State of Illinois
JB Pritzker, Governor

Illinois Economic Report 2023

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2023 Illinois Economic Report

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All data in this report were released prior to August 31, 2023.

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Highlights

- This report covers the 12-month period ending June 2023 focusing on the annual activity in the Illinois labor market and the substate Economic Development Regions. An annual economic report satisfies the requirements of the Department of Labor/Employment and Training Administration's contract deliverable for the Economic Information & Analysis Division of the Illinois Department of Employment Security during the program year covering July 1, 2022 to June 30, 2023.
- Illinois' unemployment rate continued to edge down from June 2022 through June 2023 when it reached 4.0%. This rate was 0.4 percentage point short of the all-time low unemployment rate (3.6%) reached in November and December 2019, just prior to the start of the Covid-19 pandemic in 2020.
- Unemployment rates by race and gender reveal that African-American men and women faced the slowest recovery to pre-pandemic lows although rates declined across all major groups except Hispanic women between June 2022 and June 2023. Illinois unemployment rates by race and gender were higher in all groups compared to the national average, using 12-month averages of not seasonally adjusted data.
- Labor force participation increased slightly in Illinois and the nation between June 2022 and June 2023. Illinois participation rates continue to remain higher than the national average.
- The U.S. and Illinois both saw increased labor force participation among prime age (25 54 years) groups, particularly among women, although Illinois prime-age men also saw increased participation that exceeded the pre-recession level.
- Nonfarm payroll employment continued to grow at healthy rates in the U.S. and Illinois, though both saw
 moderation in their rate of growth in the first half of 2023. In Illinois, the strongest growth sectors during
 the June 2022 June 2023 period were Education and Health Services, Government, Financial Activities
 and Construction. The weakest sectors were Information Services and Professional and Business Services.
- Wage growth moderated significantly in Illinois over the 12-month period covering June 2022 to June 2023, more dramatically than the slowdown in the nation.
- The labor force contracted in Illinois and the ten Economic Development Regions over-the-year from June 2022 to June 2023 with the smallest declines in the East Central, North Central, and Southeast Regions (-0.1% in each) and the largest decline in the Northern Stateline Region (-1.6%).
- Unemployment rates generally increased across the ten Economic Development Regions, from June 2022 to June 2023, although the unemployment rate in the Northeast Region, which includes the Chicago metro area, posted a decline over-the-year.
- As measured by nonfarm payroll employment, all ten Economic Development Regions posted over-the-year increases in June 2023 from June 2022 levels with the largest over-the-year percentage gain in the Northwest Region and the smallest over-the-year gain in the Northern Stateline and Southwest Regions.
- Average Weekly Wages and over-the-year changes in the average weekly wages varied by industry and
 across the ten Economic Development Regions reflecting differences across the regions in their industry/
 occupation mix during the year.

Technical Notes for the Reader

Interpretation of Data

All data are not strictly comparable when we review national, state, and local area statistics, even though much of the data come from a single source – the U.S. Bureau of Labor Statistics (BLS). National data, reported monthly, are primarily adjusted for seasonal variation (seasonally adjusted, SA). That is, data are adjusted for normal seasonal variations that happen at roughly the same time each year. For instance, retail trade employment tends to be higher in November and December every year when retailers hire workers in anticipation of holiday sales. Retail trade employment drops off sharply in January each year. By adjusting retail trade employment for seasonal behavior, we can see underlying trends and changes in behavior that occur for reasons other than the time of year. Not only is demand for labor seasonal (as in the retail trade example), but supply is also seasonal. Consider that teens enter the labor force during summer months, then leave the labor force during the school year. This can notably impact the unemployment rate. The BLS seasonally adjusts national and statewide monthly unemployment rates and nonfarm payroll employment.

Local data are not always seasonally adjusted. When data are not seasonally adjusted (NSA), then month-to-month variations that are caused by underlying seasonal trends rather than underlying changes in demand or supply may not be evident or distinguishable. When comparing data that are not adjusted for seasonal variation, it is best to look at year-over-year changes rather than month-over-month changes.

In this report, we primarily compare seasonally adjusted employment and unemployment for Illinois relative to the nation except for a couple of instances described below. Since data are seasonally adjusted, any monthly change generally reflects changes in demand. Yet, when we compare Illinois statewide statistics to Economic Development Region (EDR) data, the only way to eliminate differences in seasonal variation across regions is to focus on year-over-year changes in NSA data.

Seasonal adjustment issues are also evident in some of the statewide data. For instance, in breaking down unemployment rates by race, gender and age, we must look at unadjusted figures. Detailed labor market demographic statistics come from the U.S. Census Bureau's Current Population Statistics, a household-based survey. The household survey sample size is smaller than the Establishment Survey from which the nonfarm payroll figures are estimated. As a result, the monthly figures are volatile. It is best to average 12 months of data to review the trends in these series. While the U.S. data do provide information by race, gender and age on a seasonally adjusted basis, the comparable Illinois data are not available on a seasonally adjusted basis. Consequently, when we compare Illinois statewide figures to the national data by race, gender, or age, we use the 12-month average of not seasonally adjusted data for both Illinois and the U.S.

