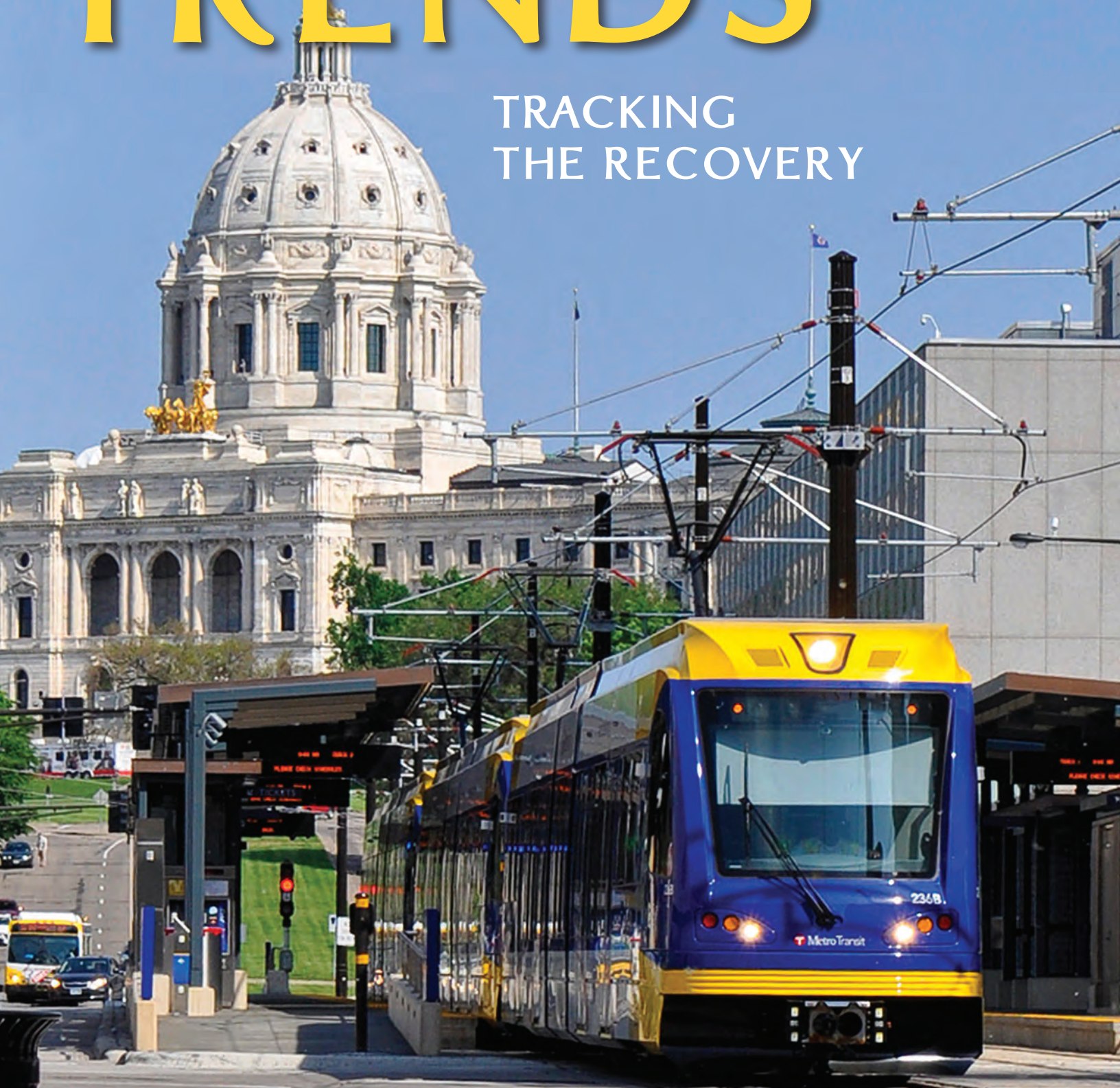


MINNESOTA ECONOMIC

# TRENDS

TRACKING  
THE RECOVERY



JUNE 2014

*Minnesota*  
Department of Employment and Economic Development



## State of the Economy

**T**he Great Recession officially ended five years ago in June. It has been a long road back nationally and in Minnesota, with the state reaching a milestone last September when it officially replaced all the jobs lost in the recession. That and other positive economic indicators, including a declining unemployment rate, more job openings and fewer claims for unemployment insurance benefits, might lead people to conclude that our economic challenges are over.

But as our annual state of the economy story indicates in this issue of Trends, you might want to wait before breaking out the champagne.

Six Minnesota industrial sectors, including manufacturing and construction, still haven't gained back all the jobs that were lost in the recession. And there is ample evidence to suggest that certain groups have been left behind in the recovery, including people of color, people with disabilities and people who have struggled with long-term unemployment.

That last point is an important one. With a skilled labor shortage on the horizon because of retiring baby boomers, it's imperative that we remove the barriers to employment that prevent people from finding quality jobs. That will not only address our looming labor shortage but ensure that all Minnesotans have an opportunity to share in the fruits of our economic growth.

Elsewhere in this issue, Luke Greiner looks at the manufacturing sector in central and southwestern Minnesota, Tim O'Neill examines the construction industry in the Twin Cities and southeastern Minnesota, and Jan Saxhaug writes about the health care and social assistance sector in northern Minnesota. Longtime Trends contributor Rachel Vilsack follows up on her recent story about employment in Minnesota's 25 largest cities with a similar piece about employment in the state's 87 counties.

If you're a numbers and data junkie, get ready for a treat. There's a lot to read and digest in this issue.

A handwritten signature in black ink that reads "Monte Hanson". The signature is written in a cursive, flowing style.

**Monte Hanson**  
Editor

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# State of the Economy

*Five years after the Great Recession, the Minnesota economy continues to make progress, but challenges remain.*

It has been five years since the Great Recession officially ended in June 2009, making this recovery slightly longer than the average of 11 post-World War II expansions. In fact, with the announced gain of private sector jobs in May, the U.S. has matched the record for consecutive monthly gains in the private sector at 51 months, equaling the old record set between February 1996 and April 2000.

During this time, Minnesota has also experienced improving labor market conditions, with total jobs, job vacancies, the unemployment rate and layoffs (as measured by new claims for unemployment benefits) returning to pre-recessionary levels. Furthermore, leading indicators, economic forecasts and the relative lack of any obvious economic threats suggest a continuation of this improvement in the months ahead. This fairly rosy outlook is not a guarantee, of course, but rather a widely-held prediction in the face of an uncertain future.

Despite the length of our recovery and the jobs that we

have regained, the severity of the recession and the often feeble nature of employment growth still leave us shy of a complete recovery.

While employment statewide and in many sectors continues to reach new highs, other sectors are still far short of where they were before the recession. Our unemployment rate has fallen to mid-2007 levels and continues to fall, but job opportunities are proving elusive for people of color, young adults with little or no experience, and those who have been without work for six months or longer. And while the top-level indicators show indisputable improvement, much evidence suggests that these improvements are accruing to a small segment of our population while leaving many groups behind.

Overall and child poverty rates, for example, remain at levels higher than before the recession. After-tax corporate profits as a share of gross domestic product (GDP) have set new records every year since 2010 (when they broke the 1929 record), while wages and salaries paid

to workers are at their lowest as a share of GDP since record-taking began. So while our national and state employment situation has improved significantly since the recovery began in mid-2009, there remains much progress to make before we can start exchanging high-fives.

Looking forward, we also face challenges as baby boomers age, with nearly 500,000 current Minnesota workers hitting retirement age over the next 10 years. Over the past three years, Minnesota has seen its labor force grow by a mere 11,300, so what job growth we have seen has come about primarily by re-employing many of the 250,000 unemployed Minnesotans that the recession produced.

But as we approach full employment, additional job growth will be limited by an ever-decreasing rate of labor force growth, which the state demographer projects will increase by only 90,000 people between now and 2030. To put that in context, since the early 1990s we have consistently added more than 70,000 jobs a

year, but now we're faced with the prospect of adding only 90,000 jobs over the next 15 years due to slow growth in the labor force.

This further underscores the need to remove the barriers to gainful employment that too many of our citizens face. If we are to mitigate the difficulties that a slowly growing labor force and economy will soon present, it is not too soon to start dealing with the challenges that confront people of color, people with disabilities, people with young children or elderly parents who need their care, people with out-of-date skills, people who have become detached from the workplace through prolonged unemployment, and the many others who find it difficult to pursue, locate or keep a quality job. Doing so will not only solve many of the problems that linger from the Great Recession, but it will also position us to overcome the significant challenges that lie ahead.

### Industry Sector Employment

Last September, after four years of moderate but uneven job growth, Minnesota employment topped its pre-recession peak. Minnesota was the 15th state to recapture the jobs lost during the recession.

The state's job recovery, after the loss of 159,000 jobs, was initially

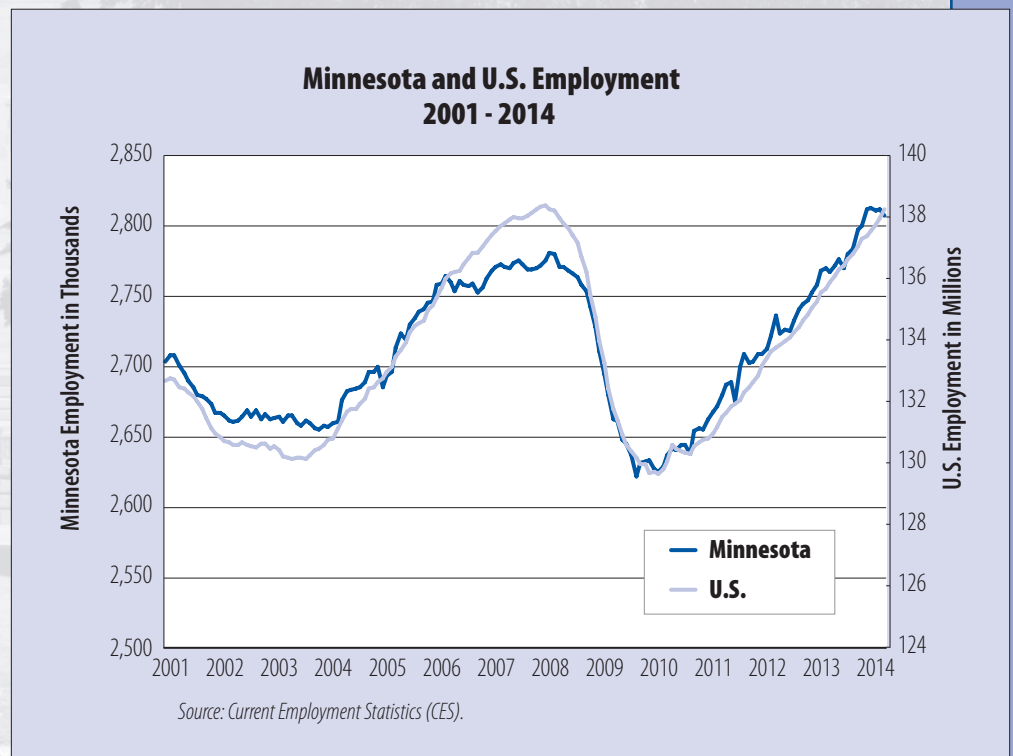
stronger than the national job rebound in 2010 and 2011, but it has pretty much mirrored the national pace over the last 2-1/2 years. Because of stronger job growth coming out of the recession Minnesota reached its pre-recession employment peak seven months before the U.S. achieved that in May. Figure 1 shows job growth for Minnesota and the U.S. since 2001.

As of April, employment in Minnesota had expanded 7.1 percent since bottoming out in 2009, compared with 6.6 percent nationwide. Minnesota's advantage in job growth over the last four years can be attributed to a significantly smaller drop in public sector employment than in the U.S. public sector since the recession. Minnesota's

public sector payroll is down 1.1 percent from its peak in 2010, while private sector payroll is up 8.2 percent from its trough in 2009. Public sector employment nationally is down 4.8 percent from its 2010 peak, while private sector payroll is up 8.6 percent from its 2009 trough.

