic teens, the 2016-2017 summer employment rate was 28.5 percent. Historically, Asian teens have had the lowest employment rates in summer as well as year-round.

Summer employment rates increased for teens in all major race-ethnic groups over the 2010-2011 and 2016-2017 period. Teens in the “Other” race-ethnic group experienced the

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<sup>8</sup> The “Other” race-ethnic group includes American Indian, Alaska Native, Native Hawaiian and other Pacific Islander, those who reported two or more races, and some other races.

highest increase in their summer month employment rate over this time period (15.2 percentage points) followed by African-American teens (+8.4 percentage points) and Hispanic teens (+6.4 percentage points). Non-Hispanic White and Asian teens also, respectively, experienced 2.5 and 2.9 percentage points increase in their summer employment rates between 2010-2011 and 2016-2017.

Employment rates of teens also rose steadily and strongly with their age. Older teens worked at a much higher rate than their younger peers. In the summer of 2016-2017, the employment rate of teens was 18 percent among 16-year-olds, rising to 31 percent among 17-year-olds, to 41 percent among 18-year-olds, and nearly 53 percent among the oldest teens aged 19 years. Teens aged 19 were 3.5 times more likely than their peers aged 16 to work during the summer of 2016-2017. Over the 2010-2011 and 2016-2017 time period, teens in each individual age group experienced between 4.5 and 5.8 percentage points increase in their summer employment rates (Table 1).

Table 1:  
Trends in Summer Employment Rates of 16- to 19-Year-Old Teens by  
Gender, Race-Ethnicity, and Age, U.S., Selected Years, 2010-2011, and 2016-2017  
(CPS 2-Year Averages, Not Seasonally Adjusted)

| Group                    | 2010-2011 | 2016-2017 | Absolute<br>Change |
|--------------------------|-----------|-----------|--------------------|
| All (16-19)              | 30.5      | 35.0      | +4.5               |
| <b>Gender</b>            |           |           |                    |
| Male                     | 29.9      | 34.7      | +4.8               |
| Female                   | 31.2      | 35.3      | +4.1               |
| <b>Race-Ethnic Group</b> |           |           |                    |
| White                    | 37.7      | 40.2      | +2.5               |
| Black                    | 17.7      | 26.0      | +8.4               |
| Asian                    | 19.2      | 22.2      | +2.9               |
| Hispanic                 | 22.1      | 28.5      | +6.4               |
| Other                    | 24.0      | 39.2      | +15.2              |
| <b>Age</b>               |           |           |                    |
| 16                       | 13.7      | 18.3      | +4.6               |
| 17                       | 25.1      | 30.9      | +5.8               |
| 18                       | 36.1      | 41.3      | +5.2               |
| 19                       | 48.3      | 52.8      | +4.5               |

Source: Current Population Surveys (CPS) public use data files, 2010-2011 and 2015-2016, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

## Employment Rates by Family Income Level

The employment rates among teens also varied by family income levels. Teens from low-income families are least likely to work while teens in affluent households have a much higher likelihood of working in the summer. Teens in very low-income households (income less than \$20,000 annually) were only about half as likely to work in the summer as their middle income counterparts who lived in families with incomes between \$75,000 and \$150,000 per year.

The likelihood of a teen working during the summer generally rises with family income until incomes of \$150,000 or more is reached. Teens in higher income families (income \$150,000 or more per year) work at a lower rate than their peers from families with incomes between \$75,000 and \$149,999 per year. In 2016-2017, only 23.5 percent of teens from a low-income family (income under \$20,000) were employed during summer months (Table 2). The teen summer employment rate rose steadily with higher family incomes; increasing from close to 30 percent among teens in families with incomes between \$20,000 and \$39,999, to 38.5 percent among those in families with incomes between \$60,000 and \$74,999, to nearly 42 percent among teens in families with incomes between \$100,000 and \$149,999 per year. The summer employment rate of teens from families with incomes more than \$150,000 was slightly lower, 38.3 percent.

Table 2:  
Trends in Summer Employment Rates of 16-to 19-Year-Olds by Family  
Income Levels, U.S., Selected Years, 2010-2011 and 2016-2017  
(CPS 2-Year Averages, Not Seasonally Adjusted)

|                     | 2010-11 | 2016-17 | Change |
|---------------------|---------|---------|--------|
| Under \$20,000      | 21.3    | 23.5    | +2.2   |
| \$20,000-39,999     | 25.2    | 29.9    | +4.7   |
| \$40,000-\$59,999   | 31.9    | 32.9    | +1.0   |
| \$60,000-\$74,999   | 33.4    | 38.5    | +5.0   |
| \$75,000-\$99,999   | 36.8    | 41.2    | +4.4   |
| \$100,000-\$149,999 | 38.7    | 41.8    | +3.1   |
| \$150,000+          | 36.1    | 38.3    | +2.2   |

**Source:** Current Population Surveys (CPS) public use data files, 2010-2011 and 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

Teens in every income group have experienced an increase in their summer employment rates between 2010-2011 and 2016-2017. In the summer of 2016-17, the employment rate gains among teens in the seven family incomes categories were in the range of 1 to 5 percentage points.

