INTRODUCTION

Since 1996, COWS has released *The State of Working Wisconsin* every two years on Labor Day. In it, we use the best and most recent data available to help build a comprehensive understanding of how working people in the state are doing. The full report comes out in even years. In odd years, like this one, 2015, we provide a more abbreviated and focused report.

This year we provide key facts and figures which offer an overview of the critical issues facing working people in the state. The issues, taken together, are daunting – slow growth in the Wisconsin labor market, extreme racial disparity in unemployment, long-term stagnation in wages, and one-fourth of workers struggling in poverty-wage jobs. But to try to improve things in the state, we first have to understand what is actually going on in the economy, and how that is playing out in our working families, our communities and our schools. These charts provide a working families’ view of what’s going on in Wisconsin. From there, we hope we can find new will and new ways to engage in the process of improving that view.

The *State of Working Wisconsin 2015: Facts & Figures*, provides key facts and figures on the following topics:

- Wisconsin By the Numbers........ Pg 1
- Jobs........................................ Pg 2
- Unemployment........................ Pg 5
- Wages...................................... Pg 8
- Poverty Wage Jobs.................... Pg 10
- Conclusion.............................. Pg 13
If Wisconsin had enjoyed the same rate of job growth as the rest of the nation across the course of the recovery, the state would have 90,000 more jobs today.

Workers who work at an hourly wage of $11.55 or lower, even full-time and year-round, cannot keep a family of four out of poverty. 730,000 Wisconsin workers – 27 percent of the entire state workforce – hold poverty wage jobs.

Wisconsin posted the nation’s highest unemployment rate for African Americans in 2014: 19.9 percent. That rate is 4.6 times higher than the state’s white unemployment rate.

In 2001, one-in-four students in Wisconsin public schools were economically disadvantaged. By 2013, that number nearly doubled to 43 percent.

Wisconsin’s median worker earns $17.38 per hour. Over the last 35 years, the inflation-adjusted median wage for workers in Wisconsin has gone up just 71 cents per hour. That’s an annual raise of just $0.02/hour.

In 2014, the ratio of women’s to men’s median wages was .81, meaning that for every one dollar a man made, a woman made 81 cents.

If Wisconsin had enjoyed the same rate of job growth as the rest of the nation across the course of the recovery, the state would have 90,000 more jobs today.
90,000 MISSING JOBS: WISCONSIN CONTINUES TO LAG NATIONAL JOB GROWTH

National job growth continues to outpace Wisconsin job growth. Wisconsin fell off the national path at some point in 2011 and the gap continues to grow. If Wisconsin had kept pace with the national rate of job growth, we would have 90,000 more jobs today.

From January 2011 to June 2015, Wisconsin gained 140,700 jobs – growth in our job market of 5.1 percent. Over that same period, the national job market grew 8.4 percent. If Wisconsin had kept pace with national growth, we would have added 230,827 jobs. The difference means that Wisconsin is missing 90,127 jobs.

Another way to think about this: over the last five years, anytime national job growth should have brought eight jobs to Wisconsin, the state’s job base only grew by five.

Figure 1
Non-Farm Jobs as a Percent of Pre-Recession Levels, Wisconsin and United States, 2007-2015

BLS, CES data
Sectors That Explain Wisconsin’s Missing Jobs

Table 1 provides some insight into the sectors that account for Wisconsin’s 90,000 missing jobs. The same logic that produced the overall number of missing jobs can be applied to the question of sectors. We assign the national growth rate, by sector, to estimate the number of jobs a sector could have been expected to produce in the state. This shows which sectors account for the state’s deviation from the national trend.

First and notable, neither government nor manufacturing explain Wisconsin’s slow growth. In fact, manufacturing in the state is actually outpacing the national rate of job growth. Without our strong manufacturing performance, Wisconsin would be further behind. We’ve gained more than 7,000 more manufacturing jobs than the national pace would imply. The government sector in the state shrank, but the number of government jobs in the nation fell even further. Wisconsin would have just slightly fewer jobs today if government jobs had fallen at the slightly higher national pace.