Minnesota's private sector job growth was running right along with the national pace until the last few months. As Figure 1 displays, Minnesota's job growth has flattened out since the beginning of the year, with the state actually losing jobs since January. After adding 5,800 jobs per month on average during the last half of 2013, Minnesota has lost 1,000 jobs per month on average during the first four months of 2014.

FIGURE 1



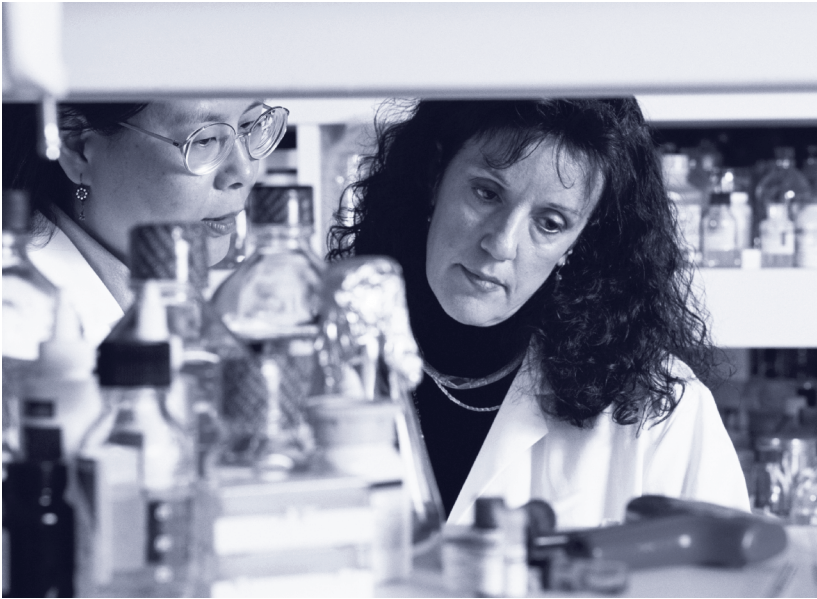


TABLE 1

**Annual Employment Growth, April 2014  
(not seasonally adjusted)**

	Minnesota Percent	U.S. Percent
Total Nonfarm	1.5	1.7
Total Private	1.7	2.1
Mining and Logging	3.6	5.5
Construction	8.5	3.5
Manufacturing	2.2	0.8
Trade, Transportation, and Utilities	1.2	2.2
Information	0.6	-1.1
Financial Activities	-0.8	0.7
Professional and Business Services	1.4	3.6
Education and Health Services	2.0	1.5
Leisure and Hospitality	1.6	2.8
Other Services	1.2	1.0
Government	0.4	0.0

Source: Current Employment Statistics (CES)

Some of the soft patch in Minnesota's job growth may be revised away when benchmarking is carried out next year. Average monthly job gains for the first four months last year were initially reported at 2,300 but later revised up to 3,600.

Part of the job growth slowdown might be related to the state's severe winter and late spring, with cold temperatures and heavy snowfall affecting hiring. But the recent hiring slowdown was broad based, with six sectors averaging negative job growth over the first four months of the year. Even educational and health services has been losing jobs in 2014. Only two sectors, manufacturing and professional and business services, averaged higher job growth during the first four months of 2014 than in the last six months of 2013.

The pause in Minnesota job growth is surprising because most labor market indicators remain positive. Initial claims for unemployment insurance benefits have continued to fall this year, running 6 percent below last year's average. Job vacancies, as reported in the 2013 fourth quarter Job Vacancy Survey, were up 2.6 percent from a year ago, indicating that labor demand continues to climb. Weekly work hours also are up from a year earlier, as are average hourly wages.

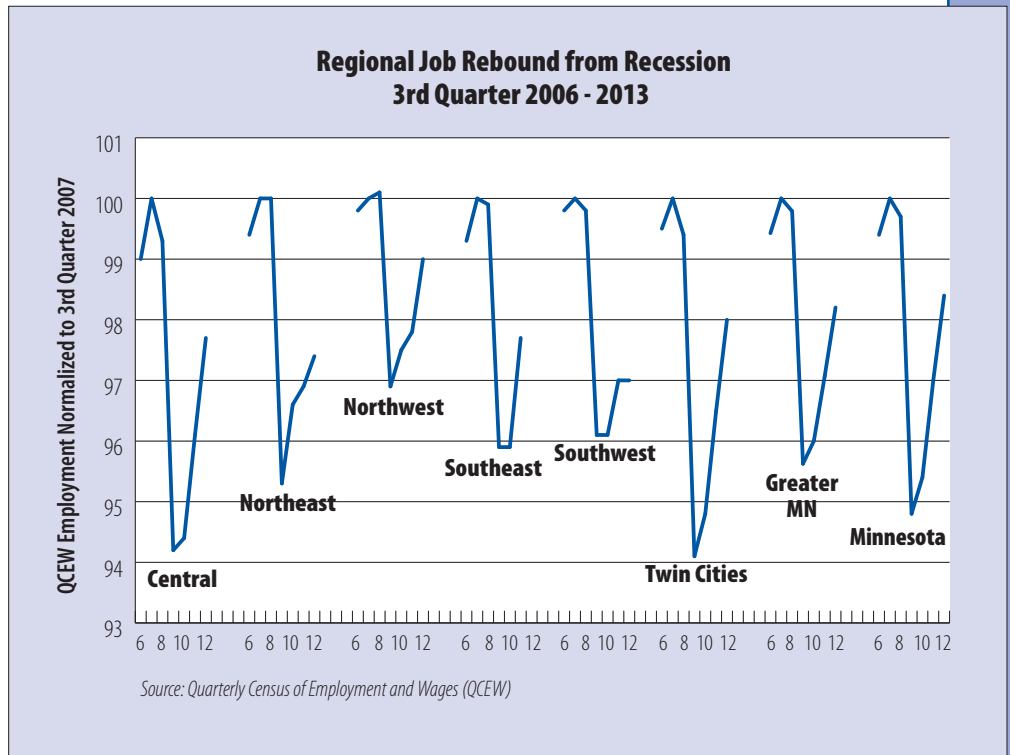
Another positive indicator is the strong readings in the Minnesota Business Conditions Index. The index, reported since 1995, had its highest-ever January through April average this year. The solid signals from various labor market indicators point toward Minnesota's job picture rebounding from its winter doldrums.

Minnesota's employment expansion over the last year was, as usual, led by educational and health services, over 9,900 new positions. Manufacturing and construction were the two other leading job generators, with 6,700 and over 7,500 jobs added, respectively.

Despite being near the top in hiring over the last 12 months, manufacturing and construction employment remain far below pre-recession levels. Manufacturing employment is still down 21 percent from its peak, while construction jobs are 20 percent short of peak numbers. Neither sector is expected to exceed its historical peak employment levels over the next 10 years.

Four other sectors, as of April, are also still below pre-recession employment levels. Trade, transportation and utilities and financial activities are expected to regain all the jobs lost during the recession within the next few years. Government employment

FIGURE 2



is also expected to top its record high, but not for another five years. Information employment, which has been declining for more than a decade, will likely continue to shrink, but the pace will be slower than during the recession.

Table 1 compares Minnesota and U.S. job growth across sectors over the last year. Job growth in the state has slipped slightly behind the national pace, with six of the 11 sectors adding jobs faster in Minnesota than nationally. The faster-growing sectors in Minnesota, however, are higher-paying sectors, which has helped boost income growth in the state relative to the nation. Minnesota's wage and salary income increased 3.3 percent

between the fourth quarters of 2012 and 2013, compared with 2.1 percent growth nationwide.

While all regions in Minnesota are experiencing a job rebound since the recession, the pace of the rebound has been slower in northeastern and southwestern Minnesota. Figure 2 compares wage and salary employment during the third quarter between 2006 and 2013 across regions. Regional employment totals are normalized to employment levels during the third quarter of 2007. The recession hit central Minnesota and the Twin Cities the hardest, with job losses near 6 percent. Both of these regions are close to recapturing the jobs lost.

FIGURE 3

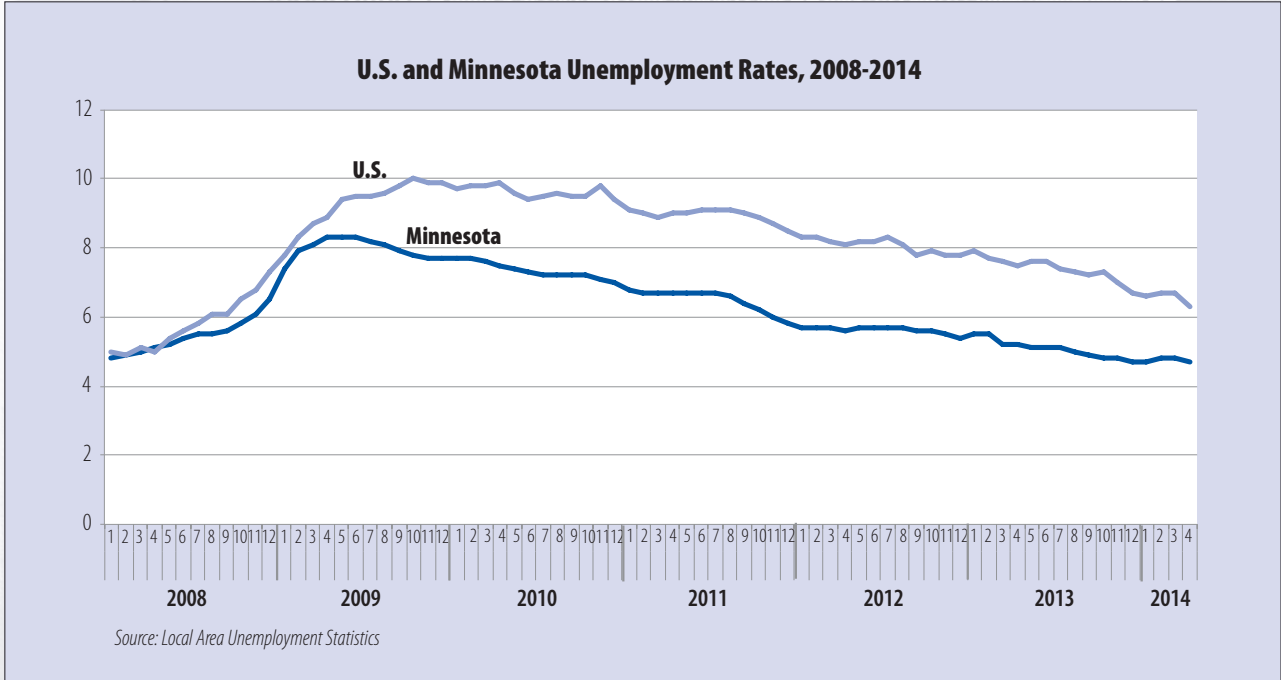
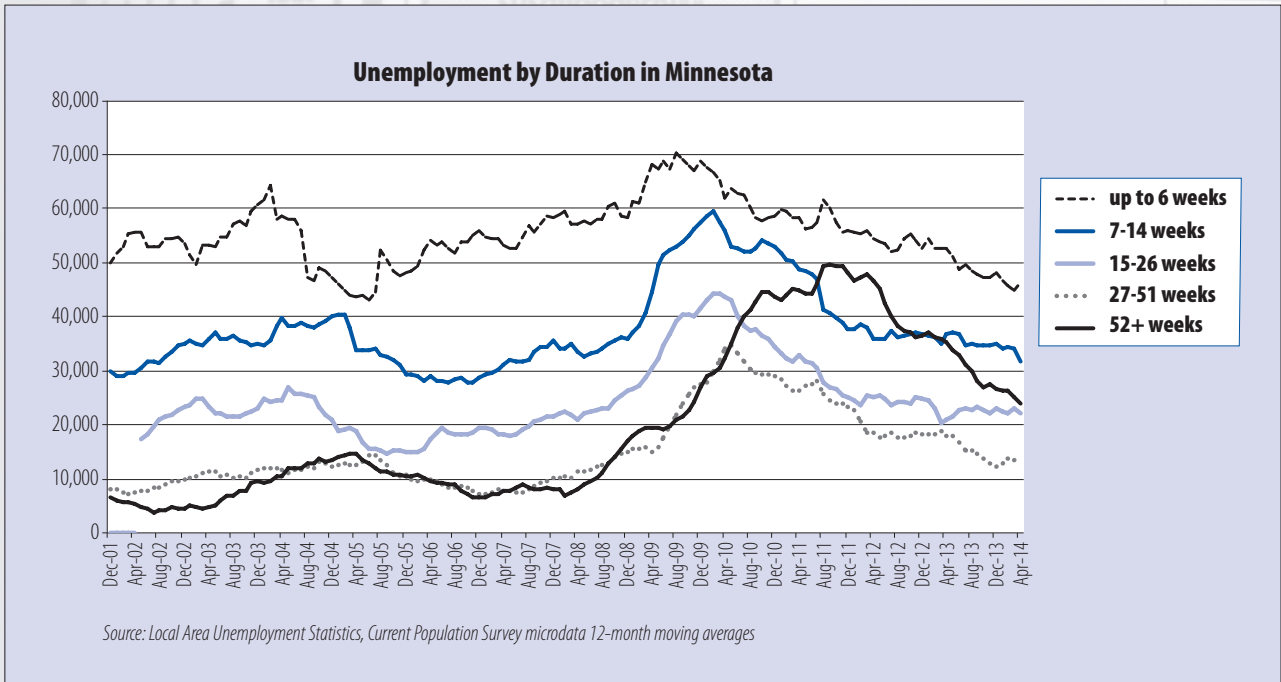