## **Employment Rates of Teens in Metropolitan and Non-Metropolitan Area**

Teens living in non-metropolitan areas work at higher rates than their peers living in metropolitan areas. Teens in larger inner city and metro areas likely face more competition from older workers and poorly educated immigrants in the job market, particularly during the labor market downturn. In 2016-17, slightly more than 39 percent of teens living in non-metropolitan areas were employed during the summer months in comparison to 37 percent of teens living in metropolitan areas (Table 3). During the labor market downturn in 2010-11, the summer employment rate gap between teens living in metropolitan areas and non-metropolitan areas was 5-percentage points, but by 2016-17, the gap had narrowed to 2 percentage points.

The teen summer employment rate also varied widely by the population of the metropolitan area. Teens from smaller metropolitan areas were more successful in obtaining summer employment than teens from larger metropolitan areas. The summer 2016-17 employment rate of teens living in metropolitan area with a population between 100,000 and 249,999 was 40 percent. The likelihood of employment fell among teens living in metropolitan areas with larger populations. Among teens living in metropolitan areas with a population between 2.5 million to 5 million, the summer employment rate was about 36 percent and only 27 percent of teens living in metropolitan areas with a population of 5 million residents or more were employed in the summer of 2016-17 (Table 3).

Summer employment rates of teens living in both metropolitan and non-metropolitan areas increased between 2010-11 and 2016-17. However, teens in metropolitan areas experienced larger employment gains (+8 percentage points) than their peers living in non-metropolitan areas (+5.0 percentage points). In metropolitan areas, the

gains in summer employment rates for teens over the 2010-11 and 2016-17 period were in the range of 4 to 9 percentage points by metropolitan population size.

Table 3:  
Trends in Summer Employment Rates of 16- to 19-Year-Olds by Metropolitan Area Status, U.S., Selected Years, 2010-2011 and 2016-2017  
(CPS 2-Year Averages, Not Seasonally Adjusted)

| Metropolitan Status          | 2010-11 | 2016-17 | Absolute Change |
|------------------------------|---------|---------|-----------------|
| Not Metropolitan             | 34.3    | 39.4    | +5.1            |
| Metropolitan                 | 29.3    | 37.3    | +8.0            |
| Metropolitan Population Size |         |         |                 |
| 100,000 - 249,999            | 35.6    | 40.1    | +4.5            |
| 250,000 - 499,999            | 32.4    | 36.5    | +4.1            |
| 500,000 - 999,999            | 30.7    | 36.0    | +5.3            |
| 1,000,000 - 2,499,999        | 32.9    | 37.9    | +5.0            |
| 2,500,000 - 4,999,999        | 26.9    | 35.9    | +9.0            |
| 5,000,000+                   | 23.2    | 27.2    | +4.0            |

Source: Current Population Surveys (CPS) public use data files, 2010-2011 and 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

## Employment Rates of Teens across the States

There were large variations across states in the teen summer employment rate. Table 4 displays a ranking of states by the teen employment rate in the summer of 2016-2017. Teens living in New Hampshire, Minnesota, South Dakota, Wisconsin, and Nebraska had the highest employment rate, both year-round and during summer months. These states have also consistently led the nation in teen employment for many years. In the summer months of 2016-2017, teens living in Nebraska and Wisconsin had the highest employment rates while teens living in Mississippi and New Mexico had the lowest employment rates. The top five states with the highest teen employment rate in 2016-2017 were Nebraska (58.9%), Wisconsin (58.4%), South Dakota (56.0%), Minnesota (54.4%), and New Hampshire (52.8%). Together these states had an average teen summer employment rate of 56 percent.

In contrast, the five states with the lowest teen summer employment rates were California and Florida (25.5%), New York (25.1%), New Mexico (23.0%), and Mississippi (20.2%). Together, these states had a teen summer employment rate that

averaged 24 percent during 2016-2017, just half the summer employment rate of the top five states.

Table 4:  
Ranking of Employment Rates of Teens in Summer Months of 2016-2017 by State  
(CPS 2-Year Averages, Not Seasonally Adjusted)