It is important to keep in mind that seasonally adjusted data cannot be compared with data that are not adjusted for seasonal variation. It would be like comparing apples to oranges. Rule of thumb: Always compare like data (Seasonally Adjusted or Unadjusted); if data are seasonally adjusted, one can compare month-to-month changes; if data are not seasonally adjusted, proper comparisons are to figures for the same month a year earlier.

Stories abound in the national press about a potential upcoming recession. We are not forecasting whether a recession will begin in 2023, but simply note that a recession is officially determined by the National Bureau of Economic Research (NBER), a private organization. Economists on the Business Cycle Dating Committee typically declare economic peaks and troughs long after the economy has fallen into recession or bottomed out and begun to recover. Incidentally, the NBER looks at a wide range of indicators to determine whether a recession has begun, notwithstanding popular belief that two consecutive declines in quarterly growth in Gross Domestic Product signal recession.

In 2020, the National Bureau of Economic Research declared that the U.S. economy peaked in February 2020 and bottomed in April 2020. This was true for the national nonfarm payroll statistics. In Illinois, employment figures peaked in January 2020, though they bottomed in April 2020 along with the nation. The national recession is defined as beginning in February and ending in April, while the Illinois recession began in January and ended in April. It is not unusual for individual states to peak before or after the nation; nor is it unusual for individual states to bottom before or after the nation.

An economic business cycle is more than just a peak and trough. For instance, once the economy hits bottom, it begins to recover. The point of recovery ends and expansion begins when the indicator's prior peak values are reached. For instance, U.S. national payrolls reached/surpassed their prior peak values (from April 2020) in June 2022. Thus, the nation began the expansionary phase of the business cycle. We won't know when a new peak has been reached until payroll employment once again turns down and the cycle begins again.

Interpretation of Industry Codes

Industry data, as defined by the North American Industry Classification System (NAICS) codes, are available by detailed industries which are then rolled up into summary statistics. This report covers industry information at the super sector level and sometimes some broad subsectors. For instance, Manufacturing is the super sector whereas Durable Goods Manufacturing and Nondurable Goods Manufacturing are subsectors. Additional industry detail would consider Food Manufacturing within Nondurable Goods and Primary Metals within Durable Goods Manufacturing. Another example is that Trade, Transportation and Utilities are rolled up as a major industry sector, which can be broken down into three subcategories: Wholesale Trade, Retail Trade, and Transportation, Warehousing and Utilities. Each of the subcategories can be broken down further within broad categories such as Durable and Nondurable Wholesale Trade; a wide variety of Retail Trade such as Food Stores, General Merchandise Stores and Gas Stations; Transportation categories such as Truck, Air, or Rail Transportation. This report will focus on summary level data.

Section 1: Labor Market Analysis of the State of Illinois

National Economic Landscape 2022 - 2023

The economy does not stand still, and the U.S. economic landscape is somewhat different in mid-2023 than it was a year ago when we published our retrospective analysis of the Covid-19 pandemic-induced recession and recovery in the 2022 Annual Economic Report. As we'll show later in this report, national employment growth and the civilian unemployment rate recovered pre-pandemic levels in 2022. Labor demand remained strong in the 12-month period from July 2022 through June 2023 – indicated by a variety of labor market indicators. As employment conditions remained tight, wage pressures mounted and then modestly subsided as did inflationary pressures during this period.

With a strong recovery in the nation's labor market and pandemic program-related spending, Federal Reserve policymakers became increasingly concerned that inflationary pressures were not abating quickly enough even though supply constraints were becoming less onerous in the second half of 2022. Exhibit 1 shows key indicators that matter to the Federal Reserve: consumer prices (measured in total by the well-known CPI and by the core components by the nonfood, nonenergy PCE deflator preferred by economists) as well as a wage measure reported monthly with the employment report. The Consumer Price Index (CPI-U) soared to levels last seen in the 1980s. The Fed's preferred price index, which is more stable and reflective of core consumer goods and services, the Personal Consumption Expenditure (PCE) Core Index (excluding food and energy prices) also increased to levels that were well above the Fed's acceptable range (0.0 to 2.0%).