FIGURE 4





Northwestern Minnesota's job losses were the smallest during the recession, enabling the region to become the first to exceed its pre-recession employment peak. Both the northeastern and southwestern parts of the state still have some work to do before employment recovers to pre-recession levels.

### Trends in Unemployment

Minnesota's unemployment rate has been significantly below the national rate since early in the recession. In mid-2009 Minnesota peaked at 8.3 percent (seasonally adjusted), while the U.S. rate continued to increase until it peaked at 10 percent in late 2009. Since then, Minnesota's unemployment rate has remained about 2 percent lower than the national rate, with both declining in concert. In recent months, however, Minnesota's unemployment rate has leveled off, while the U.S. has continued to trend downward.

In January 2014 the Minnesota-to-U.S. unemployment rate gap fell below 2 percentage points (to 1.9) for the first time since 2009. In April, it further decreased to 1.6 percent, as Minnesota's seasonally adjusted unemployment rate hit 4.7 percent and the U.S. unemployment rate fell to 6.3 percent (see Figure 3).

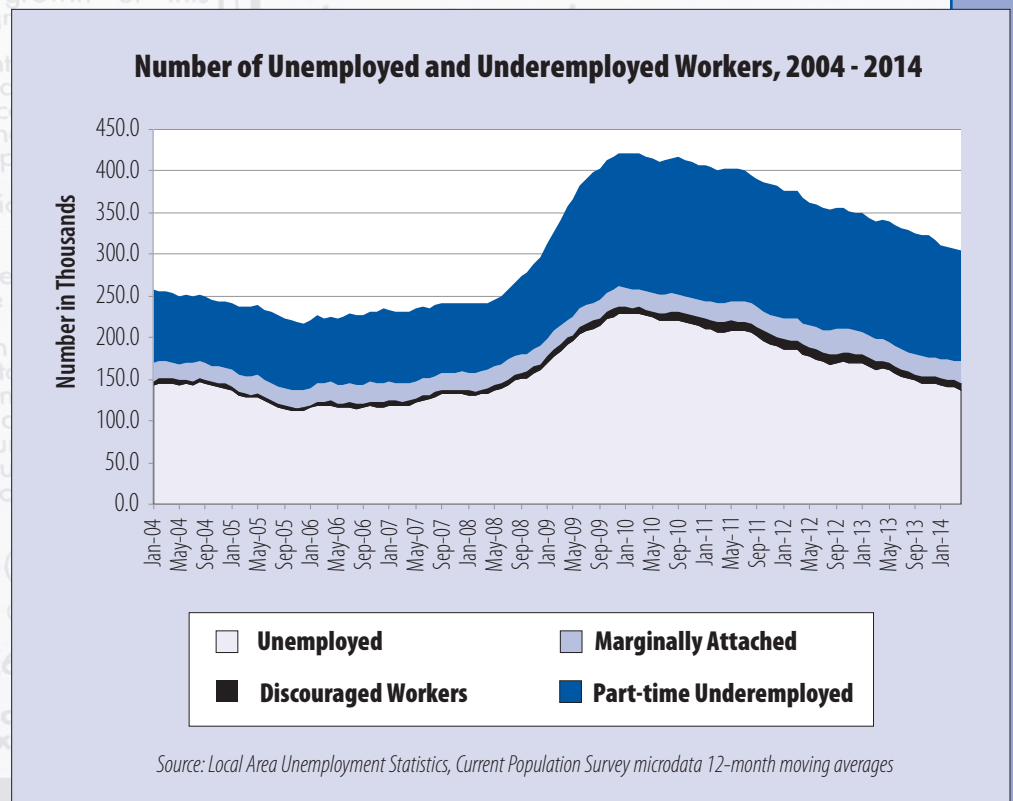
The unemployment picture in Minnesota has continued to improve on other fronts. Between April 2010 and June 2013, the number of long-term unemployed — people out of work 27 weeks or longer — was the largest share of all unemployed. Only in the last few months has the number of people unemployed six weeks or fewer — historically the largest category — surpassed the long-term unemployed.

The number of long-term unemployed didn't peak until August 2011 and lingered at nearly 50,000 until June 2013, staying well above the

15,000 mark that was typical through most of the last decade. The number of long-term unemployed is now down to 37,900 and declining rapidly (especially those unemployed longer than 52 weeks) as the other groups of unemployed workers taper more gradually (see Figure 4).

Unfortunately, some of these declines are created as people drop out of the workforce. In Figure 5, the official number of unemployed workers — those not working who want to work, are available to work and actively looking for work — has fallen back down to 2008 levels.

FIGURE 5



The number of discouraged workers (those who have given up looking because they don't believe jobs are out there) and the number of marginally attached workers (those who have worked or looked for work in the last year but not actively enough to qualify as unemployed) both remain slightly elevated over 2008. The number of part-time underemployed workers (those who are working part time because they couldn't find full-time work) remains significantly higher than before the recession, however.

### Job Vacancy Quality

Job vacancies have rebounded since the Great Recession, reaching more than 60,000 during fourth quarter 2013 in Minnesota. But has the quality — hours and wage offers — of these vacancies rebounded as well?

The only information on hours is from share of part-time versus full-time vacancies. The share of part-time vacancies ranged from 34 to 45 percent (averaging 39 percent) between 2001 and 2013. Before the Great Recession, which started in fourth quarter

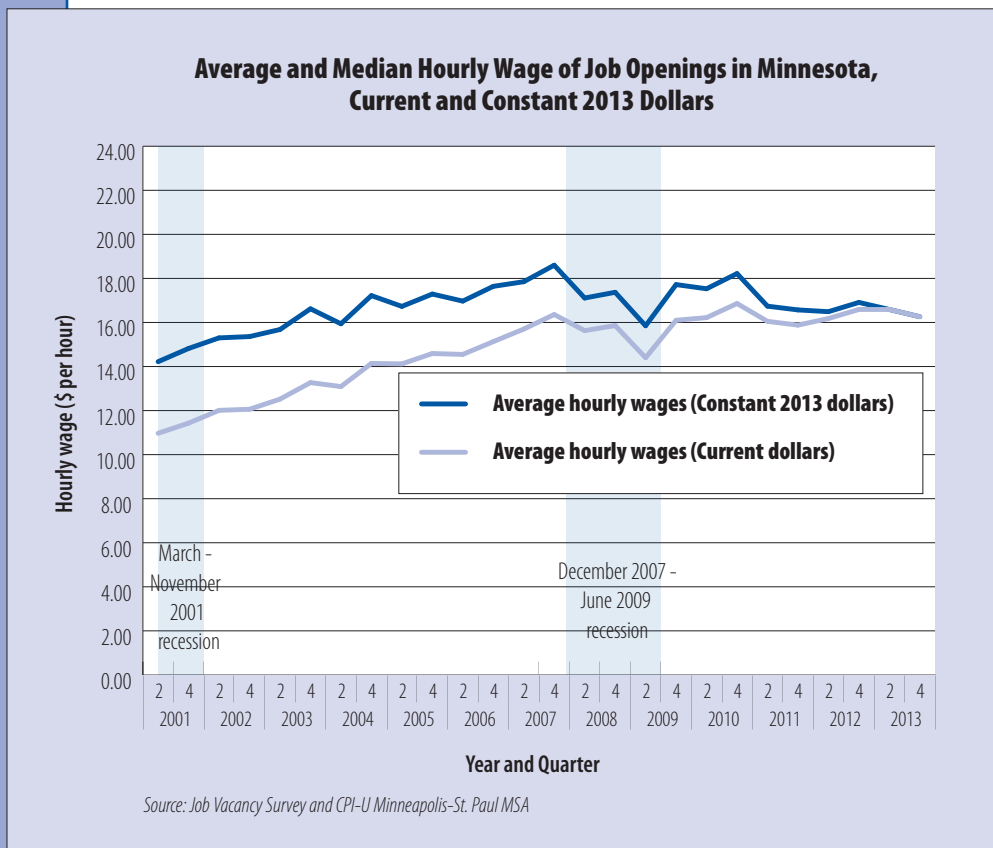
2007, the share of part-time vacancies averaged 37.9 percent. The share of part-time vacancies increased during the recession, averaging 40.4 percent. Since then, part-time vacancies have remained high, averaging 40.8 percent since the end of the recession. Overall, full-time jobs are still more difficult to find since the recession than they were between 2001 and 2007.

Average wage offers<sup>1</sup> are another important measure of job quality. In this article, average wage offers are presented in nominal (current dollars) and real (constant 2013 dollars) terms.<sup>2</sup>

Statewide, both average nominal and real wage offers climbed steadily from 2001 to the start of the recession and then fell throughout the recession (see Figure 6). They climbed back up to near pre-recession highs shortly after the recession but dropped down in 2011 and have leveled off since. Overall, average real wage offers grew 9.7 percent between fourth quarter 2001 and fourth quarter 2013, or about 0.8 percent a year on average. Average real wage offers, however, have declined 12.6 percent since peaking at \$18.60 during fourth quarter 2007 to \$16.26 in fourth quarter 2013.

As Figure 7 shows, the seven-county Twin Cities pattern has been similar to the statewide pattern. Average wage offers

FIGURE 6



in Greater Minnesota have remained consistently below those of the Twin Cities. In fourth quarter 2013, the average wage offer in Greater Minnesota was \$14.11 compared with \$18.02 in the Twin Cities. Moreover, average real wage offers in Greater Minnesota have shown a somewhat flatter pattern than in the Twin Cities, climbing 10.6 percent compared with 12.8 percent in the Twin Cities between the fourth quarters of 2001 and 2013 in constant 2013 dollars.