| Rank | State         | Employment Rate | Rank | State          | Employment Rate |
|------|---------------|-----------------|------|----------------|-----------------|
| 1    | Nebraska      | 58.9            | 26   | Tennessee      | 38.0            |
| 2    | Wisconsin     | 58.4            | 27   | Oregon         | 37.6            |
| 3    | South Dakota  | 56.0            | 28   | Illinois       | 37.6            |
| 4    | Minnesota     | 54.4            | 29   | Maryland       | 37.3            |
| 5    | New Hampshire | 52.8            | 30   | Connecticut    | 36.7            |
| 6    | Vermont       | 52.4            | 31   | Arkansas       | 36.4            |
| 7    | Montana       | 52.3            | 32   | Kentucky       | 35.6            |
| 8    | Maine         | 51.9            | 33   | North Carolina | 35.6            |
| 9    | Wyoming       | 50.0            | 34   | South Carolina | 35.4            |
| 10   | Iowa          | 49.9            | 35   | Alaska         | 33.8            |
| 11   | Utah          | 49.7            | 36   | Nevada         | 33.5            |
| 12   | Kansas        | 49.2            | 37   | Arizona        | 31.4            |
| 13   | North Dakota  | 48.3            | 38   | Texas          | 30.4            |
| 14   | Ohio          | 47.6            | 39   | Georgia        | 29.2            |
| 15   | Idaho         | 44.8            | 40   | Louisiana      | 28.8            |
| 16   | Pennsylvania  | 43.7            | 41   | West Virginia  | 28.1            |
| 17   | Rhode Island  | 43.6            | 42   | Oklahoma       | 28.0            |
| 18   | Indiana       | 43.3            | 43   | New Jersey     | 27.0            |
| 19   | Delaware      | 42.9            | 44   | Alabama        | 27.0            |
| 20   | Massachusetts | 42.9            | 45   | Hawaii         | 26.2            |
| 21   | Michigan      | 42.3            | 46   | California     | 25.5            |
| 22   | Missouri      | 42.2            | 47   | Florida        | 25.5            |
| 23   | Colorado      | 41.6            | 48   | New York       | 25.1            |
| 24   | Washington    | 39.9            | 49   | New Mexico     | 23.0            |
| 25   | Virginia      | 38.8            | 50   | Mississippi    | 20.2            |

Source: Current Population Surveys (CPS) public use data files, 2010-2011 and 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

## Employment Rates Gains Across States

The pace of recovery of teen summer jobs also varied sharply across states in the nation. A number of states posted strong gains in teen summer employment rates since the employment trough of the recession. In 10 states (Wisconsin, Idaho, Washington, Indiana, Michigan, New

Hampshire, North Carolina, Utah, Minnesota, and Tennessee), the teen summer employment rate increased in the range of 10 to 15 percentage points between 2010-2011 and 2016-2017.

Table 5:  
Ranking of States by Absolute Change in Teen Summer Employment Rate over the 2010-2011 to 2016-2017 Period, (CPS 2-Year Averages, Not Seasonally Adjusted Numbers in Percent)

| Rank | State          | 2010-2011 | 2016-2017 | Absolute Change | Rank | State         | 2010-2011 | 2016-2017 | Absolute Change |
|------|----------------|-----------|-----------|-----------------|------|---------------|-----------|-----------|-----------------|
| 1    | Wisconsin      | 43.8      | 58.4      | +14.6           | 26   | West Virginia | 24.5      | 28.1      | +3.6            |
| 2    | Idaho          | 32.4      | 44.8      | +12.4           | 27   | Illinois      | 34.3      | 37.6      | +3.3            |
| 3    | Washington     | 28.3      | 39.9      | +11.6           | 28   | Texas         | 27.2      | 30.4      | +3.2            |
| 4    | Indiana        | 31.9      | 43.3      | +11.5           | 29   | Maryland      | 34.2      | 37.3      | +3.0            |
| 5    | Michigan       | 31.0      | 42.3      | +11.3           | 30   | Pennsylvania  | 41.4      | 43.7      | +2.3            |
| 6    | New Hampshire  | 41.8      | 52.8      | +11.0           | 31   | Virginia      | 36.9      | 38.8      | +1.9            |
| 7    | North Carolina | 24.8      | 35.6      | +10.7           | 32   | Florida       | 23.6      | 25.5      | +1.9            |
| 8    | Utah           | 39.6      | 49.7      | +10.1           | 33   | Arkansas      | 34.7      | 36.4      | +1.7            |
| 9    | Minnesota      | 44.3      | 54.4      | +10.1           | 34   | Kansas        | 47.7      | 49.2      | +1.5            |
| 10   | Tennessee      | 28.3      | 38.0      | +9.7            | 35   | Alabama       | 26.2      | 27.0      | +0.8            |
| 11   | South Carolina | 25.9      | 35.4      | +9.5            | 36   | Wyoming       | 49.4      | 50.0      | +0.6            |
| 12   | Delaware       | 33.7      | 42.9      | +9.1            | 37   | Maine         | 51.3      | 51.9      | +0.5            |
| 13   | Georgia        | 20.2      | 29.2      | +9.0            | 38   | New Mexico    | 22.5      | 23.0      | +0.5            |
| 14   | Ohio           | 39.3      | 47.6      | +8.3            | 49   | Hawaii        | 26.0      | 26.2      | +0.2            |
| 15   | Nebraska       | 50.8      | 58.9      | +8.1            | 40   | New York      | 25.4      | 25.1      | -0.3            |
| 16   | Kentucky       | 27.5      | 35.6      | +8.1            | 41   | Missouri      | 43.1      | 42.2      | -0.9            |
| 17   | Colorado       | 34.0      | 41.6      | +7.6            | 42   | New Jersey    | 28.1      | 27.0      | -1.1            |
| 18   | Arizona        | 24.0      | 31.4      | +7.5            | 43   | South Dakota  | 57.2      | 56.0      | -1.2            |
| 19   | Montana        | 45.6      | 52.3      | +6.7            | 44   | Iowa          | 51.7      | 49.9      | -1.7            |
| 20   | California     | 20.3      | 25.5      | +5.2            | 5    | Oregon        | 40.3      | 37.6      | -2.6            |
| 21   | Vermont        | 47.4      | 52.4      | +5.0            | 46   | Connecticut   | 39.4      | 36.7      | -2.7            |
| 22   | Louisiana      | 24.0      | 28.8      | +4.8            | 47   | Oklahoma      | 32.0      | 28.0      | -4.0            |
| 23   | Nevada         | 29.2      | 33.5      | +4.3            | 48   | Alaska        | 38.9      | 33.8      | -5.1            |
| 24   | Rhode Island   | 39.4      | 43.6      | +4.2            | 49   | Mississippi   | 27.2      | 20.2      | -7.0            |
| 25   | Massachusetts  | 39.2      | 42.9      | +3.7            | 50   | North Dakota  | 58.8      | 48.3      | -10.6           |