After leaving rates unchanged in 2020 and 2021 in reaction to the 2020 recession, the accelerating inflation led the Federal Reserve to begin to tighten credit conditions by increasing the federal funds rate in March 2022. They raised the target (federal funds) rate ten times from 0.125% in March 2022 to 5.125% in May 2023 to ensure that inflation would settle within their preferred range. In June, the Federal Open Market Committee (FOMC) left its target rate unchanged, but noted they had not completed their tightening cycle and would likely raise rates again in 2023. Yet, policymakers were not in agreement whether they have raised rates sufficiently to tame inflation pressures. (Spoiler: The Federal Reserve did raise its target federal funds rate by 25 basis points on July 26, 2023, stating that "The Committee was highly attentive to inflation risks."2)

For instance, Raphael Bostic, President of the Federal Reserve Bank of Atlanta said, "Our policy rate is 5% to 5.25%. I think that's moderately restrictive and I think that today that could be enough to get us back to the 2% target..." at a presentation he gave on June 23, 2023.³

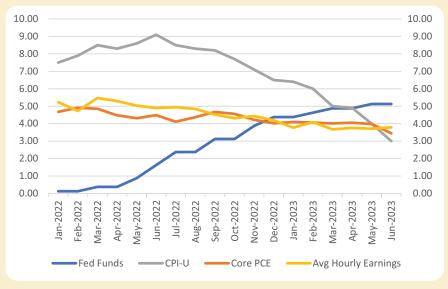
In contrast, Federal Reserve Chairman Jerome Powell said, "Our commitment isn't to a particular number of rate hikes; it is to a stance of policy that's sufficiently restrictive to bring inflation down to 2%," speaking at a conference in Madrid on June 29, 2023.⁴

After the June CPI report, Mary Daly, President of the San Francisco Federal Reserve Bank said, "The data have come in (with) surprising strength, with inflation persistently printing too high...So against that backdrop you think, well there's more that we need to do."⁵

While the Consumer Price Index (CPI) posted its highest over-the-year increase of 9.1% in June 2022, it has since moderated to a year-over-year gain of 3.0% in June 2023. But it is not yet in line with the Federal Reserve's preferred inflation target of 2%. The core PCE index, which excludes food and energy prices, has not yet come down to the target inflation rate either, reaching 4.1% in June. Wage increases, measured by the year-over-year percent change in average hourly earnings, have decelerated from their highest rate but are still hovering around 4.4% in June.

Federal Reserve tightening was expected to tame inflationary pressures by softening economic and labor market conditions. Typically, rising interest rates dampen the economy by reducing spending on interest-sensitive goods. The housing market has declined from the heady pace of a few years ago as consumers face 7% rather than 3% mortgage rates. Now that consumers are no longer facing supply constraints on car dealer lots, they are finding higher auto loan rates at commercial banks: much closer to 8% in the second quarter of 2023 compared to 4.5% in the first quarter of 2022.

Exhibit 1: U.S. Annual Inflation Rates and the Federal Funds Target Rate, Seasonally Adjusted, January 2022 – June 2023



Source: Federal Open Market Committee, U.S. Bureau of Labor Statistics and U.S. Bureau of Economic Analysis via Haver Analytics



Announcements by large tech companies laying off thousands of workers suggested that employment gains would soften - and perhaps that nonfarm payroll growth would moderate sufficiently to lead to a rising unemployment rate in the U.S. Indeed, average monthly gains in national nonfarm payrolls moderated significantly when comparing the first nine months of 2022 (average monthly gains of 438,000) to the most recent nine-month period October 2022 - June 2023 with average monthly increases of 280,000 per month. Yet one cannot call the growth in payrolls "slow" by historical standards. (The over-the-month increase in nonfarm payroll employment between January 1980 and June 2023 averaged 125,000 per month. This includes declines during recessions and above-average growth during recoveries.)

In addition to nonfarm payrolls, policymakers and businesses are also monitoring the Job Openings and Labor Turnover Survey (JOLTS), a monthly report produced by the U.S. Bureau of Labor Statistics (BLS), to determine whether labor market conditions are less tight than a year ago. If the Job Openings Rate and the Quits Rate moderates, it would suggest that labor tightness is easing somewhat. Indeed, the job openings rate decreased in June 2023 over levels seen in June 2021 and 2022. The U.S. quits rate has also edged down in June 2023 compared to the prior two years. The Fed continues to note that their decisions depend on all the latest economic indicators at their disposal when making policy decisions.

This report will review labor market conditions during the June 2022 – June 2023 period in Illinois as businesses and consumers in the state navigated within the national economic landscape over the past year and how Illinois businesses and workers react to policy decisions made at the national level. Illinois' labor market will be viewed relative to the national labor market. We will look at labor supply and demand in the state, along with wages. We will then provide an overview of how Illinois' ten Economic Development Regions (EDRs) have fared this past year comparing their growth patterns relative to Illinois as a whole.

8.0 ■ Openings ■ Quits 6.7 7.0 6.5 6.0 5.0 4.0 2.8 2.7 3.0 2.4 2.0 1.0 0.0 June 2023 June 2021 June 2022

Exhibit 2: U.S. Job Openings Rate and Quits Rate: Seasonally Adjusted, June 2021 - 2023

Source: Job Openings and Labor Turnover Survey, U.S. Bureau of Labor Statistics via Haver Analytics

Labor Supply

Unemployment

Most of the recovery from the pandemic-induced jump in unemployment occurred shortly after the country's recession trough. In the U.S., the unemployment rate fluctuated between a low of 3.4% and high of 3.7% between June 2022 and June 2023; just looking at the two end points, the unemployment rates were identical at 3.6%. Illinois continued to edge down by small amounts between June 2022 and June 2023 ending this period with a rate of 4.0% as seen in Exhibit 3. Illinois stood 0.4 percentage point above its

pre-pandemic low of 3.6% reached in November and December of 2019.