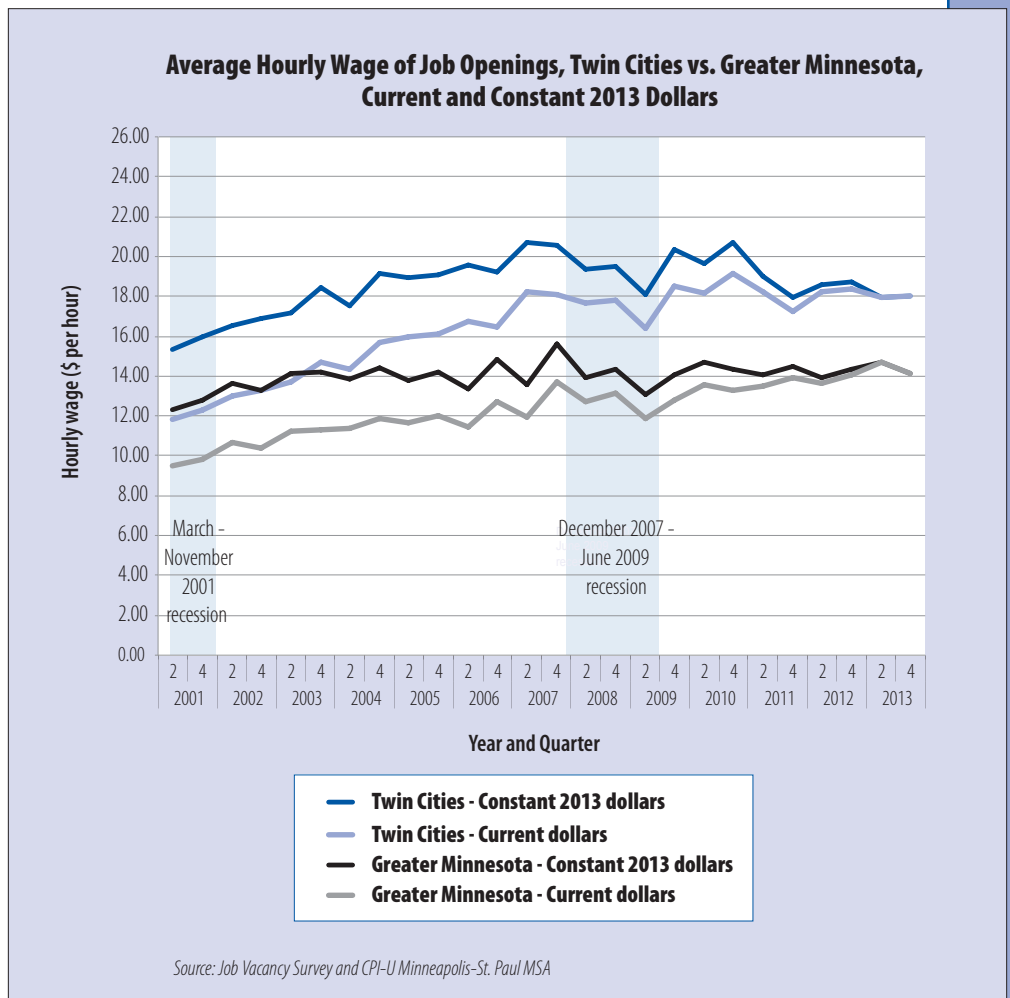


FIGURE 7

There are many underlying forces at work in Figures 6 and 7. Some are intrinsic to job vacancies, such as education and experience requirements. Some are structural, such as occupational and industrial shifts. Still others are institutional, such as increases in the minimum wage during 2007-2009.

It is plausible that all these forces are correlated with each other, making it difficult to isolate the net effect of each force. To develop an appreciation of how these forces are related to the structure of wage offers over time, we only consider in this article the behavior of the distribution of educational requirements for job vacancies over time.

Educational requirements show two opposite tendencies. First, during non-recession years,



they are part of the explanation for differences in average wage offers over time. For example, the share of vacancies requiring post-secondary education was lower in fourth quarter 2013 than any time since 2004, as Figure 8 shows. This at least partly explains why average wage offers decreased in real terms between fourth quarter 2012 and 2013, despite an improved labor market as measured by the ratio of vacancies to unemployed job seekers.

In addition, the upward trend in average wage offers between 2001 and 2007 can be partly explained by an upward trend in the share of vacancies requiring post-secondary education. The share of vacancies requiring post-secondary education increased from 28.4 percent in second quarter 2001 to 45.5 percent in second quarter 2007. Similarly, the flattening in average wage offers since 2011 seems to be associated with a flattening of the share of vacancies requiring post-secondary education. Finally, job vacancies in fourth quarter 2010 exhibited the highest share of vacancies requiring post-secondary education at 46 percent and the highest average nominal wage offer since the start of the data series in 2001.

Figure 8 also illustrates the tendency of employers to inflate educational requirements of vacancies during slack labor market periods. Before the recession, the share of vacancies requiring post-secondary education averaged 39.7 percent, but during the recession they averaged 42.8 percent even as the average wage offer steadily fell during those quarters.

### Job Growth Forecast

On a year-over-year basis, Minnesota's job growth averaged 1.6 percent during the first four

months of 2014, which is right in line with the 1.5 percent pace expected in 2014. That growth will be Minnesota's fourth consecutive year of solid job gains, providing the state with its best four-year run in that category since 1997-2000. Overall, the Minnesota economy is forecasted to generate 42,000 wage and salary jobs in 2014, down slightly from the 46,000 jobs added last year.

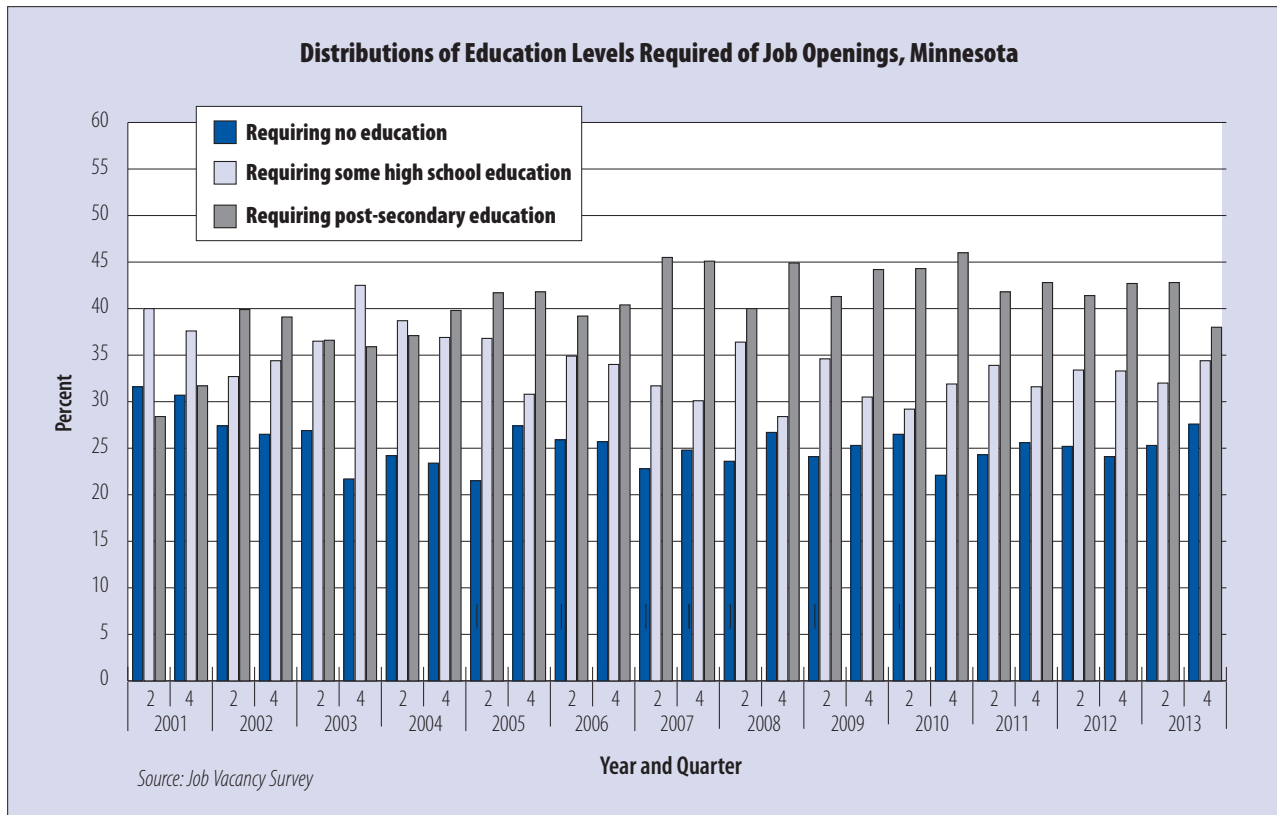
Most labor market indicators remain positive, pointing toward another year of steady employment expansion. Initial claims for unemployment benefits have fallen to pre-recession levels, while job vacancies have climbed to their highest total since 2005. All sectors are anticipated to expand employment in 2014, producing another year of broad-based growth.

Hiring is expected to accelerate in construction and manufacturing while slipping slightly in financial activities, professional and business services, and educational and health services. Goods-producing sectors will account for slightly more than one in four new jobs in 2014. Employment in construction and manufacturing, however, will remain far below pre-recession levels, despite the expected uptick in hiring.



PHOTO: JUDY PARKER

FIGURE 8



Minnesota's unemployment rate, which had been trending downward faster than the national rate since the end of the recession, has been stuck between 4.6 to 4.8 percent for the last seven months. This is actually a good sign because it is being driven by expanding labor force participation. The labor participation rate had been sliding since the recession, but it

started to climb over the last few months, boosting Minnesota's labor force to more than 3 million workers for the first time.

Minnesota's labor market has rebounded to the point where workers who dropped out of the labor force over the last five years are now beginning to return.

A recent uptick in household employment is another encouraging development. Household employment, which includes self-employment, has been increasing at its fastest pace since 2011. **T**

*The following writers contributed to this story: Steve Hine, Oriane Casale, Amanda Rohrer, Mustapha Hammida and David Senf.*

<sup>1</sup>Average wage offers are used here instead of median wage offers to better illustrate change in wage offers over time. The job vacancy survey sample is constructed to estimate point-in-time data rather than time series data. Normally median wage offer is a better representation of point-in-time data (one quarter of data) as it protects against the distortive effects of extremely high wage offers. However, using job vacancy survey statistics in a time-series analysis gives rise to what is known as a "composition effect." This effect can occur as a result of changes in the distribution of job vacancies between industries, changes in the occupational distribution of job vacancies, and changes in the proportion of full time and part time. Although both median and average wage offers are expected to be influenced by this effect, the average wage is a better measure to illustrate comparisons over time.

<sup>2</sup>Average real wages represent average nominal wages adjusted for inflation and are expressed here in terms of prices prevailing in 2013.



**Regional Spotlight:**  
**NORTHERN Region**

# Prescription for a Healthy Economy

*The health care and social assistance sector is driving job growth in northern Minnesota.*

**N**orthern Minnesota, traditionally home to a strong goods-producing sector, was hit hard by the Great Recession.<sup>1</sup> The economy is still solidly grounded in its rich natural resources and strong manufacturing base, but the health care and social assistance sector weathered the recession to emerge as the largest employer in the region.

While employment in goods-producing sectors declined by 13.4 percent between 2000 and 2012, jobs increased in the health care and social assistance sector by 33 percent (see Chart 1).

There are many reasons behind this change. A major factor is the long-term shift in the national economy away from the goods-producing sectors and toward the service-providing sectors. This trend, coupled with an aging population demanding

more health care, has led to an explosion in health care and social assistance employment nationwide.

## **Doctors and Nurses and Pharmacists, Oh My!**

To be fair, health care and social assistance is big business throughout Minnesota. In the third quarter of 2013, the sector accounted for 16.6 percent of all covered employment and 15.2 percent of all wages paid across the state.

But while the Twin Cities and Rochester often are cited when it comes to the strength of the state's health care sector, northern Minnesota should not be overlooked. The health care and social assistance sector supplied 69,829 jobs to the region's labor market — 19.4 percent of total employment — making it the largest employing industrial sector in the region by

a wide margin (see Table 1). In total, 15.6 percent of the state's health care and social assistance jobs are found in this region.