However, three sectors in Wisconsin are substantially lagging national growth rates: 1) trade, transportation and utilities; 2) professional and business services; and 3) leisure and hospitality. In trade, transportation, and utilities, the lag is especially pronounced. Wisconsin would have added nearly 43,000 jobs in this sector if it had grown at the national rate. The state added just 16,600 jobs. This sector alone therefore accounts for over 26,000 of Wisconsin’s missing 90,000 jobs. Leisure and hospitality lagged national rates by 19,000. Professional and business services’ slow growth in the state accounts for another 17,000 missing jobs.

\[ \text{Table 1} \]

\text{WISCONSIN’S MISSING JOBS BY INDUSTRY: COMPARING ACTUAL JOB CHANGES IN WISCONSIN TO CHANGE THAT WOULD HAVE BEEN GENERATED BY NATIONAL INDUSTRY TRENDS, FOR KEY SECTORS, JANUARY 2011 TO JUNE 2015} \\

<table>
<thead>
<tr>
<th>Industry</th>
<th>Actual Job Growth</th>
<th>Expected Job Growth</th>
<th>Missing/Extra Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Non-Farm</td>
<td>140,700</td>
<td>230,827</td>
<td>-90,127</td>
</tr>
<tr>
<td><strong>Wisconsin Industries that Outperform National Trend</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>34,600</td>
<td>27,125</td>
<td>7,475</td>
</tr>
<tr>
<td>Government</td>
<td>-5,900</td>
<td>-6,657</td>
<td>757</td>
</tr>
<tr>
<td>Mining and Logging</td>
<td>1,100</td>
<td>436</td>
<td>664</td>
</tr>
<tr>
<td>Information</td>
<td>2,600</td>
<td>1,959</td>
<td>641</td>
</tr>
<tr>
<td><strong>Wisconsin Industries that Lag behind National Trend</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade, Transportation &amp; Utilities</td>
<td>16,600</td>
<td>42,974</td>
<td>-26,374</td>
</tr>
<tr>
<td>Leisure and Hospitality</td>
<td>18,700</td>
<td>37,751</td>
<td>-19,051</td>
</tr>
<tr>
<td>Professional and Business Services</td>
<td>27,900</td>
<td>44,990</td>
<td>-17,090</td>
</tr>
<tr>
<td>Other Services</td>
<td>-1,400</td>
<td>8,364</td>
<td>-9,764</td>
</tr>
<tr>
<td>Education and Health Services</td>
<td>31,200</td>
<td>39,730</td>
<td>-8,530</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>3,100</td>
<td>8,806</td>
<td>-5,706</td>
</tr>
<tr>
<td>Construction</td>
<td>12,200</td>
<td>16,161</td>
<td>-3,961</td>
</tr>
</tbody>
</table>

COWS analysis of BLS, CES data
Different Data Sources Paint a Consistent Picture

Figure 2 makes the Wisconsin’s labor market lag quite clear, regardless of the data source. The left panel (2a) provides the comparison using the Quarterly Census of Employment and Wages (QCEW). This jobs count relies on a thorough and reliable system of counting jobs. The right panel (2b) provides the comparison using Current Employment Statistics (CES). This jobs count is based on a survey and is subject to revision. Note however, that regardless of the source, the gap is substantial. (See methods section for more on these two data sources.)

But the picture is basically the same: Wisconsin fell off the national pace of growth and remains behind – and it isn’t simply a question of data source.

NON-FARM JOBS AS A PERCENT OF PRE-RECESSION LEVELS, WISCONSIN AND UNITED STATES, 2007-2015

Wisconsin Job Watch

COWS releases Wisconsin Job Watch each month, providing an update on where Wisconsin’s labor market stands in its slow recovery from the Great Recession. The latest data puts the current Wisconsin Job Deficit at 115,700. That’s the additional jobs needed to generate the same level of employment opportunity that the state had before the recession. Read Wisconsin Job Watch here.
UNEMPLOYMENT AT PRE-RECESSION LEVELS, YET WISCONSIN AFRICAN AMERICAN UNEMPLOYMENT WORST IN NATION

Wisconsin’s unemployment has returned to pre-recession levels, and has consistently registered just below 5 percent for most of this year. That means that in July 2015, 142,200 Wisconsinites were unemployed. The state trend mirrors the national trend though, in general, Wisconsin’s unemployment is slightly below the national rate, as is clear in Figure 3.

Some careful consideration of the definition of unemployment helps shed light on the seeming disparity between Wisconsin’s unemployment and jobs statistics. A person is “unemployed” if he or she is actively seeking but cannot secure work. Wisconsin’s low level of unemployment is certainly, in part, due to job growth (fewer workers are looking for work, and more are working). But low unemployment is also the product of some workers who have simply given up looking for jobs. Individuals exit the labor force (and therefore do not appear in the unemployment statistic) when they announce retirement, go back to school, or when they become so discouraged by the lack of prospects that they stop looking for work. Thus, unemployment can fall for both good and bad reasons. Wisconsin’s low levels of unemployment represent both.