Source: Current Population Surveys (CPS) public use data files, 2010-2011 and 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

In sharp contrast, ten states actually saw their teen summer employment rates decline even as the nation added more than 18 million new jobs since the end of the recession. Missouri (-0.9 percentage points), New Jersey (-1.1 percentage points), South Dakota (-1.2 percentage points), Iowa (-1.7 percentage points), Oregon (-2.6 percentage points), Connecticut (-2.7



percentage points), Oklahoma (-4.0 percentage points), Alaska (-5.1 percentage points), Mississippi (-7.0 percentage points), and North Dakota (-10.6 percentage points) all experienced declines in share of teens working during the summer between 2010-11 and 2016-17. The employment rate of teens in North Dakota declined sharply over the 2010-2011 and 2016-2017 period; however, in both time periods, North Dakota had one of the highest teen summer and year-round employment rates among 50 states. In six states (Alabama, Wyoming, Maine, New Mexico, Hawaii, and New York), employment rates for teens over this time period was nearly flat (changing by less than 1 percentage point). In the remaining states, the teen summer employment rate increased by 1 to 10 percentage points between 2010-2011 and 2016-2017 (Table 5).

## **Do Teens Want to Work in Summer?**

The decline trend in teen employment in the summer as well as year-round has raised questions about the employment desire of teens, in summer as well as year-round. Some argue that more teens are opting for school-related activities than work in summer months.<sup>9</sup> Indeed, the summer school enrollment rate among teens has increased by more than 10 percentage points since 2000. However, an examination of the desire to work reveals a strong desire to work among teenagers.

The labor market problems such as unemployment, hidden unemployment, and underemployment among teens are higher than those observed for any other age group. In the summer months of 2016-17, nearly 1.1 million teens were ‘officially’ unemployed, another 432,000 wanted to work full-time, but were working part-time because they could not find full-time work, and another 886,000 teens wanted to work but had quit looking for a job (Table 6). The combined pool of the three groups of underutilized teens was nearly 2.4 million. This means that about 31 percent of the adjusted teen labor force was underutilized during the summer months of 2016-2017. This underutilization rate is higher than the rate of underutilization among any other group of workers. These findings clearly show that, despite some claims to the

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<sup>9</sup> See: (i). Jeff Clabaugh, Why Teens Don’t Want Summer Jobs? *Washington Business Journal*, April 21, 2015; (ii). Catey Hill, American Teens Don’t Want to Work, *MarketWatch*, August 4, 2014. <https://www.marketwatch.com/story/american-teens-dont-want-to-work-2014-05-01>

contrary, a large number of teens do have a strong desire to work in the summer months, but are unsuccessful in either finding sufficient hours of work or finding any work at all.

With the overall improvement in national labor market conditions, the unemployment, hidden unemployment, and under-employment problems of teens has declined sharply from the high reached in 2010-11. Over the summer months of 2010-11 and 2016-17, the number of unemployed teens declined by 40 percent, the number of underemployed teens declined by nearly 36 percent, and the number of teens experiencing hidden unemployment fell by 19 percent (Table 6). The underutilized pool of teens dropped by one-third over this time period. The underutilization rate of teens during summer months has declined from 44 percent in 2010-11 to 31 percent in 2016-17. Despite this decline, the teen labor force underutilization problem remains stubbornly high even in the recent labor market boom.