The average weekly wage for jobs in health care and social assistance is \$710 in northwestern Minnesota and \$873 in northeastern Minnesota — \$36,920 and \$45,396 a year, respectively. While the wage numbers are skewed higher by well-paying health care occupations, by and large the sector is a good source of living-wage employment.

## **Location, Location, Location**

It goes without saying that the health care and social assistance sector is an important component of the northern Minnesota economy, but how does it compare with other parts of the state? One way to measure a region's level of

CHART 1

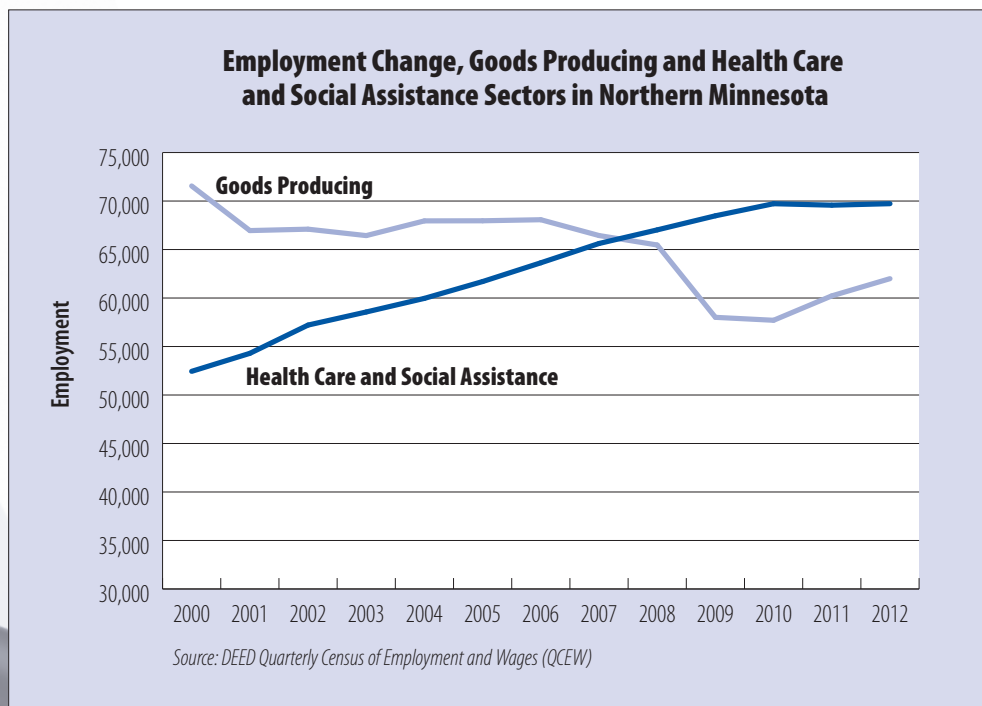


TABLE 1

**Top 10 Industries by Employment, Northern Minnesota, Q3 2013**

NAICS Industry Title	Establishments	Employment	% of Total	Average Weekly Wage (NW)	Average Weekly Wage (NE)
Total, All Industries	26,296	360,017	100.0%	\$662	\$763
Health Care and Social Assistance	2,433	69,829	19.4%	\$710	\$873
Retail Trade	3,873	46,343	12.9%	\$437	\$441
Accommodation and Food Services	2,497	39,024	10.8%	\$259	\$274
Manufacturing	1,205	37,521	10.4%	\$850	\$1,027
Educational Services	749	26,637	7.4%	\$752	\$844
Public Administration	1,294	26,210	7.3%	\$753	\$866
Construction	3,139	18,585	5.2%	\$917	\$969
Wholesale Trade	968	14,148	3.9%	\$908	\$893
Other Services	2,241	11,050	3.1%	\$369	\$459
Finance and Insurance	1,361	10,641	3.0%	\$827	\$872

*Source: DEED Quarterly Census of Employment and Wages*

TABLE 2

**Location Quotient Analysis, Private Sector Health Care and Social Assistance Employment, Minnesota's Planning Areas**

Planning Area	Employment	Location Quotient
Southeastern Minnesota	58,565	1.82
<b>Northeastern Minnesota</b>	<b>30,682</b>	<b>1.70</b>
Central Minnesota	43,042	1.26
<b>Northwestern Minnesota</b>	<b>32,184</b>	<b>1.18</b>
Southwestern Minnesota	25,680	1.14
Seven-County Twin Cities Metro	231,566	1.04

Source: DEED Quarterly Census of Employment and Wages

the industry's importance to Minnesota's economy.

When comparing LQs across the state's planning areas, it is no surprise that southeastern Minnesota — home to the Mayo Clinic — has the highest LQ at 1.82. What may come as a surprise, however, is that northeastern Minnesota, home to Essentia Health, St. Luke's Hospital and the Benedictine Health Care System, boasts the second highest LQ at 1.7. With an LQ of 1.2, northwestern Minnesota outpaces southwestern Minnesota and the Twin Cities in terms of industry specialization (see Table 2).

TABLE 3

**Shift-Share Analysis for Private Sector Employment in Health Care and Social Assistance, Northern Minnesota, Q3 2003 to Q3 2013**

	Actual Change	Expected Change	National Share	Industry Mix	Regional Shift
Health Care and Social Assistance jobs	12,521 jobs	13,986 jobs	2,845 jobs	11,141 jobs	-1,465 jobs

Source: DEED Quarterly Census of Employment and Wages

**Despite It All**

Despite slowing down in recent years, private sector employment in health care and social assistance has grown steadily in northern Minnesota over the past decade. Employment in the private sector grew from 50,345 jobs in the third quarter of 2003 to 62,866 by the third quarter of 2013 — a 24.9 percent increase.

specialization in a particular industry is the location quotient (LQ). The LQ is simply the ratio of an industry's share of regional employment to the industry's share of national employment. An LQ that is higher than 1.0 indicates a moderate to high

level of specialization for that particular industry in the region.

Looking at private sector health care and social assistance employment, every region in Minnesota boasts an LQ greater than 1.0, further evidence of

What conditions led to such a large jump in employment? A shift-share analysis of employment growth in northern Minnesota reveals some interesting trends. Of the 12,521 jobs gained between the third quarters of 2003 and



2013, the large majority were due to the performance of the health care and social assistance sector nationwide (industry mix), with a smaller amount of growth occurring because of a strengthening overall economy (national share).

Because of strong nationwide growth trends in the health care and social assistance sector and strengthening economic conditions overall, northern Minnesota added 12,521 jobs in the sector despite regional economic conditions that, according to shift-share analysis, led to 1,465 fewer jobs (regional shift) than if the industry had grown at the same rate as it did nationally (expected change).

### So What's the Prognosis?

The question remains: Will the impressive growth continue? All signs point to yes. As the local economy strengthens and baby boomers age, health care and social assistance will continue to be a major source of quality jobs for residents of northern Minnesota.

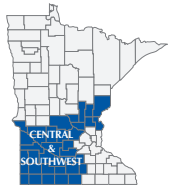
The health care and social assistance sector is projected



to grow by 33.3 percent in northeastern Minnesota and 32.4 percent in northwestern Minnesota by 2020. Impressive job growth combined with increased retirements will lead to a projected 20,502 job openings across the two regions in that time.

The bottom line is this: If a job seeker is looking for future employment opportunities, it doesn't get any better than the health care and social assistance sector in northern Minnesota. **T**

<sup>1</sup>For the purposes of this article, northern Minnesota includes the 26 counties in the Northwest Planning Region and the seven counties that make up the Northeast Planning Region.



**Regional Spotlight:**  
**CENTRAL AND SOUTHWESTERN Region**

# Making a Living Making Things

*Manufacturing is a major employer in southwestern and central Minnesota, accounting for more than 70,000 jobs.*

Anyone walking into a manufacturing plant today would see a stark contrast from what was common in the last century. Much progress has been made toward correcting safety and health concerns of yesteryear and promoting a vibrant workplace. One thing hasn't changed, though. The industry remains an important source of jobs, both nationally and in Minnesota.

Central and southwestern Minnesota are home to a variety of manufacturers, from food processing manufactures like Seneca Foods and Jennie-O, to specialized vehicle manufacturers like Polar Tank Corp. and agricultural equipment makers like AGCO.

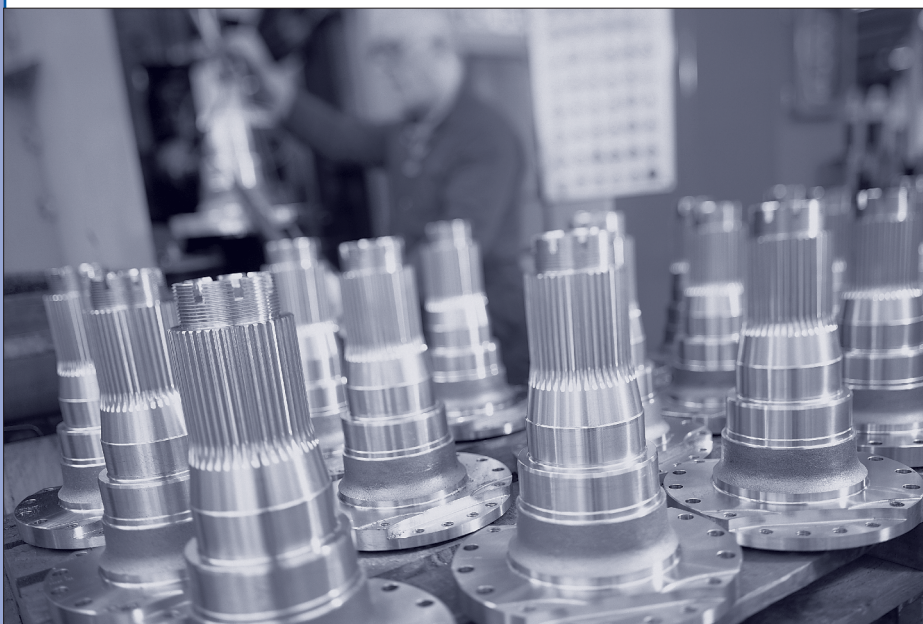
These and other manufacturers have a major impact on local economies in central and

southwestern Minnesota, providing more than 70,000 jobs in the region.

As Table 1 illustrates, southwestern Minnesota has the highest concentration of manufacturing jobs in the state with a location quotient of 2.0. A location quotient (LQ) is a way of showing how concentrated a particular industry is compared with the country or state. The value 2.0 means that southwestern Minnesota has two times more manufacturing jobs than the country as a whole.

Central Minnesota also has a high location quotient at 1.69. So while the Twin Cities metro employs many more people in manufacturing, the concentration of manufacturing jobs is actually greater in southwestern and central Minnesota.

A higher LQ demonstrates the importance of a particular industry in a region. Just over 16 percent of all jobs in the combined central and



southwestern regions are in manufacturing, with the southwest at 18.1 percent and central at 15.2 percent. The percentage of jobs in manufacturing statewide is 11.5 percent and nationally 10.5 percent.

### The Sweet Spot

Manufacturing is notorious for being affected by business cycles, and the most recent recession was no exception. While manufacturing employment is making a steady recovery in central and southwestern Minnesota, it remains below pre-recession levels.

In the four years leading up to the start of the recession, manufacturing employment averaged 42,647 jobs in central Minnesota and 34,275 jobs in the southwest. In the four years following the recession, that numbers dropped to 37,427 in central and 31,202 in southwest.

The good news is that manufacturing employment has been steadily growing since the end of the recession (see Figure 1). It's easy to recognize not only the impact of the recession on manufacturing but also the differences in the recovery in each area. Except for a slight dip in the southwest in 2013, employment in the sector has been making steady progress.