Figure 3
UNEMPLOYMENT, WISCONSIN AND UNITED STATES, 1979 TO JULY 2015
The Demographics of Unemployment

Table 2 provides an overview of the uneven distribution of unemployment across different demographic groups in the state. The high rate of African American unemployment stands out. One of every five black workers in the state was looking for, but could not find work in 2014 (more on this below). Furthermore, younger workers, Hispanic workers, and workers with less education also suffer higher rates of unemployment.

Table 2 also shows that beyond the high unemployment rates, the rate of involuntary part-time work is also substantial for some groups. “Involuntary part-time” applies to workers who have jobs, but report that they want more hours of work than they can secure in their current employment. The rate has fallen over the past year, from 4.5 percent in 2013 to 3.8 percent in 2014. That’s good news, as it means that more workers are able to get the hours they need from work. Still, involuntary part-time employment is concentrated in specific groups, generally those that face high unemployment rates as well. Young workers, workers with lower levels of education, and Hispanic workers, all have notably high rates.

<table>
<thead>
<tr>
<th></th>
<th>Unemployed</th>
<th>Involuntary Part-Time</th>
<th>“Fully” Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All</strong></td>
<td>5.6%</td>
<td>3.8%</td>
<td>90.6%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5.8</td>
<td>3.3</td>
<td>90.9</td>
</tr>
<tr>
<td>Female</td>
<td>5.5</td>
<td>4.3</td>
<td>90.2</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-24 yrs</td>
<td>13.1</td>
<td>7.0</td>
<td>79.9</td>
</tr>
<tr>
<td>25-54 yrs</td>
<td>4.4</td>
<td>3.5</td>
<td>92.1</td>
</tr>
<tr>
<td>55 yrs and older</td>
<td>4.2</td>
<td>2.9</td>
<td>92.9</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than high school</td>
<td>14.9</td>
<td>5.9</td>
<td>79.2</td>
</tr>
<tr>
<td>High school</td>
<td>7.2</td>
<td>5.5</td>
<td>87.3</td>
</tr>
<tr>
<td>Some college</td>
<td>4.5</td>
<td>3.9</td>
<td>91.6</td>
</tr>
<tr>
<td>Bachelor’s or higher</td>
<td>3.2</td>
<td>1.7</td>
<td>95.1</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>4.3</td>
<td>3.4</td>
<td>92.3</td>
</tr>
<tr>
<td>African American</td>
<td>19.9</td>
<td>5.4</td>
<td>74.7</td>
</tr>
<tr>
<td>Hispanic</td>
<td>9.1</td>
<td>8.9</td>
<td>82.0</td>
</tr>
</tbody>
</table>

EPI analysis of CPS data
Wisconsin Has the Highest African American Unemployment Rate in the Nation

Though the state’s overall unemployment rate compares favorably with the national, Wisconsin’s 2014 African American unemployment rate, 20 percent, was the highest in the nation. In Wisconsin, one of every five black workers is actively seeking work but cannot find it. The pie charts in Figure 4 make this stark disparity evident. Considering that another 5 percent of black workers in the state are working part-time, but seeking full-time hours, one-fourth of black workers in Wisconsin are less than fully employed.

Nationally, African American workers are 2.3 times more likely to be unemployed than white workers. In Wisconsin, African American workers’ unemployment rate is 4.6 times the white rate. Wisconsin’s disparity in unemployment rate is extreme, exceeding every state in the nation. Figure 5 shows that Wisconsin’s black/white unemployment disparity is substantially higher than in neighboring states.
WISCONSIN WAGES: HOURLY WAGE GROWS JUST 71 CENTS OVER 35 YEARS

The long-term stagnation of the median wage in Wisconsin is shown in Figure 6. The chart shows the wage of the worker at the exact middle of the wage distribution for Wisconsin, the Midwest and the United States from 1979 to 2014. (All workers, both hourly and salaried, are included in this analysis. And all wages are expressed in 2014 dollars in order to account for inflation over the period.)

In 1979, Wisconsin’s median worker earned a wage well above the national median. The 1980s—an especially bad decade for workers in Wisconsin—brought considerable real and relative wage decline, leaving Wisconsin workers nearly a dollar per hour behind the U.S. median. Wisconsin finally moved back to the national median wage in 1995, and wages grew in the state each year until 2005. The weak economy and Great Recession took their toll on wages, which slipped to a low point in 2012.