Table 6:  
Trends in Labor Market Problems of 16- to 19-Year-Olds in Summer Months of 2010-2011 and 2016-2017 (CPS 2-Year Averages, Not Seasonally Adjusted Numbers in 1,000s)

| Labor Force Status                | 2010-11 | 2015-16 | Absolute Change | % Change |
|-----------------------------------|---------|---------|-----------------|----------|
| (A) Labor Force (B+C)             | 6,940   | 6,931   | -10             | -0.1     |
| (B) Employed                      | 5,138   | 5,859   | +721            | +14.0    |
| (C) Unemployed                    | 1,802   | 1,072   | -731            | -40.5    |
| (D) Working PT for ECN Reasons    | 671     | 432     | -239            | -35.6    |
| (E) Labor Force Reserve           | 1,095   | 886     | -209            | -19.1    |
| (F) LF Underutilized Pool (C+D+E) | 3,567   | 2,389   | -1,178          | -33.0    |
| (G) Not In Labor Force            | 9,880   | 9,811   | -69             | -0.7     |
| (H) Total Teen Population         | 16,821  | 16,742  | -79             | -0.5     |
| LF Underutilization Rate (In %)*  | 44      | 31      | -14             | -31.2    |

Source: Current Population Surveys (CPS) public use data files, 2010/2011 and 2016/2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

Note:\* Underutilization rate is derived by dividing underutilized pool (unemployed, underemployed, and hidden employed (labor force reserve)) by adjusted labor force (labor force + labor force reserve).

The teen labor force underutilization rate varied widely across states. In the summer months of 2016-17, the labor force underutilization rate of teens varied from lows of 16 to 17 percent in Nebraska, New Hampshire, and Wisconsin to highs of 42 to 47 percent in Mississippi, Alaska, and New Mexico (Table 7).

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Table 7:  
Labor Force Underutilization Rates of Teens during the Summer of 2016-2017 by State  
(CPS 2-Year Averages, Not Seasonally Adjusted Numbers in Percent)

| Rank | State          | Labor Force Underutilization Rate | Rank | State               | Labor Force Underutilization Rate |
|------|----------------|-----------------------------------|------|---------------------|-----------------------------------|
| 1    | Nebraska       | 16.4                              | 27   | Pennsylvania        | 29.1                              |
| 2    | New Hampshire  | 16.6                              | 28   | Rhode Island        | 29.3                              |
| 3    | Wisconsin      | 17.5                              | 29   | Arkansas            | 30.2                              |
| 4    | South Dakota   | 17.8                              | 30   | Hawaii              | 30.4                              |
| 5    | Minnesota      | 18.1                              |      | <b>U.S. Average</b> | <b>30.6</b>                       |
| 6    | Iowa           | 20.3                              | 31   | Texas               | 30.8                              |
| 7    | Kansas         | 20.4                              | 32   | Virginia            | 31.6                              |
| 8    | North Dakota   | 21.2                              | 33   | Washington          | 32.6                              |
| 9    | Utah           | 22.8                              | 34   | Florida             | 33.0                              |
| 10   | Colorado       | 23.3                              | 35   | Oklahoma            | 33.1                              |
| 11   | Vermont        | 23.3                              | 36   | Maine               | 33.7                              |
| 12   | Kentucky       | 23.9                              | 37   | Michigan            | 34.3                              |
| 13   | Ohio           | 24.8                              | 38   | Oregon              | 34.9                              |
| 14   | Tennessee      | 24.9                              | 39   | Arizona             | 36.3                              |
| 15   | Massachusetts  | 25.4                              | 40   | New Jersey          | 36.7                              |
| 16   | Delaware       | 25.6                              | 41   | Georgia             | 36.8                              |
| 17   | Indiana        | 26.1                              | 42   | Louisiana           | 36.9                              |
| 18   | Idaho          | 26.2                              | 43   | Alabama             | 37.8                              |
| 19   | Montana        | 26.5                              | 44   | California          | 38.0                              |
| 20   | Maryland       | 27.0                              | 45   | New York            | 38.4                              |
| 21   | South Carolina | 27.2                              | 46   | Connecticut         | 38.6                              |
| 22   | West Virginia  | 27.2                              | 47   | Nevada              | 39.0                              |
| 23   | Wyoming        | 27.6                              | 48   | Mississippi         | 42.2                              |
| 24   | Missouri       | 27.9                              | 49   | Alaska              | 46.3                              |
| 25   | Illinois       | 28.4                              | 50   | New Mexico          | 47.3                              |
| 26   | North Carolina | 28.7                              |      |                     |                                   |

Source: Current Population Surveys (CPS) public use data files, 2010-2011 and 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

## Industry and Occupation of Teens during the Summer of 2016-2017

Tables 8 and 9 provide some insight into the industries and occupations where teens work in the summer. The employment of teens was concentrated in only few key industries during the summer months. Of the total 5.859 million teens employed during the summer months of 2016-2017, nearly 42 percent were working in arts, entertainment, recreation, accommodations and food service industries, 21 percent worked in retail trade

industries, and another 10 percent worked in educational services, healthcare and social assistance industries. These three major industries employed nearly three-quarters (73.3 percent) of all employed teens during the summer of 2016-2017 (Table 8). Nationally, between 2011 and 2017, total payroll employment in leisure and hospitality, retail trade, and education and health industries increased by 20 percent, 8 percent, and 14 percent, respectively.<sup>10</sup>