TABLE 1

Manufacturing Industry, Average of Qtrs. 1-3, 2013			
Planning Area	Employment	Establishments	Location Quotient
Central Minnesota	39,105	1,160	1.69
Northeast Minnesota	8,941	359	0.71
Northwest Minnesota	27,885	841	1.45
Twin Cities Metro	162,571	4,100	1.12
Southeast Minnesota	36,653	668	1.74
<b>Southwest Minnesota</b>	<b>31,264</b>	<b>610</b>	<b>2.00</b>

*Source: DEED Quarterly Census of Employment and Wages*

FIGURE 1



The central region was hit harder during the recession, with manufacturing employment plummeting over 17 percent, compared with a 12 percent loss in the southwest. From 2010 through the first three quarters of 2013, employment in the sector grew almost 10 percent in

central and almost 3 percent in southwest. That well outpaced overall employment growth, which was 4.7 percent in the central region and 1.2 percent in the southwest.

Manufacturing has added 3,534 jobs in central and 862 jobs in

TABLE 2

**Manufacturing Employment Gains and Losses  
by Sector, 2012 - 2013**

Sectors within the Manufacturing Industry	Central 2012 - 2013 change	Southwest 2012 - 2013 change
Manufacturing	873	-550
Food Manufacturing	286	-228
Beverage and Tobacco Product Manufacturing	78	35
Textile Product Mills	29	No Data
Apparel Manufacturing	-37	No Data
Wood Product Manufacturing	41	-11
Paper Manufacturing	-145	No Data
Printing and Related Support Activities	197	-79
Chemical Manufacturing	-85	-49
Plastics and Rubber Products Manufacturing	93	-91
Nonmetallic Mineral Product Manufacturing	79	44
Fabricated Metal Product Manufacturing	177	16
Machinery Manufacturing	16	168
Computer and Electronic Product Manufacturing	2	-245
Electrical Equipment, Appliance, and Component Mfg.	-111	-5

Source: DEED Quarterly Census of Employment and Wages

the southwest since 2010. Over the same period manufacturing employment grew 5 percent statewide. Despite slightly different trends during and after the recession, both areas currently stand at over 85% percent of their pre-recession peak employment in the sector.

The largest sector within manufacturing for both regions is food manufacturing. With 17,369 jobs, food manufacturing represents 25 percent of the manufacturing sector in the combined areas. Food manufacturing is even more concentrated in southwestern Minnesota, with just over 10,000 jobs (32 percent of all manufacturing jobs in the region). Food production is also the largest manufacturing subsector in central Minnesota, averaging 7,467 workers for the first three quarters of 2013.

Other differences appear more pronounced when looking at the two areas from 2012 to 2013. Table 2 shows that central Minnesota gained 873 manufacturing jobs, while southwest lost 550 during that period. While a loss of 550 jobs is not insignificant, it's important to keep in mind that it represents less than 2 percent of southwest's manufacturing jobs.

Food manufacturing saw the largest gains in central



Minnesota over the one-year period, adding 286 jobs. Printing and fabricated metal both gained more than 150 jobs. Gains in southwest were in a few other areas, with the largest being in machinery manufacturing, which added 168 jobs. Transportation equipment, nonmetallic mineral and beverage manufacturing also added jobs.

### Reconsidering Johnny Paycheck

Manufacturing offers a wide variety of occupations beyond production. Many of these jobs provide wages that are considerably above the median for all occupations. While Johnny Paycheck sang “Take This Job and Shove It” about factory work, his advice might be reconsidered after looking at the data.

Holding on to the factory job might be better advice for today. The average weekly wage in manufacturing is about 25 percent more than the average for all occupations, or \$172 more per week in central and \$161 per week in southwestern Minnesota.

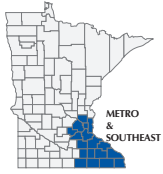
Some of the most common occupations in manufacturing include production, transportation and material moving, office and administrative support, installation and repair, as well as management, sales and business, and financial operations (see Table 3). With the exception of transportation and material moving in central Minnesota, all the occupations in Table 3 have significantly higher hourly wages than the median hourly wage for occupations across all industries.

Manufacturing allows employees at all levels to see firsthand a tangible product that has been made — the definition of accomplishment to many workers. It provides the satisfaction of being part of a process that can take raw material and transform it into a necessity, a life saver, a luxury or something truly incredible. Whether producing a trailer, conveyor or tape, manufacturing in central and southwestern Minnesota is a way of life for many residents and will continue to be as long as there is a demand for high-quality products. **T**

TABLE 3

2013 Common Manufacturing Occupations					
	All Industries and Occupations	Central Minnesota		Southwest Minnesota	
		Employment	Median Wage	Employment	Median Wage
Manufacturing Industry	Management	2,170	\$44.41	1,480	\$43.25
	Business and Financial Operations	1,310	\$27.01	1,080	\$26.61
	Sales and Related	1,300	\$26.15	910	\$22.71
	Office and Administrative Support	4,070	\$16.60	3,010	\$16.12
	Installation, Maintenance and Repair	2,210	\$21.50	1,960	\$20.69
	Production	24,230	\$16.09	21,400	\$14.93
	Transportation and Material Moving	3,420	\$15.00	3,820	\$15.15

*Source: DEED Occupational Employment Statistics*



**Regional Spotlight:**  
**METRO AND SOUTHEASTERN Region**

# The Construction Sector Rebuilds

*Construction employment in the Twin Cities and southeastern Minnesota is recovering after hitting the skids during the recession.*

**B**uilding is the name of the game when it comes to the construction industry. Lately, however, rebuilding might be a better way to characterize the construction sector. The recession in Minnesota had a heavy impact on construction projects and employment. The housing bubble, after all, sparked the recession. Since 2010, however, construction has begun to re-emerge as a significant

industry in Minnesota. Within the seven-county metro area and southeastern Minnesota, current and upcoming projects promise to keep construction workers busy into the foreseeable future.

### The Big Picture

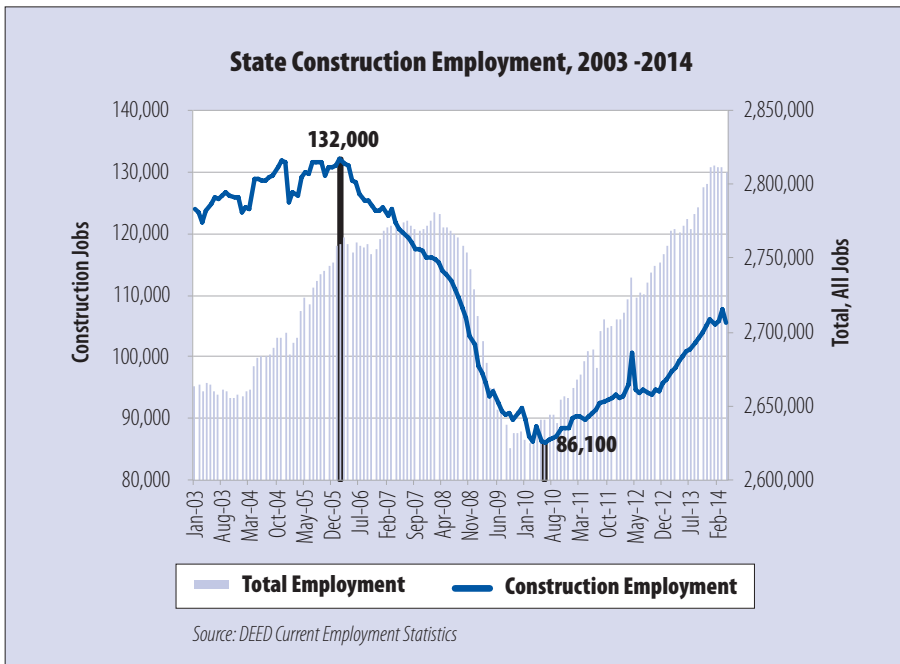
Statewide, construction employment hit a seasonally-adjusted pre-recessionary peak of 132,000 jobs in February

2006. Over the next 52 months, construction employment would plummet by 45,900 jobs (34.8 percent). Comparatively, total employment for all industries in Minnesota declined by 4.3 percent during the same period. By June 2010, the state was down to 86,100 construction workers, a level of employment not witnessed since 1995.

Fortunately, construction employment has been gradually rebuilding within the last 46 months. As of April 2014, Minnesota had a seasonally-adjusted 106,000 construction workers. This represents a boost of 19,900 workers from the low point in June 2010, an increase of 23.1 percent.

To put this growth in perspective, professional and business services had the second-highest employment growth at 11.3 percent during the same period. Overall, total employment growth statewide was 6.3 percent. While construction employment is

FIGURE 1



still 26,500 jobs below its pre-recessionary peak, recent trends are encouraging (see Figure 1).

### Upon Closer Inspection

To analyze employment at the regional level, we looked at data from the Quarterly Census of Employment and Wages. This is a comprehensive dataset covering about 97 percent of total state employment.

In third quarter 2013, Minnesota had 16,448 covered construction establishments with 121,657 jobs. More than half of these jobs, 63,634, were located in the seven-county metro area. Another 9,299 construction jobs were in the 11 counties of southeastern Minnesota.

As such, three out of every five construction workers in the state work in either the metro or southeastern Minnesota. This is despite construction representing a smaller share of all jobs in those two areas than other regions and the state overall (see Table 1).

Based on quarterly data, employment hit its pre-recessionary peak during the fourth quarter of 2007 in Minnesota. Construction, however, had already begun to show signs of significant decline throughout the state.



PHOTO: JUDY PARKER

TABLE 1

#### Construction Employment in Minnesota Sorted by Employment, 3Q 2013

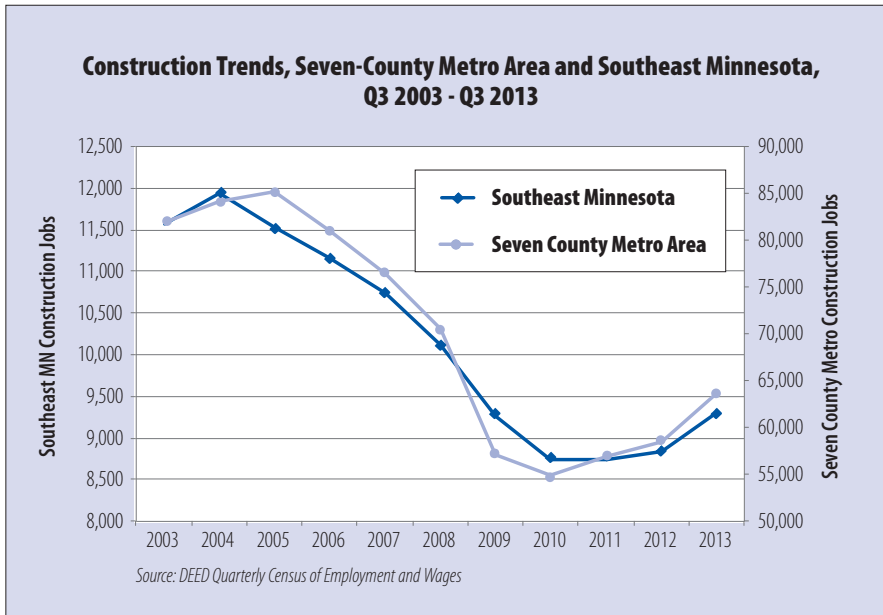
Area	Establishments	Employment	Percent of Total Employment	Average Annual Wage
Minnesota	16,448	121,657	4.5%	\$56,160
Seven-County Metro Area	6,505	63,634	3.9%	\$61,256
Central	2,677	16,478	6.3%	\$53,300
Northwest	2,137	11,911	5.5%	\$47,684
Southeast	1,458	9,299	3.9%	\$48,516
Southwest	1,511	8,796	5.1%	\$45,188
Northeast	1,002	6,674	4.7%	\$50,388

Source: DEED Quarterly Census of Employment and Wages (QCEW) Program

The metro and southeast both hit their respective pre-recessionary highs of 85,221 and 11,540 construction workers during the third quarter of 2005. Between the third quarters of 2005 and 2010, construction employment

within the metro dropped by 36 percent, the largest margin of any region in the state. Construction employment in southeastern Minnesota fell by 24 percent, shedding nearly 2,800 jobs over that period. Figure 2 shows the

FIGURE 2



jobs, nearly 60 percent of all state construction employment recovered since 2005.