Illinois' unemployment rate is typically higher than the national average and this pattern continued during the past year. Between 2010 and 2019, the Illinois unemployment rate was on average 0.8 percentage point higher than the U.S. rate; from 2020 through June 2023, the Illinois rate was on average 0.9 percentage point higher than the U.S. rate. While the overall unemployment rate did not move very much over the 2022-2023 period, the U.S. and Illinois have shown some variation by race and gender.

7.0 6.4 U.S. 5.9 6.0 5.0 4.4 4.0 4.0 3.6 3.6 3.0 2.0 1.0 0.0 June 2021 June 2022 June 2023

Exhibit 3: Civilian Unemployment Rate: U.S. and Illinois, Seasonally Adjusted, June 2021 - 2023

Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

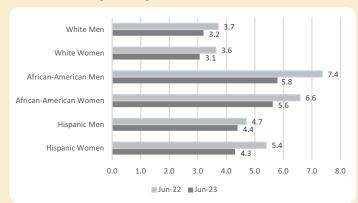


Unemployment by Race and Gender

Reviewing unemployment rates by gender and race, it is evident that not all groups saw equal improvement in their circumstances. While seasonally adjusted monthly unemployment rates by gender and race are available for the national figures, seasonally adjusted monthly unemployment rates are not available for Illinois (or any state). Monthly unadjusted rates are too volatile to assess meaningfully, so we looked at the 12-month moving averages for both Illinois and the U.S. to appropriately compare unemployment rates for all the groups aged 16 and over. As illustrated in Exhibits 4 and 5, we compared the 12-month average rates for June 2023 to the 12-month average ending June 2022. Across the board, the U.S. rates revealed that the unemployment situation improved for men and women of all races over the year. White men and women had lower unemployment rates than African-American and Hispanic men and women. African-American men and women had the highest unemployment rates, but all unemployment rates were below 6% in the 12-month period ending June 2023.

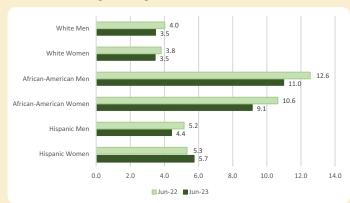
The Illinois picture is not the same. In the 12-month period ending June 2023, all groups except Hispanic women posted over-the-year declines in their unemployment rates. The unemployment rates for White men and women were 3.5% and the unemployment rate for Hispanic men decreased to 4.4%. The unemployment rate for Hispanic women inched closer to 6%. African-American men and women saw a larger decline in their unemployment rates over-the-year than the other groups but posted much higher unemployment rates in June 2023 than their White and Hispanic counterparts with rates remaining in the double-digits for African-American men, but falling below 10% for African-American women. It is possible that at least one factor preventing a more robust recovery in unemployment rates for these groups is that they are employed in those industries that suffered most during the recession and that have not yet fully recovered.

Exhibit 4: Unemployment Rates by Race and Gender for Men and Women (Aged 16+) in the U.S., Not Seasonally Adjusted, 12-Month Average Ending June 2022 and 2023



Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis

Exhibit 5: Unemployment Rates by Race and Gender for Men and Women (Aged 16+) in Illinois, Not Seasonally Adjusted, 12-Month Average Ending June 2022 and 2023



Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis

Labor Force Participation

Labor force participation in the nation or the state reveals the labor supply able and willing to work. The U.S. Bureau of Labor Statistics counts only those people who actively search for work and those employed. A high labor force participation rate is considered good for an economy because it signifies that a greater share of the population is working or available to work. All else equal, a state with a higher-than-average participation rate also needs a higher-than-average employment participation rate to not be troubled by high unemployment rates. The labor force includes both the employed and those actively seeking work, so the employed component of the labor force can increase relative to those actively seeking work, which will in turn drive down the unemployment rate. But, if the labor force decreases due to a fewer number of people actively seeking work, it will reduce the unemployment rate, not because a greater number of people are working, but because fewer people are available to work.

To a large extent, the labor force participation rate is determined by demographic factors such as gender and age. Men are more likely than women to participate in the labor force. The young (aged 16-24) and the old (over 65) tend to have much lower participation because the younger aged groups are still in school while the older population are often retired. During economic downturns, some people drop out of the labor force because jobs are more difficult

to find and they may have alternative uses of time (going to school, taking care of children or elderly parents). When economic conditions improve and jobs are easier to find, many re-enter the workforce.