Table 8:  
Distributions of Employed Teens in Summer Months of 2016-2017 by Major Industry  
(Numbers of Employed in 1,000s)

| Industry   | Numbers of<br>Employed | Percentage<br>Distribution |
|--|------------------------|----------------------------|
| Agriculture, forestry, fishing and hunting, and mining                             | 135                    | 2.3                        |
| Construction   | 248                    | 4.2                        |
| Manufacturing  | 241                    | 4.1                        |
| Wholesale trade  | 53                     | 0.9                        |
| Retail trade   | 1,246                  | 21.3                       |
| Transportation, warehousing, and utilities   | 92                     | 1.6                        |
| Information  | 86                     | 1.5                        |
| Finance and insurance, and real estate and leasing                                 | 95                     | 1.6                        |
| Professional, scientific, management, administrative and waste management services | 302                    | 5.2                        |
| Educational services, healthcare and social assistance                             | 596                    | 10.2                       |
| Arts, entertainment, recreation, accommodations and food services                  | 2,453                  | 41.9                       |
| Other services   | 255                    | 4.4                        |
| Public administration  | 58                     | 1.0                        |
| <b>Total</b>   | <b>5,859</b>           | <b>100.0</b>               |

Source: Current Population Surveys (CPS) public use data files, 2010-2011 and 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

Since a large majority of teens are entering the world of work for the first time, they lack sufficient education/human capital, experience, and job skills. Consequently, teens are more likely to be employed in entry-level occupations that do not require a lot of education/human capital, experience, and job skills. During the summer of 2016-2017,

<sup>10</sup> Employment in the retail trade industry increased from 14.670 million in 2011 to 15.864 million in 2017. In the education and health industry, employment increased from 19.228 million in 2011 to 23.188 million in 2017. Similarly, employment in the leisure and hospitality industry increased from 13.352 million in 2011 to 16.056 million in 2017.

nearly 64 percent of all employed teens worked in service and low-level sales positions.<sup>11</sup> The second largest share of employed teens worked in office and administrative support occupations (10.4%) followed by production, transportation, and material moving occupations (9.3%) (Table 9). These three major occupations accounted for 83.3 percent of all employed teens across the U.S. in the summer months of 2016-2017.

Table 9:  
The Distribution of Employed Teens during the Summer of 2016-2017 by Major Occupations (Numbers of Employed Teens in 1,000s)

| <u>Occupation</u>                                     | <u>Numbers<br/>Employed<br/>(1000's)</u> | <u>Percentage<br/>Distribution</u> |
|---|--|------------------------------------|
| Professional, technical, managerial, high level sales | 505                                      | 8.6                                |
| Healthcare practitioner & technical                   | 46                                       | 0.8                                |
| Office & administrative support                       | 610                                      | 10.4                               |
| Service & low-level sales                             | 3,728                                    | 63.6                               |
| High skill blue collar                                | 313                                      | 5.3                                |
| Production, transportation & material moving          | 544                                      | 9.3                                |
| Farming, fishing, and forestry                        | 113                                      | 1.9                                |
| <b>Total</b>  | <b>5,859</b>                             | <b>100.0</b>                       |

Source: Current Population Surveys (CPS) public use data files, 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

At the individual occupation level, 30 percent of teens who were employed during the summer months of 2016-2017 were working in the following four occupations: cashiers, waiter/waitresses, retail sales persons, and customer service representatives/receptionist and information clerks. Table 10 displays the top 20 occupations of jobs held by teens during the summer of 2016-2017. All of these occupations are low level service occupations. Seventy percent of teen employment in the summer of 2016-17 was concentrated in these 20 occupations. In the 1990s, teens used to work in more diverse sets of occupations, including financial institutions and public service occupations. In recent decades, however, a large majority of teens are confined to employment in a handful of low-level service occupations.

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<sup>11</sup> Service and low-level sales occupations include healthcare support, food preparation and support, buildings and ground cleaning, personal care and service, and low-level sales.

Table 10:  
Top 20 Occupations Employing Largest Number of Teens  
During the Summer Months of 2016-2017, U.S.

| Occupation   | Numbers of<br>Employed | Percent      |
|--|------------------------|--------------|
| Cashiers   | 814,130                | 13.9         |
| Waiters and waitresses   | 378,796                | 6.5          |
| Retail salespersons  | 310,882                | 5.3          |
| Customer service representatives/receptionist and information clerks   | 252,106                | 4.3          |
| Cooks  | 245,112                | 4.2          |
| Food preparation and serving related workers/dishwashers/ all other including dining room and cafeteria attendants and bartender helpers | 226,977                | 3.9          |
| Food preparation workers   | 205,975                | 3.5          |
| Lifeguards and other recreational and all other protective service workers   | 186,088                | 3.2          |
| Hosts and hostesses, restaurant, lounge, and coffee shop   | 178,767                | 3.1          |
| Child care workers   | 174,468                | 3.0          |
| Laborers and freight, stock, and material movers, hand   | 165,353                | 2.8          |
| Grounds maintenance workers  | 152,573                | 2.6          |
| Stock clerks and order fillers   | 146,760                | 2.5          |
| Counter attendants, cafeteria, food concession, and coffee shop  | 106,647                | 1.8          |
| Janitors and building cleaners   | 102,883                | 1.8          |
| Combined food preparation and serving workers, including fast food   | 102,541                | 1.8          |
| Miscellaneous agricultural workers, including animal breeders  | 101,521                | 1.7          |
| Construction laborers  | 93,038                 | 1.6          |
| Recreation and fitness workers   | 92,219                 | 1.6          |
| Miscellaneous entertainment attendants and related workers   | 73,300                 | 1.3          |
| <b>Total of above occupations</b>  | <b>4,110,136</b>       | <b>70.2</b>  |
| <b>Total Employed</b>  | <b>5,859,046</b>       | <b>100.0</b> |