In 2014, Wisconsin’s median wage climbed to $17.38 per hour -- just slightly higher than the pre-recession median wage in 2007. Neither the national nor the Midwestern average has reached that threshold yet. Recent trends in median wage in the state are a relief from the declines earlier in the recovery.

The bottom line? Taking inflation into account, the wage of Wisconsin’s median worker is 71¢ per hour more today than it was in 1979. That’s very slow wage growth – an annual raise of just 2¢ per hour. In terms of annual income, that amounts to an increase of $1,400. The median worker has more education today and is working with more productive technology, but in a full-time job, that worker earns just barely more than the median worker did a third of a century ago.

figure 6
MEDIAN HOURLY WAGES, WISCONSIN, THE MIDWEST AND UNITED STATES, 1979-2014 (2014 dollars)
Gender Wage Gap Continues to Shrink

Women face a considerable “gender gap” in pay but that gap is closing.

Figure 7 shows that in Wisconsin over the last 35 years, women’s pay has been on a slight upward trajectory while men’s wages have moved downward. In 1979, men’s median hourly wage was $21.41 and women’s was $12.64. The median woman earned just 59 cents for every dollar earned by the median man. By 2014, the gender gap had narrowed, with women earning 81 cents relative to men’s median.

Why Real Median Wages?

In general, we present trends in real median hourly wages. “Real” means inflation adjusted—in our case, through the Consumer Price Index Research Series Using Current Methods, or CPI-U-RS. “Median” means the center of a distribution, with exactly half the distribution above and half below it. The alternative expression of average wage trends is in terms of an actual average, or “mean,” calculated simply by taking all wages for a population and dividing by its number of members. We prefer the median to the mean, because the mean can mislead; a few very high-earning individuals can raise the mean so that it does not represent the center of the distribution. In the comparison of Wisconsin to the nation, moreover, the use of means artificially disfavors us on grounds of which we should be proud: we have a comparatively equal distribution of earnings and so less opportunity for such upward distortion. Compared to the rest of the nation, then, Wisconsin’s mean wages look worse than our median wages do, but only because we have less inequality.
POVERTY-WAGE WORK IN WISCONSIN

Definition: Poverty wage in 2014 = $11.55 per hour. Below this wage a worker cannot keep a family of four (2 adults, 2 children) out of poverty, even with full-time, year round work.

To get a sense of key sectors and demographics in Wisconsin’s low-wage labor market, we set a threshold for job quality. Our threshold is $11.55 per hour, the wage at which, with full-time year round work, a worker can keep a four person family out of poverty. With this yardstick of job quality, we turn then to look at Wisconsin jobs, and separate workers in Wisconsin in to two groups: those holding poverty-wage jobs and those who’s jobs pay above $11.54.

Poverty-wage Work Facts

• 730,000 Wisconsin workers — 1 in 4 — worked in poverty-wage jobs in 2014.

• The median age of a poverty-wage worker in Wisconsin is 29 years old.

• More than three-fourths of Wisconsin’s poverty wage workers are white. But African American and Hispanic workers are much more likely to hold poverty wage jobs. While one-quarter of white workers earn poverty wages, 36 percent of black, and 48 percent of Hispanic workers do.

• Three times as many poverty-wage workers have no health insurance as compared to other workers – 22 percent of poverty-wage workers had no health insurance in 2013; only 7 percent of workers with jobs paying above that line have no insurance.

• Hours can be as big a problem as wages. Poverty-wage work is often formally or functionally part-time. Just-in-time scheduling, where an employer gives little-to-no advance warning of scheduled work times, is an increasing norm. In many service sector jobs, bad weather, bad traffic, or just too few customers can send workers home mid-shift.

The following pages provide further data on demographics and key sectors of poverty wage work.
Poverty-wage Workers in Wisconsin

DEFINING JOB QUALITY

$11.55 AN HOUR Wage required for a full-time/year-round worker to keep a family of four out of poverty.