It is widely recognized that the baby boom generation (1946 to 1964) is retiring as even those born in 1964 are no longer part of the prime-aged (25 to 54) workforce. This naturally depresses the overall labor force participation rate in the U.S. and Illinois as this generation has been leaving the labor market in large numbers. Policymakers and businesses believe that the pandemic-induced recession of 2020 may have hastened retirements in this age group and don't believe this population will all be induced to return. Nonetheless, not all were adequately prepared (financially) for retirement and some of the younger retirees may still re-enter the workforce. A flexible environment might be more conducive to labor force participation by older workers, or even other groups, such as men and women who need to care for children or elderly parents or workers who are disabled.

Recently, *The Wall Street Journal* reported on a trend that shows retirees aged over 65 years old taking positions in the home health industry as personal care, in-home health aides and companions. Some are supplementing Social Security payments while others are earning wages to delay taking Social Security until they reach the age of 70.⁷



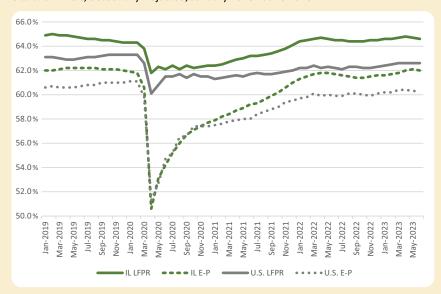
The Washington Post wrote that the U.S. economy recovered 75% of the 4 million workers who stopped working because of retirements, lack of childcare and health concerns. The authors noted that workers returned but switched industries taking on new types of jobs in such sectors as finance and professional services – industries which are more likely to offer remote and flexible opportunities. But other industries did not perform as well, including education, health care and leisure and hospitality. Noted Julia Pollak, chief economist at ZipRecruiter, "In a tight labor market, people migrated into higher paying more comfortable jobs. They managed to trade up, which has left some industries like the public sector and public schools short staffed and struggling."

The labor force participation rate is defined as the ratio of labor force to civilian population (both over 16 years of age). Similarly, the employment-to-population ratio measures the number of employed (over 16 years of age) relative to the civilian population. Illinois' labor force participation rate is higher than

the nation's, a trend that goes back as far as the history of this series (1976). Similarly, Illinois' employment-to-population ratio also tends to run higher than the nation's, although that did not always hold true during the 1980s and in 2002. Even though the unemployment rate in Illinois is higher than the nation's unemployment rate, Illinoisans are actively searching for work at a higher rate than the national average; similarly, a greater share of workers living in Illinois are employed than the national average, as seen in Exhibit 6.

Factors that could play a role in the differences in labor force participation rates between Illinois and the nation include differences in education levels (as higher levels of education correlate with higher participation), differences in health (as healthier individuals can work longer over their lifetime) and of course differences in age and gender. The following section focuses on the prime-age segment of the labor force by gender comparing Illinois to the nation.

Exhibit 6: Labor Force Participation Rate (LFPR) and Employment-to-Population Ratio (E-P): U.S. and Illinois, Seasonally Adjusted, January 2019 - June 2023



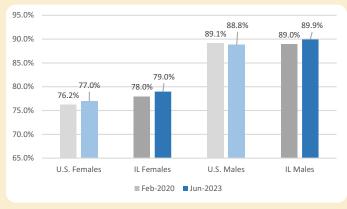
Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

Prime-Age Labor Force Participation by Gender

The New York Times and The Wall Street Journal both heralded the national labor market as "saved" by the prime-aged workforce - those in the 25 - 54-year-old age group.9, 10 While national data are available on a seasonally adjusted basis, state figures for the same demographic are not. Consequently, we report on the 12-month average of the not seasonally adjusted figures for this demographic to compare Illinois to the nation. Exhibits 7 and 8 show the Labor Force Participation Rates and the Employment-to-Population Ratios for Females and Males in the U.S. and Illinois. The chart on the left shows the labor force participation rate has increased for U.S. and Illinois prime-age females between February 2020 and June 2023. That is, women in Illinois and the U.S. aged 25 - 54 have a higher labor force participation rate today versus prior to the start of the pandemic. In contrast, prime-age males in the U.S. are just shy of their pre-pandemic labor force participation rate. Prime-aged males in Illinois have surpassed their pre-pandemic labor force participation rate in the 12-month period ending June 2023 by 0.9 percentage point.

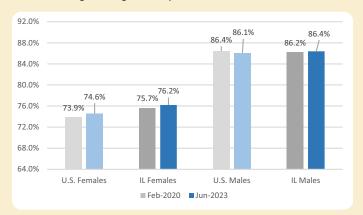
These same scenarios hold when looking at the employment-to-population ratios for prime-aged men and women in the U.S. and Illinois. Women in Illinois and the U.S. have a higher employment-to-population rate in June 2023 relative to prior to the pandemic, as do prime-aged men in Illinois. However, prime-aged men in the U.S. are just shy of the employment-to-population ratio reached in the 12-months ending February 2020.