Source: Current Population Surveys (CPS) public use data files, 2016-2017, U.S. Census Bureau; tabulations by Center for Labor Markets and Policy, Drexel University.

## **The Projected Summer 2018 Job Outlook for U.S. Teens**

Payroll job gains in the U.S. have been steady since 2010, with non-farm employment rising by about 2 percent per year; however, gains in teen employment failed to keep pace with the overall rate of new job creation. How well are the nation’s teens likely to fare in the job market in the summer months of 2018? To answer this question, we have relied upon a regression model of teen employment rates that was developed in 2006 and has proven to be a reliable predictor of the summer employment prospects of teens across the nation.<sup>12</sup> The model is designed to predict the average summer employment rate of teens based on their employment in

<sup>12</sup> The projection is based on a method developed by Andrew Sum and Ishwar Khatriwada et al. at the Northeastern University’s Center for Labor Market Studies.

January through April of each year. The regression model used seasonally adjusted monthly teen employment data from 1980 through 2002. The teen labor force increases sharply in the summer months as students are out of school temporarily during summer vacation or have exited school permanently. The teen employment rate is highly path dependent. That is, the likelihood of working in the future is dependent on the amount of past work experience. Teens who worked in the previous year or during the winter and spring before the summer are much more likely to work in the summer months than those who did not work.

In recent years, we revised our previous regression model to predict the summer employment rate with 1980 through 2005 data. We included seasonally-adjusted average teen employment rates during three months (January, February, and March) to predict the (seasonally adjusted) summer employment rate, based on the hypothesis that a higher employment rate over the January to March period is expected to yield a higher summer employment rate for teens. Our revised model also achieved a good fit. The R-squared for the model was .87, which was highly significant at .001 level (Table 11).

Table 11:  
Findings of the Regression Model Estimates of the Summer Teen Employment Rate in the U.S.  
Based on Observations from 1980 to 2005  
(Seasonally Adjusted Average E/P Rates, January through March)

| Regression Variable         | Coefficient | Standard Error | t-Statistics | Sig. of t |
|-----------------------------|-------------|----------------|--------------|-----------|
| Constant                    | 43.0        | 0.231          | 186.0        | 0.001     |
| Jan-March E-P               | .97         | 0.077          | 12.7         | 0.001     |
| <b><u>Model Summary</u></b> |             |                |              |           |
| R-Squared                   | 0.87        |                |              |           |
| DF; N                       | 1;24        |                |              |           |
| F-Stat                      | 160.8       |                |              |           |
| Sig. of F                   | 0.001       |                |              |           |

The predicted summer employment rate (seasonally adjusted) for a given year is estimated as follows:<sup>13</sup>

$$\text{Predicted Summer E-P Ratio, EMP } i, t = 43.0 + .97*(\text{EMP } j, t - 43.2)$$

Where: EMP  $i, t$  = Predicted seasonally adjusted summer teen employment rate in year  $t$ .  
EMP  $j, t$  = Estimated teen employment rate in the first four months of year  $t$ .

<sup>13</sup> The predictor variable referred to as employment rate (employment to population ratio) is the value of average employment rate of January to March, seasonally adjusted, less 43.2 (average January-March employment to population ratio from 1980 to 2005).

Table 12 presents actual and predicted summer teen employment rates based on the above model. The model under-predicted the teen summer employment rate in 2012 through 2014 by 0.3- to 0.6-percentage points. In 2015 and 2016, the model over-predicted the teen summer employment rate by 0.2- to 0.6-percentage points. In 2017, the predicted teen summer employment rate was identical to the actual rate of 30.5 percent. In the first three months of 2018 (January to March), the seasonally adjusted employment rate of teens in the U.S. was 30.7 percent. Plugging this employment rate in the regression equation above, **we predict that the teen employment rate in the summer months of 2018 will be 30.9 percent.**