POVERTY-WAGE JOBS pay $11.54/hr or less

BETTER JOBS pay $11.55/hr or more

730,000 WORKERS

1,960,000 WORKERS

1 IN 4 WORKERS hold poverty-wage jobs

HOURS WORKED PER WEEK

36 40

MEDIAN AGE

29 44

MEDIAN HOURLY WAGE

$8.00 $21.24

SOURCE OF HEALTH INSURANCE

EMPLOYER/UNION 79%

PUBLICLY FUNDED 5%

PRIVATE PURCHASE 7%

NO INSURANCE 7%

COWS analysis of ACS, 2013

DEMOGRAPHICS OF POVERTY-WAGE WORKERS

Share of workers in poverty-wage jobs for key demographic groups

25% OF WHITE WORKERS

36% OF AFRICAN AMERICAN WORKERS

48% OF HISPANIC WORKERS
Poverty-wage Sectors in Wisconsin

275,000

of Wisconsin’s 730,000 poverty-wage workers work in these 3 sectors.

- **Food Service**
  - Median Wage: $9.06/hr
  - 66% of workers earn poverty wages

- **Retail**
  - Median Wage: $12.08/hr
  - 45% of workers earn poverty wages

- **Residential & Home Health Care**
  - Median Wage: $12.79/hr
  - 40% of workers earn poverty wages

38% of poverty-wage workers are in these three sectors.

13% of better-wage workers are in these sectors.

COWS analysis of ACS, 2013
IT ALL COMES TOGETHER IN OUR COMMUNITIES

Two maps summarize, quite powerfully, many of the themes of this report. The maps provide information for each school district in the state. The darker the area, the greater share of children in the district that have family income low enough to qualify for free and reduced-price lunch. Families with income at these levels in general are struggling to make ends meet and cover basic expenses. They may not technically live below the very frugal federal definition of poverty, but there is no question that their resources are stretched thin.

In 2001, the state shows some dark patches – school districts where more than 40 percent of students qualified for free and reduced-price lunch. But lighter colors predominate. In many districts, especially on the eastern side of the state, less than 10 percent of students qualified for free and reduced-price lunch. In 2001, one-in-four students in districts across the state qualified as economically disadvantaged.

The 2014 map is much darker, meaning that all across the state, more families are struggling to make ends meet. Only a few districts maintain the comfortable position of less than 10 percent of students eligible for free and reduced-price lunch. Many more districts face free and reduced rates at the 40 percent level or higher. The change across the years is dramatic and pronounced. Overall, the share of economically disadvantaged students nearly doubled from the 2001 level, jumping to 43 percent (from 24 percent in 2001).

**figure 8**
SHARE OF STUDENTS WHO QUALIFY FOR FREE AND REDUCED-PRICE LUNCH IN WISCONSIN SCHOOL DISTRICTS, 2001 AND 2012
These maps confirm the significant challenges that working people in the state face. They show that the income challenge has known no geographic boundaries – neither urban nor rural areas are exempt. In every corner of the state, more families are working hard, but living paycheck to paycheck.

These maps also remind us that the dry data of wages and income are directly connected to everyday life for families and especially children in the state. Without enough income, children can’t always secure the food and other foundations that make growth and learning possible. Statistics are abstract, but they have a direct line to our future. And as more kids in our schools are facing stress, their classrooms are more stressed for all students.

In the face of increasing needs in our classrooms, however, our public schools are continually facing cutbacks in resources. That too is making the provision of a strong education for all children harder to supply. Schools and teachers are dealing with greater need in their classrooms, even as the resources supporting public education are declining. So these maps say something not only about our changing economy, and growing needs of our children, but also about our public will.

Wisconsin faces a choice today about what sort of future we want for our state. It is about our children and our schools, narrowly. But more broadly, that choice is about whether we will continue to become more private and divided. Or whether we will once again embrace common purpose in our communities and commit to and invest in that collective future. We can move on a different trajectory. But not without more conscious attention to both the economy and the long-term investment in our infrastructure and schools that can build a foundation for changing what is possible.
DATA SOURCES & METHODOLOGY

*The State of Working Wisconsin* relies on a wide range of data sources. The specific source or sources relied on for any given table or figure are identified below the figure or table in question. In this section we define the abbreviations used in tables and figures source notes to refer to our sources, discuss those sources for which some methodological detail and description are required, and explain some other methodological issues. Two data sources provide for the majority of our analysis: The Current Population Survey, and the American Community Survey.

**The Current Population Survey**

One of our primary sources is the annual compilation of the Current Population Survey (CPS), which is conducted jointly by the U.S. Bureau of Labor Statistics (BLS) and the U.S. Census Bureau. From these, the National Bureau of Economic Research (NBER) develops the CPS Outgoing Rotation Group (CPS ORG) file, which contains earnings questions only given to a subset of respondents. We relied on a version of the CPS ORG developed by the Economic Policy Institute (EPI) for our tabulations and calculations. For unemployment, underemployment, and labor force participation, EPI provided us with calculations based on data from the full monthly CPS sample.