Exhibit 7: Prime-Age Females and Males Aged 25 - 54 Labor Force Participation Rate: U.S. and Illinois, Not Seasonally Adjusted, 12-Month Average Ending February 2020 and June 2023



Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

Exhibit 8: Prime-Age Females and Males Aged 25 - 54 Employment-to-Population Ratio: U.S. and Illinois, Not Seasonally Adjusted, 12-Month Average Ending February 2020 and June 2023



Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics



Workforce Issues: People are talking about...Remote Work

A Roundup from The New York Times, The Wall Street Journal and The Washington Post

Remote work. Telework. Hybrid Schedules. Zoom. Flexibility. These terms have become ubiquitous in the workforce since the onset of the Covid-19 pandemic in 2020. In fact, telework did not begin with the Covid-19 pandemic. Some people worked from home long before remote work became popular. But there is no question that the pervasiveness of remote work since 2020 has changed the economic landscape. On the one hand, those workers who have the opportunity and ability to work from home embrace the flexibility that it provides making it easier to take care of home responsibilities. On the other hand, employers often deride remote work because it is more difficult to engage their workers and to establish a productive office culture. Indeed, many employers are concerned that worker productivity has declined since working remotely. Working remotely, whether every day or just a few days a week has also changed the commercial real estate market, retail establishments in city centers, and city tax revenues. Recent articles have attempted to quantify the shift in work's reality for many, and to foreshadow the new workplace normal.

Wall Street Journal reporter Gwynn Guilford wrote that according to the Department of Labor, 72.5% of establishments indicated that their workers rarely or never teleworked in 2022 up from 60.1% of establishments that said that their workers never or rarely teleworked in 2021. Prior to the pandemic, 76.7% of establishments claimed that their workers rarely or never teleworked. Share of businesses with hybrid arrangements decreased in all industries in 2022 from 2021 by 13.4 percentage points. But there was a sharp divide among industry sectors. For instance, telework remained common in the Information Services sector where 67.4% of the workforce teleworked some or all the time. The Professional and Business sector still had 49% of their workers teleworking some or all the time. Yet, Financial Activities establishments operating hybrid schedules dropped by half between 2021 and 2022 to 22% from 44.9%. ¹

Steven Rattner discusses some of the confounding aspects of telework in *The New York Times* Op-ed piece entitled "Is Working from Home Really Working?" He suggests that productivity is lower and that working from home can threaten long term damage to economic growth and prosperity. He cites comments made by CEOs such as Meta's Mark Zuckerberg and JP Morgan Chase's Jamie Dimon as indicating remote work was not ideal for businesses. After all, it reduces collaboration, makes mentorship difficult and makes it difficult for new employees to pick up on the corporate culture. Furthermore, it can be seen as white-collar privilege because most other workers don't have the opportunity to work remotely. Yet, Rattner does admit that the views on productivity are inconclusive. Technology has long made remote work possible. And he surmises that no one ever said that commuting and time spent on personal grooming to get to the office were productive. ²

In June 2023, Meta announced that it would require workers assigned to an office to be in the office three days per week although remote positions were not affected. This was scheduled to begin in September. ³ Farmers' Insurance changed their position on remote work with an incoming new CEO. A year ago, Farmers employees were told that they could work remotely, and many made lifestyle changes including selling their cars and moving to other cities. The new CEO reversed this decision and will require three days per week in the office. ⁴ In July, managers from Amazon.com began telling their staff who were remote or working from small offices that they might have to move to main hub locations such as Seattle, New York, or San Francisco. It is yet unclear how many business units are affected but it is evident that the company is escalating its efforts to bring workers back to the office. ⁵

Tech companies other than Meta have also started getting more serious about enticing their workers back to the office at least three days a week. For instance, Google issued an ultimatum that workers' performance evaluations would be negatively impacted by telework while Salesforce.com are incentivizing their workers by offering to donate monies to charities for every day that they are in the office. In this *Washington Post* article, reporters Taylor Telford and Gerrit DeVynck noted that office occupancy rates are stuck below 50% of pre-pandemic levels.⁶

It remains unclear whether remote work or hybrid work will remain the new norm in the labor force. In another *Washington Post* article reporters Caitlin Gilbert, Teddy Amenabar, Hanna Zakharenko and Lindsey Bever use data from the American Time Use Survey undertaken by the U.S. Department of Labor to indicate that "Remote work appears to be here to stay." Working from home seems to be a permanent shift that favors the college educated and primarily women who have many caregiving and household roles. ⁷

Emily Badger of *The New York Times* writes about "The Uneven Effect of Remote Work," listing the share of workers by occupation who are teleworking. The number one occupation are economists and market researchers with 68% working remotely. The next four occupations in the top five are writers and authors (65%), software developers (64%), management analysts (62%) and mathematical science occupations (62%). It is no surprise to see which occupations are at the bottom of the list: mining machine operators (2%), electrical powerline technicians (3%), highway maintenance workers (3%), metal and plastic workers (3%) and butchers (3%). ⁸