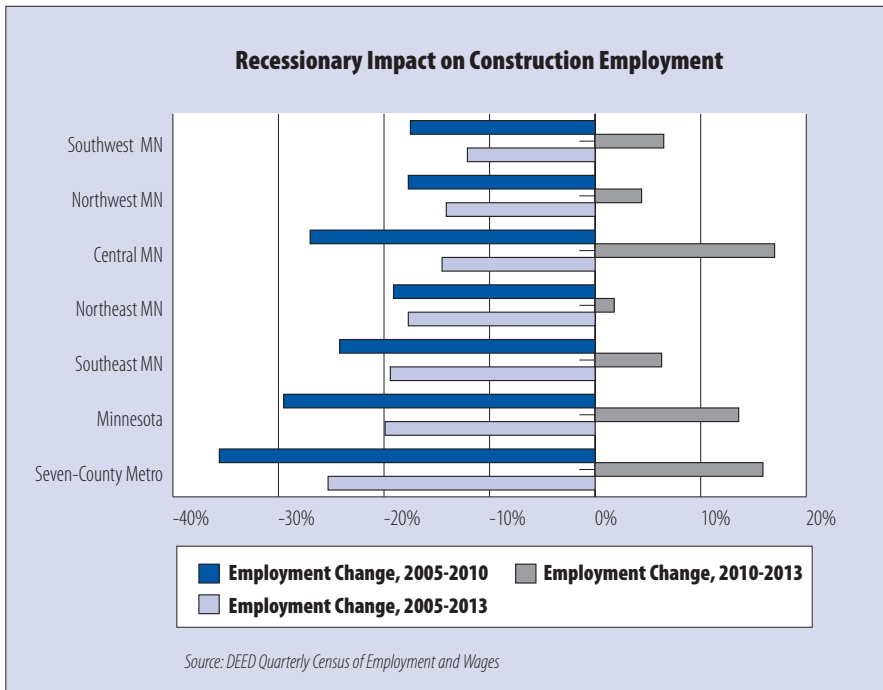
Southeastern Minnesota has added 554 construction jobs since 2005 and currently sits at about 9,300 total jobs (see Table 2).

### A Building Frenzy

DEED industry projections show construction employment in the state growing by 39 percent between 2010 and 2020, the fastest growth of any major industrial sector. Within the metro and southeastern Minnesota, construction is projected to grow by 38 percent and 40 percent, respectively. Only central Minnesota shows higher projections, at 52 percent growth.

In light of recent news for the metro and southeast, it would seem that these areas are well on their way toward meeting these projections. Within the metro, several large projects are planned or underway that promise to bolster the need for construction workers. The Green Line light rail project, for instance, has been the largest public works project in state history. While construction on the Green Line is finished after three years of work, investment along the line for new and renovated commercial and housing projects, has already topped \$2.5 billion.<sup>1</sup> Other projects and news worthy of attention include:

FIGURE 3



drop in the two regions, while Figure 3 shows that these two regions were not alone in this regard.

Fortunately, construction employment in the metro and

southeastern Minnesota has joined the rest of the state in showing positive signs of recovery since 2010. In fact, between the third quarters of 2010 and 2013, the metro area added back 8,710 construction



- The Minnesota Legislature recently approved a \$1 billion public works package that will pump funding into state college and university building projects, parks and trails, prisons, hospitals, roads, bridges, and dozens of economic development projects sought by cities and counties throughout the state. Notable projects include the restoration of the state Capitol, a makeover for Target Center and a redesign of Nicollet Mall.
- The \$1 billion Vikings stadium is underway in downtown Minneapolis.
- A \$400 million development near the new Vikings stadium will bring offices, new retail and apartments.<sup>2</sup>
- A \$5 billion Destination Medical Center in Rochester is expected to bring a surge in new home construction.<sup>3</sup>
- The Federal Reserve Bank of Minneapolis recently reported that Minnesota construction and land development loans increased by almost 7 percent in 2013 to nearly \$2 billion, illustrating increased construction activity locally.<sup>4</sup>
- And let’s not forget seasonal road construction.

projects planned or underway, and projections showing robust numbers through 2020, the need for construction workers will be high in many parts of the state. Based on the latest Job Vacancy Survey, from the fourth quarter of 2013, there was 567 and 464 construction vacancies reported within the metro and southeastern Minnesota, respectively. Combined, vacancies for these two areas are up 250 percent from the previous year, indicating a strong demand for construction workers even during fall and winter months.

Moving forward, both the metro and southeast will see increased demand for skilled construction workers. Carpenters, electricians,

plumbers and pipefitters, construction laborers, highway maintenance workers and construction managers are just a sample of the occupations in demand.

While some of these occupations, such as construction managers, electricians and plumbers, might require post-secondary education, most simply require on-the-job-training and experience. With construction occupations offering substantially higher wages than the average of all occupations, along with the industry’s comeback since 2010, the future looks bright for work in construction in the metro area and southeastern Minnesota. **T**

TABLE 2

Regional Construction Industry Statistics Quarter 3, 2005 - 2013						
Area	Employment	Q3, 2005 – Q3, 2013		Q3, 2010 – Q3, 2013		
		Numeric	Percent	Numeric	Percent	
Minnesota	121,657	-30,188	-19.9%	14,553	13.6%	
Seven-County Metro Area	63,634	-21,587	-25.3%	8,710	15.9%	
Central	16,478	-2,802	-14.5%	2,396	17.0%	
Northwest	11,911	-1,952	-14.1%	507	4.4%	
Southeast	9,299	-2,241	-19.4%	554	6.3%	
Southwest	8,796	-1,214	-12.1%	539	6.5%	
Northeast	6,674	-1,432	-17.7%	116	1.8%	

Source: DEED Quarterly Census of Employment and Wages (QCEW)

## Let’s Get Building

With so many construction

<sup>1</sup>Walsh, James. “Investment along Green Line tops \$2.5 billion,” Minneapolis Star Tribune, May 18, 2014.

<sup>2</sup>Moore, Janet. “A ‘Transformative’ Project,” Minneapolis Star Tribune, May 14, 2014

<sup>3</sup>Baier, Elizabeth. “More Construction Workers Needed in Rochester as Housing Market Recovers,” MPR News, March 31, 2014.

<sup>4</sup>Janet, Moore. “Industrial Real Estate Market Heating Up,” Minneapolis Star Tribune, May 15, 2014.

# Employment in Minnesota's Counties

*More than half of the state's 87 counties still haven't recovered all the private-sector jobs that were lost in the recession.*

Minnesota has recovered all the private-sector jobs that were lost in the recession, but the recovery has not occurred uniformly across the state. While some counties never lost jobs during the recession, others still haven't regained all the jobs that disappeared during that period.

This story examines data from the Quarterly Census of Employment and Wages to determine which counties have fared the best since the recession and which ones are still in recovery mode.

Map 1 displays the percentage change in private-sector employment for Minnesota's 87 counties. A dozen counties had no job losses during the recession between 2007 and 2009. Clearwater County led the state in employment growth during that period at 8.2 percent, gaining 136 jobs. Employment gains also occurred in Jackson (up 5.8 percent), Murray (up 4.7 percent), Lincoln (up 4.6 percent), Pine (up 4.2 percent), Clay (up 3.7 percent), Nobles (up 3.5 percent), Swift (up 2.9

percent), Sibley (up 1.5 percent), Lac qui Parle (up 1.3 percent), Grant (up 1.2 percent) and Wilkin (up 1.2 percent).

Counties with the largest employment had the most numeric job losses during the recession. Hennepin County lost 44,691 private-sector jobs between 2007 and 2009, followed by Ramsey (down

14,343), Anoka (down 8,582) and Dakota (down 7,288). These four counties rank first, second, fourth and third, respectively, for private-sector jobs in Minnesota.

Traverse County, with the third-smallest private employment base in the state, had the highest percentage job loss (down 15.7 percent) between 2007 and 2009. Nicollet (down 13.7 percent),

MAP 1

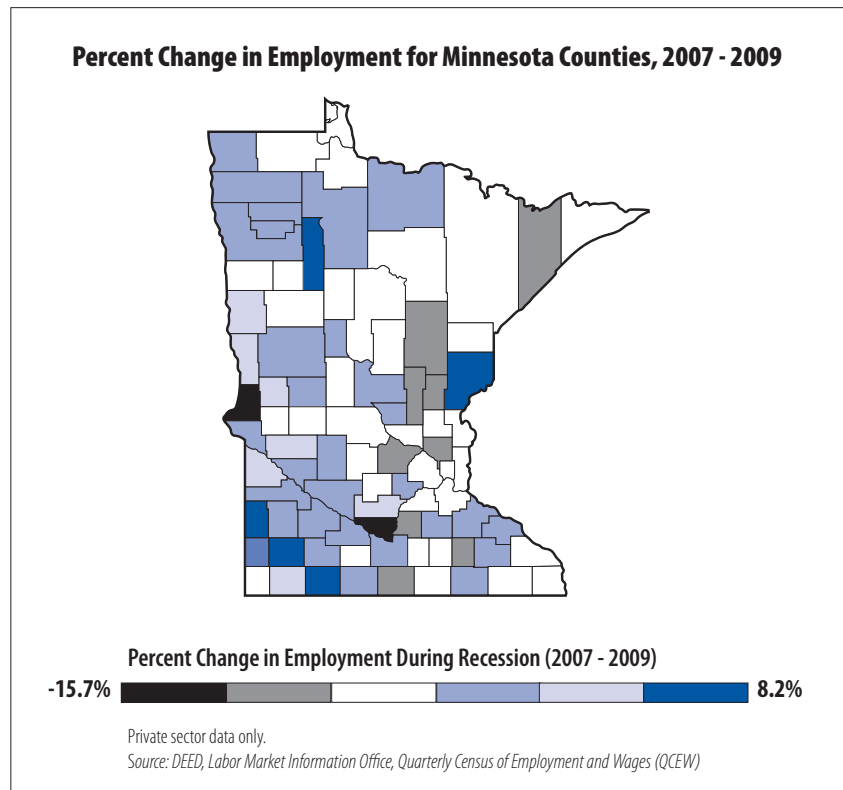


TABLE 1

### Minnesota Counties with Recession Job Losses that Rebounded by 2012

	2007 Employment	2009 Employment	2012 Employment	Numeric Employment Change, 2007-2012	Percent Change in Employment, 2007-2012
Pennington County	7,330	7,267	8,132	802	10.9%
Marshall County	1,574	1,544	1,699	125	7.9%
Stevens County	3,886	3,690	4,143	257	6.6%
Cook County	1,725	1,626	1,820	95	5.5%
Kittson County	1,089	1,056	1,135	46	4.2%
Steele County	19,002	17,964	19,704	702	3.7%
Rock County	2,400	2,252	2,483	83	3.5%
Lake County	3,438	3,127	3,554	116	3.4%
Mahnomen County	616	587	636	20	3.2%
Carver County	28,650	27,524	29,364	714	2.5%
Becker County	10,480	9,895	10,690	210	2.0%
Blue Earth County	32,230	31,256	32,793	563	1.7%
Goodhue County	17,090	16,694	17,234	144	0.8%
Traverse County	810	683	816	6	0.7%
Itasca County	12,487	11,902	12,540	53	0.4%
Olmsted County	83,210	80,763	83,272	62	0.1%
Pope County	3,145	2,966	3,146	1	0.0%
Wabasha County	5,781	5,567	5,782	1	0.0%
Kandiyohi County	18,693	18,281	18,696	3	0.0%
Beltrami County	13,197	12,725	13,198	1	0.0%

*Data are private sector only.*

*Source: DEED, Quarterly Census of Employment and Wages (QCEW).*

Faribault (down 10.8 percent), Dodge (down 10.8 percent) and Le Sueur (down 10.4 percent) also had double-digit employment declines during the recession.