We base our analysis of wages on CPS ORG data because it is the best source for analyzing state- and national-level trends. Unlike the “average wage” series produced by the U.S. Department of Labor, CPS data permit calculation of individual hourly earnings and the linkage of earnings to demographic characteristics such as race, sex, and educational attainment. The CPS sample also includes a wide range of workers and employment situations and permits comparison between Wisconsin workers and those elsewhere. Also, the CPS allows for much longer-term analysis than the American Community survey.

The sample used for all analyses involving wages includes all wage and salary workers with valid wage and hour data. In the CPS, respondents answer the question regarding wages in one of two ways. If they are paid an hourly wage, they simply report that wage. If they are paid on a salary basis, they report their weekly earnings and their usual hours of work in a given week. To estimate their hourly wage, we then divide earnings by usual hours. For wage estimates, we include all respondents between the ages of 18 and 64 but exclude the unincorporated self-employed. In the cases of labor force participation and unemployment, we include all respondents ages 16 and older. CPS demographic weights were applied to make the sample representative of the population.

**The American Community Survey**

The source for our analysis of poverty wage work is the American Community Survey (ACS), an ongoing yearly survey conducted by the Census Bureau that provides data aimed at giving communities up-to-date information...
for planning and policy. Besides providing demographic information, the Survey asks about family relationships, income, earnings and benefits, health insurance, education, veteran status, disabilities, work and employment status, housing, etc. Because it is aimed at providing information at the local level, the ACS offers a larger sample than the CPS and other nationally representative samples, surveying more than 3 million people every year, and providing data all the way down to the county level. In practice, since 2010 the ACS has replaced the national Census long form. In making our calculations, we use the Public Use Microdata Sample (PUMS) version of the survey.

The sample used for all of our analyses involving wages includes all wage and salary workers with non-zero wages, and wages below $500/hour, who do not work for the military (i.e. are part of the civilian labor force), and who are between 18 and 64 years old at the time of the survey. Hourly wages are calculated by using the number of weeks worked during the past 12 months. The figure is originally provided in six discrete intervals (less than 14 weeks worked; 14 to 26; 27 to 39; 40 to 47; 48 to 49; and 50 to 52). The number of weeks worked by an individual are imputed by using the median of the given interval. Hourly wages are then calculated by dividing the total wages received during the last 12 months, divided by the product of the (imputed) number of weeks worked and the average number of hours worked per week, as reported by the interviewee. The resulting average hourly wage is adjusted using the inflation adjustment variable provided by the Census Bureau, and by adjusting these hourly wages from its value in dollars of July on the survey year to average dollars for that year, using the CPI deflator provided by the Bureau of Labor Statistics.

**CES and QCEW**

There are two important and reliable data series on jobs at the state level from the federal government. The most well known is the CES (Current Employment Statistics) which provides monthly jobs data for all states, three weeks after the end of the month (i.e., July data is released in the third week of August). An estimate of a state’s jobs base is produced on the basis of a survey of a sample of employers. The CES is very timely and has consistently been the go-to source for politicians, the media, and researchers on current job trends for the nation and at the state level. Across the nation, this series remains the standard series for judging state labor markets.

The other source is the QCEW (Quarterly Census of Employment and Wages) which, in general, receives much less media and political attention. The data is derived from a census—a real count—of all jobs in a state that are covered by Unemployment Insurance (greater than 95 percent of all jobs). Derived from an actual count of jobs, the data are therefore more reliable. It is also less timely than the CES series. The data is released quarterly rather than monthly, and the lag from the time of release is six months (i.e., data on jobs from the last quarter of 2014 is not released until late June 2015).

Without a doubt, the QCEW provides a more accurate picture of changes in jobs. And it is also without question that this data comes with a significant lag. Both CES and QCEW paint a consistent story of jobs in the state.

**ABOUT COWS**

Based at the University of Wisconsin-Madison, COWS is a national think-and-do tank that promotes “high road” solutions to social problems. These treat shared growth and opportunity, environmental sustainability, and resilient democratic institutions as necessary and achievable complements in human development. COWS is nonpartisan but values-based. We seek a world of equal opportunity and security for all. For more information: www.cows.org.