Hybrid work is common with the bulk of the workers choosing to work the middle days of the week (Tuesday through Thursday). Ann Marie Chaker of *The Wall Street Journal* wrote that "Mondays are the New Office Fight." Managers would prefer that workers come in on Monday to set the productive tone of the week, but workers are fighting to keep their workdays the middle of the week. Only 7% of the workers come in on Friday. ⁹ The *WSJ's* Chaker finds that senior level managers may be the biggest holdouts on the five-day office week. Based on a McKinsey report, research shows that senior employees prefer having the option to work from home. These top performers have some bargaining power as competitors can poach them with offers of work flexibility. The McKinsey survey of 13,000 office workers in six countries revealed that the largest share of employees who strongly prefer to work from home earned more than \$150,000 per year. ¹⁰

There is no question that there are winners and losers from hybrid and remote work. For instance, office towers with fewer employees don't need furniture or cleaning services. *Wall Street Journal* reporter Peter Grant writes in "Industries Reliant on Thriving Downtowns Suffer from Remote Work" that lawyers, financiers, and brokers may be the hardest hit in this office eco system where leases and sales have dramatically declined reducing revenue for brokerage commissions. Even when leases do happen, they are for shorter time periods, again reducing commissions for leasing agents. ¹¹

Overall, pundits who suggest remote work will disappear indicate that it would happen when workers lose their bargaining power to demand flexibility once the economy weakens and unemployment rises. Yet, many analysts are convinced that the hybrid office is the new normal.

Footnotes

- 1. Gwynn Guilford, "Work from home Era Ends for Millions of Americans," *The Wall Street Journal*, March 25, 2023.
- 2. Steven Rattner, "Is Working from Home Really Working", The New York Times, March 22, 2023.
- 3. Ginger Adams Otis, "Meta Requires Office Workers to Return to Desks Three Days a Week," *The Wall Street Journal*, June 1, 2023
- 4. Peter Grant, "A New CEO Says Employees Can't Work Remotely After All, and They Revolt," *The Wall Street Journal*, June 6, 2023.
- 5. Sebastian Herrera and Dana Mattioli, "Amazon is Asking some Employees to Relocate, Return to Main Hub Offices," *The Wall Street Journal*, July 21, 2023.
- 6. Taylor Telford and Gerrit DeVynck, "To Fill Offices, Google issues ultimatum while Salesforce Tries Charity," *The Washington Post*, June 7, 2023.
- 7. Caitlin Gilbert, Teddy Amenabar, Hanna Zakharenko, Lindsey Bever, "Remote Work appears to be here to stay, especially for women," *The Washington Post*, June 22, 2023.
- 8. Emily Badger, "The Uneven Effect of Remote Work in one list," *The New York Times*, June 26, 2023.
- 9. Ann Marie Chaker, "Mondays are the New Office Fight," *The Wall Street Journal*, June 26, 2023.
- 10. Ann Marie Chaker, "The Biggest Holdouts on the five-Day Office Week: Bosses," *The Wall Street Journal*, July 19, 2023.
- 11. Peter Grant, "Industries Reliant on Thriving Downtowns Suffer from Remote Work," *The Wall Street Journal*, July 3, 2023.

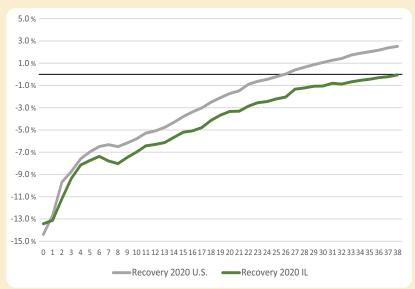
Labor Demand

Industry Employment

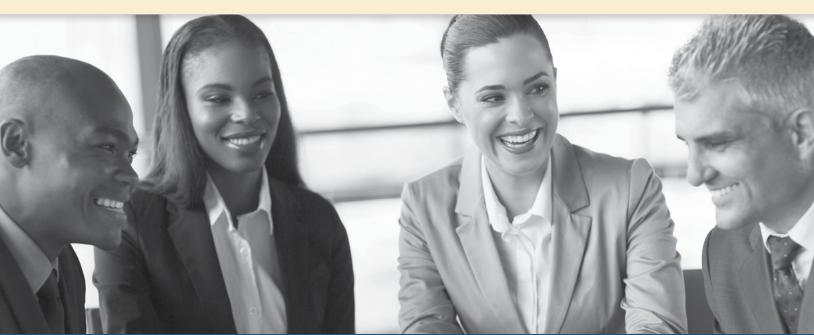
In a business cycle, economists say that a new expansion begins once the economy reaches its prior peak level and begins to exceed it. Until a new peak is reached, the business cycle is still considered in recovery. National nonfarm payrolls regained their prior peak 26 months after the trough of the recession, in June 2022 as illustrated in Exhibit 9. The U.S. labor market is now experiencing an expansion as nonfarm payrolls reach new highs monthly. In June 2023, Illinois was just shy of reaching its prior peak nonfarm payroll level 38 months after the trough, posting -0.1% (-3,100 jobs) below its prior peak level.