Of the 75 Minnesota counties that experienced job losses

during the recession, only 20 fully recovered and can claim higher average annual employment in 2012 than in 2007 (see Table 1). The five counties with the largest percentage gains in jobs were Pennington (up 10.9 percent), Marshall (up 7.9 percent),

Stevens (up 6.6 percent), Cook (up 5.5 percent) and Kittson (up 4.2 percent).

With just 62 more jobs in 2012 than in 2007, Olmsted County's place on this list is worth noting. Olmsted ranks fifth among Minnesota counties in private-sector employment.

During the recession, 2,447 jobs were lost by businesses in the county, representing 2.9 percent of private jobs. Job declines continued in 2010 with an additional 1,322 jobs lost. By 2012, the county had recouped 3,831 jobs from its 2010 low and exceeded pre-recessionary employment levels by 62 jobs.

### Five Fast-Growing Counties

With just over 8,100 jobs in 2012, Pennington County saw the state's fastest employment growth rate between 2007 and 2012 and the biggest gain in jobs. These gains were largely concentrated in the trade,

education and health services — between 2007 and 2012.

Like Pennington County, Marshall County is located in northwestern Minnesota along the North Dakota border. With 125 more private-sector jobs in 2012 than 2007, the county captured the second-highest percent change in employment. Trade, transportation and utilities is the largest private-sector industry in the county, but small job gains were seen in nearly all major industry sectors between 2007 and 2012.

Stevens County in western Minnesota is home to the city of Morris. The county's major

2007 and 2012, however, was in the natural resources (including agriculture) and mining sector, which is likely driven by its dairy and hog operations. According to the U.S. Department of Agriculture, Stevens County had 560 farms in 2012.<sup>1</sup>

Cook County is the northeastern-most county in Minnesota, located along the North Shore and home to part of the Superior National Forest and the Boundary Waters Canoe Area Wilderness. More than half of the county's private jobs are in the leisure and hospitality sector. That industry shed jobs during the recession but had recovered to within eight jobs of its 2007 employment level by 2012. The trade, transportation and utilities sector saw the largest job gains during those five years, helping to push the county's overall employment level up by 5.5 percent.

For contrast, Kittson County is the northwestern-most county in Minnesota, located along the Canadian border of Manitoba and the North Dakota border. With 1,135 jobs in 2012, Kittson had the fifth-largest percentage growth in private-sector jobs between 2007 and 2012, gaining 46 jobs. Industry employment is concentrated in education and health services and in trade, transportation and utilities. Both sectors saw job gains between 2007 and 2012.



transportation and utilities sector, which accounts for half of private-sector employment in the county. Job losses occurred in the county's other large industrial sectors — manufacturing and

employing industrial sectors in 2012 included manufacturing; education and health services; and trade, transportation and utilities. The largest private employment growth between

## Employment Gains and Losses, 2007 to 2012

Map 2 presents a side-by-side illustration of which counties gained jobs and which did not over the 2007 to 2012 period. Ramsey and Hennepin stand out as having the largest number of jobs to regain before reaching their pre-recessionary private sector employment levels. They still need to regain 12,915 and 9,923 jobs, respectively, to get back to pre-recessionary levels.

In 2012, Anoka (down 4,244), St. Louis (down 2,549), Dakota (down 2,393), Crow Wing (down 2,051), Stearns (down 1,635), Nicollet (down 1,472), McLeod (down 1,031), Washington (down 1,018), and Scott (down 1,017) are still 1,000 or more private-sector jobs below their 2007 employment levels.

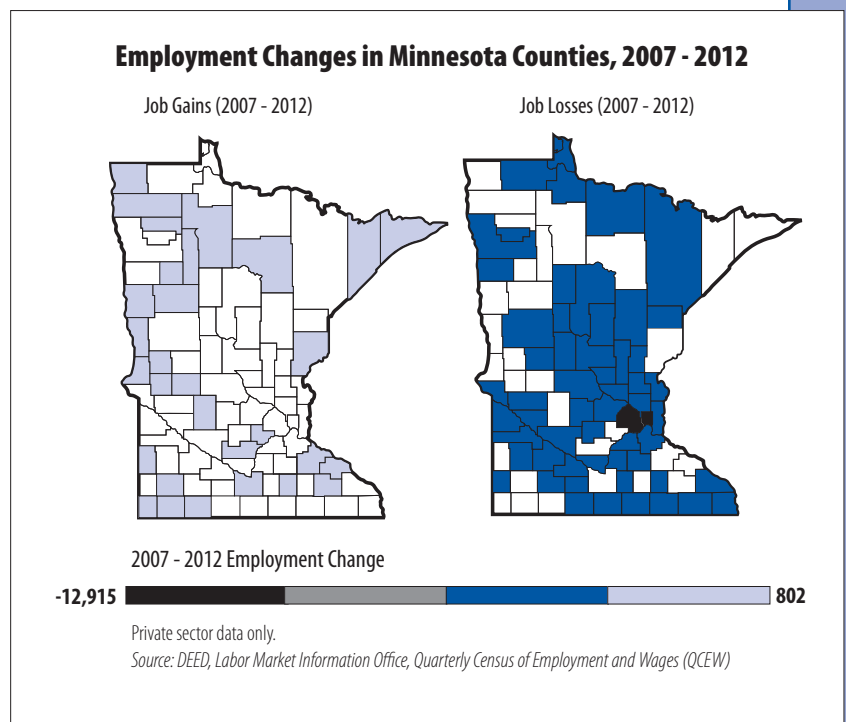
Aitkin County is still 15.9 percent below its 2007 employment level, followed by Nicollet at 12.2 percent.

Swift and Lac qui Parle counties are included in Map 2 as losing jobs between 2007 and 2012. While these counties had job gains between 2007 and 2010, employment in the years since declined to pre-2007 levels.

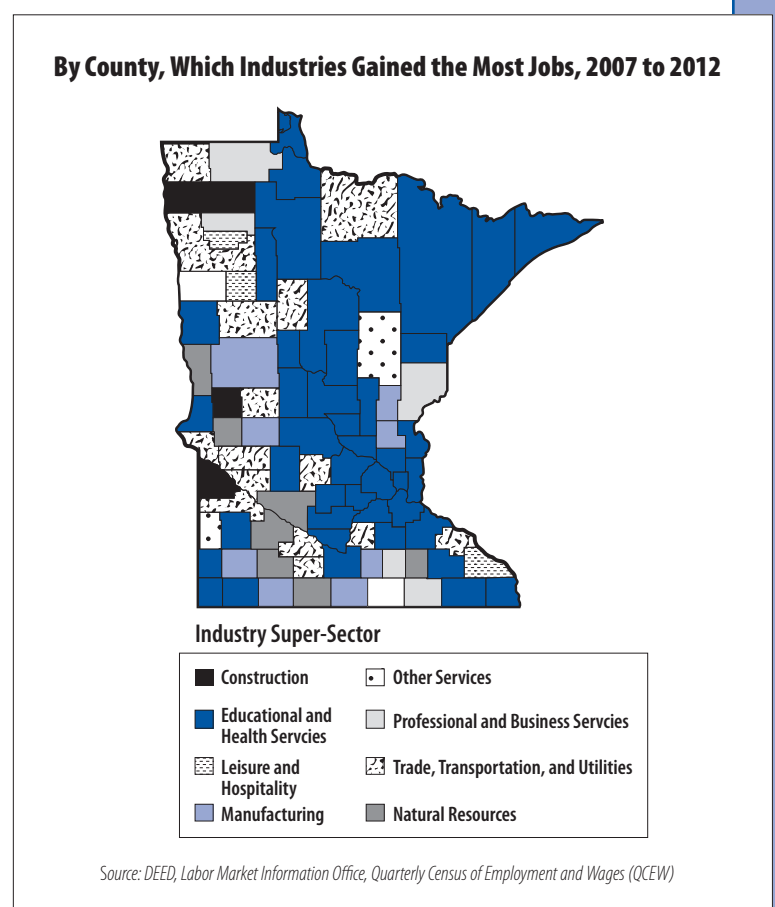
## Industries on the Rebound

A county-level analysis of private employment in 10 industry super-sectors shows that many counties have one or more sectors that have equaled or surpassed their 2007 employment levels. Map 3 highlights the industrial sectors with the highest numeric job gains between 2007 and 2012, while Map 4 shows the sectors with the largest numeric job losses.<sup>2</sup> In 2012, all industrial sectors in Freeborn and Norman counties had private employment levels at or below their 2007 levels.

MAP 2



MAP 3



The most private-sector jobs were recovered in education and health services in 42 counties, and that same sector is above 2007 employment levels in 63 counties (see Table 2).

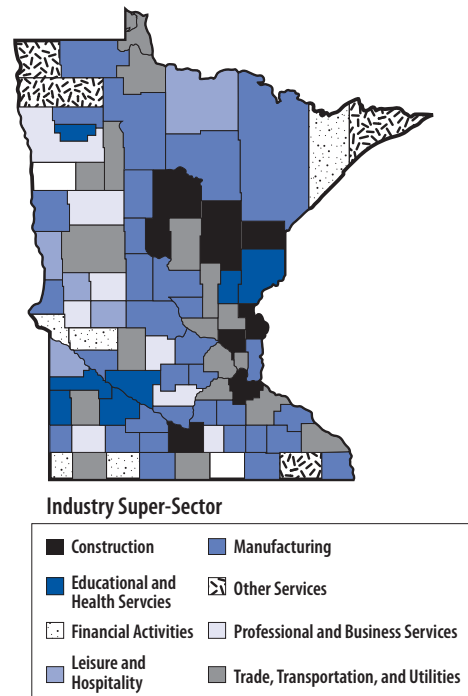
Surprisingly, natural resources and mining was the second-most recovered sector in Minnesota, with 51 counties regaining their pre-recessionary job levels by 2012. And while manufacturing remains the least-recovered sector in 32 counties, the industry has recovered in 22 counties overall. Manufacturing was also the most-recovered industry in eight counties: Isanti, Kanabec, Faribault, Pope, Murray, Jackson, Otter Tail and Waseca.

### Conclusion

Recovery is still underway in more than half of Minnesota’s counties, with 2012 employment levels lagging their 2007 pre-recessionary benchmarks. When 2013 annual average employment data for counties become available at midyear, we can expect to see more counties cross over their 2007 employment levels, and, on net, finally recover from the recession.

Some recessionary employment losses will be permanent, as new industry employment leaders come into prominence in a county. And job gains will not be seen equally in all industries, but for many it’s clear that it’s back to business as usual. **T**

**By County, Which Industries Lost the Most Jobs, 2007 to 2012**



Source: DEED, Labor Market Information Office, Quarterly Census of Employment and Wages (QCEW)

TABLE 2

**Industry Employment by County, 2007 to 2012**

Industry	Number of Counties Where 2012 Employment Exceeds 2007 Employment
Education and Health Services	63
Natural Resources and Mining	51
Trade, Transportation and Utilities	37
Professional and Business Services	34
Other Services	32
Leisure and Hospitality	28
Manufacturing	22
Financial Activities	21
Construction	17
Information	9

Data are private sector only.

Source: DEED, Quarterly Census of Employment and Wages (QCEW).

<sup>1</sup>U.S. Department of Agriculture, Census of Agriculture, 2012. [www.agcensus.usda.gov](http://www.agcensus.usda.gov).

<sup>2</sup>Employment for some industry super-sectors was not available for all counties. This analysis selects the industries with the largest numeric job gains between 2007 and 2012 and the industries with the largest numeric job losses between 2007 and 2012, based on data that were available in both years.

Meet

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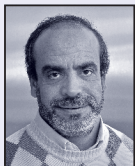
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