Table 12:  
Comparisons of Predicted and Actual Teen Summer Employment Rates from  
2005 to 2017 and the Predicted Teen Summer Employment Rate for 2018  
(June-August Averages, in Percent, Seasonally Adjusted)

| Summer of Year: | Actual Rate | Predicted Rate | Gap (Actual-Predicted) |
|-----------------|-------------|----------------|------------------------|
| 2005            | 36.7        | 36.2           | +0.5                   |
| 2006            | 36.9        | 37.2           | -0.2                   |
| 2007            | 34.3        | 36.0           | -1.7                   |
| 2008            | 32.4        | 33.7           | -1.3                   |
| 2009            | 28.5        | 30.3           | -1.9                   |
| 2010            | 25.6        | 26.6           | -1.0                   |
| 2011            | 25.6        | 26.1           | -0.5                   |
| 2012            | 26.4        | 26.0           | +0.4                   |
| 2013            | 26.7        | 26.4           | +0.3                   |
| 2014            | 27.2        | 26.6           | +0.6                   |
| 2015            | 28.1        | 28.8           | -0.6                   |
| 2016            | 29.7        | 29.9           | -0.2                   |
| 2017            | 30.5        | 30.5           | 0.0                    |
| <b>2018</b>     | <b>?</b>    | <b>30.9</b>    | <b>--</b>              |

In recent months as the overall unemployment rate has declined and the nation's ratio of unemployed workers to job openings has nearly reached 1:1, there has been a growing chorus that the major labor market problem faced by most firms in the nation is that of a labor shortage. Indeed, almost on a daily basis, we see stories in the media about labor shortages across a wide variety of industries and occupations. Recently, the *Wall Street Journal* observed that these labor shortage problems are so severe that firms are once again turning to teens to fill available job



openings.<sup>14</sup> Yet our summer jobs projections suggest that teen summer employment rates will once again rise only slightly. Even as the nation moves to full employment, teens remain at the bottom of the labor queue and continue to fall further behind.

At the end of the 1990s jobs expansion, teens accounted for nearly one in four food service workers during the summer. Today, teens account for just one in six summer food service workers. Similarly, teens today are much less likely to find a summer job in retail firms as sales and customer assistance workers. Back in 2000 about one in five of these jobs were held by teens in the summer. Today that share has fallen to just one in seven.

Who has replaced teens in these summer positions? Older workers and foreign-born adults have increased their penetration into these traditional teen summer jobs. Employers have a preference for these workers, in part because employers value these workers for their superior behavioral traits like reliability as well as their superior social skills. Firms prefer to hire older workers and people from overseas who enter the U.S. on various temporary visas to fill summer jobs. In places like Martha's Vineyard, Cape Cod, the Hamptons, and the New Jersey Shore, employers will once again ramp up complaints about labor shortages. However, our projections suggest that only small gains in teen summer work will occur for American youth.

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<sup>14</sup> Jennifer Levitz and Eric Morath, "Facing Historic Shortages, Companies Snap Up Teenagers", *The Wall Street Journal*, April 16, 2018.

## Data Sources and Methodology

Estimates of labor force statistics appearing in this report are based on the monthly Current Population Survey, a national household survey, conducted by the U.S. Census Bureau for the U.S. Department of Labor's Bureau of Labor Statistics. Every month, the CPS survey is conducted from the 19<sup>th</sup> to the 25<sup>th</sup> of the month with a nationally representative sample of approximately 60,000 households.<sup>15</sup> The survey asks household members about their labor force status in the "reference week", the week prior to the day of interviews (12<sup>th</sup> to 19<sup>th</sup> of the month). The CPS collects data on the current labor force activities of all household members aged 16 years and older, including their employment, unemployment status, hours worked, industry and occupation of employment, etcetera. The CPS survey is the official source of data on the labor force, income, and poverty in the United States. The monthly CPS also adds supplemental questions to household members in a particular month to get detailed information on various important topics such as the annual social and economic characteristics, education and school enrollment, food security, fertility and marriage, tobacco use, computer and internet use, voting and registration, volunteering, veterans, etcetera. These CPS supplemental topics are known as CPS supplement surveys.

To assess the labor market well-being of teen aged (16- to 19-years-old) population in the U.S., we have relied primarily on the employment rate (employment to population ratio or E/P ratio) measure in this paper. The employment rate is the percent of a population group (in this instance 16- to 19-year-olds) in the civilian, non-institutional population that were employed in an average month during the year. The denominator excludes persons serving in the nation's armed forces and inmates of institutions, such as juvenile homes, jails, and prisons. Employment rate is the best available indicator to gauge labor market success of teens.

### Key Definitions:

**Labor force participation rate:** the share of civilian persons in a given group who are either working or actively looking for work. The labor force is the sum of employed and unemployed persons, i.e., labor force = employed + unemployed.

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<sup>15</sup> For detail, see: U.S. Census Bureau. Current Population Survey: Interviews Reference Manual, April 2015, retrieved, [http://www2.census.gov/programs-surveys/cps/methodology/intman/CPS\\_Manual\\_April2015.pdf](http://www2.census.gov/programs-surveys/cps/methodology/intman/CPS_Manual_April2015.pdf)

**Employment rate:** also referred to as the employment to population ratio. It is the numbers of civilian persons employed in a given group as a percentage of non-institutionalized population in that group.

**Unemployment rate:** the percentage of persons in the civilian labor force who are not working, but are actively looking for employment and are available for work.