Growth rates among the various industry sectors were uneven in the U.S. and Illinois over the past three years measuring from June to June. In total, industry payrolls grew 13.5% in the U.S. and 12.5% in Illinois between June 2020 and June 2023. As seen in Exhibit 10, the bulk of the growth came in between June 2020 and June 2021, in the early days of labor market recovery. Labor market growth moderated in 2022 and 2023 in both the U.S. and Illinois. Focusing primarily on the growth in the 12-months ending June 2023, we see in Exhibit 10 that industry sectors posted uneven growth in Illinois and the U.S. Illinois payrolls grew more rapidly than U.S. payrolls in Financial Activities, Educational and Health Services,

Exhibit 9: Nonfarm Payroll Jobs Recovery: U.S. and Illinois, Seasonally Adjusted, 2020 - 2023



Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics



and Government. Three industries posted about the same growth in payrolls in Illinois and the U.S.: Construction, Leisure and Hospitality and Other Services. Illinois payrolls grew less rapidly than U.S. payrolls in Mining, Manufacturing, Trade, Transportation & Utilities, Information Services and Professional and Business Services. Among these latter (slower growth) industries, Illinois payrolls posted outright declines over-the-year in Information Services and Professional and Business Services.

As the economy moves away from its recovery phase and towards its expansionary phase of the business cycle, it makes sense that employment growth would moderate. It is surprising though that one of the industry sectors that was a strong economic driver since the recovery began in Illinois – Professional and Business Services – would post an over-the-year decline in employment. While some subsectors of Professional and Business Services have weakened, others have remained healthy or strengthened.

Exhibit 10: Over-the-Year Growth Rate in Nonfarm Employment by Industry Sector: U.S. and Illinois, Seasonally Adjusted, June 2021 - 2023



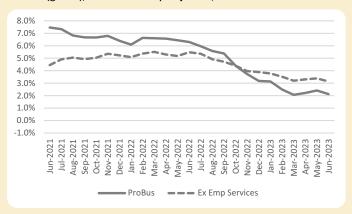
Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

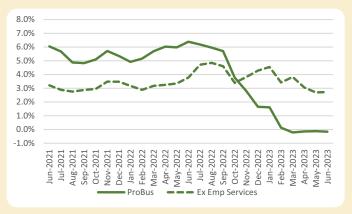
Most of the individual subcomponents don't have large industry shares, but one of them – Employment Services which includes Temporary Help Services – accounts for almost a quarter of Total Professional and Business Services. Employment Services has posted eight consecutive over-the-year declines through June 2023. Excluding Employment Services from Professional and Business Services, we are left with positive over-the-year growth in this sector. Exhibit 11 on the left shows a similar pattern for the U.S. Professional and Business Services with and without Employment Services included, although U.S. payrolls were somewhat stronger overall. But Illinois and the nation both are showing declines in growth rates for Employment Services.

Economists have marveled at the strength in the U.S. labor market even as the Federal Reserve has

tightened credit conditions by raising rates 10 times during the past 18 months (11 times counting July's rate hike). Employment Services payrolls are highly cyclical and typically have begun to decline long before a general downturn in the economy begins. Even without considering a general downturn in the economy, it would make sense that some of the jobs within this sector begin to decline as companies hire permanent employees rather than temporary ones. Many analysts have noted that large layoffs in the tech sector have not appeared to register in the nonfarm payroll data although anecdotal evidence was that the laid off tech workers were finding jobs quickly. It is possible we are seeing some substitution of tech workers moving jobs and perhaps displacing some temporary workers.

Exhibit 11: Total Professional and Business Services and Excluding Employment Services: Over-the-Year Percent Change, U.S. (gray) and Illinois (green), Not Seasonally Adjusted, June 2021 – June 2023





Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

Job Openings in Illinois

Nonfarm payroll employment through June 2023 shows that industry demand continued to move along at a good clip in Illinois. To get a lead on whether demand would continue to grow in upcoming months, we monitor the Help Wanted Online job openings report to provide an indication of coming changes in job demand as well as the industries and occupations that are currently in demand locally. Exhibit 12 shows the pattern of unique job postings for Illinois from January 2020 to July 2023. Not surprisingly, current job postings are down from the 2021-22 highs but still higher than the pre-pandemic job postings for

January 2020. This indicator is beneficial in that it provides timely data in contrast to many government-issued statistics that are reported with a lag. It also allows us to see where the job postings are around the state. One important distinction to keep in mind is that not all industries post ads online. For example, construction and manufacturing sectors are not well represented in this indicator of job openings. The construction industry uses union hiring halls while the manufacturing industry uses temp help agencies. The Economic Information & Analysis Division publishes a monthly statewide report featuring top employers and top occupations in demand as well as monthly reports by Economic Development Region.

Exhibit 12: Monthly Job Openings in Illinois, January 2020 – July 2023



Source: Live Help Wanted Online, Lightcast



Workforce Issues: People are talking about...A.I.

A Roundup from *The New York Times*, *The Wall Street Journal* and *The Washington Post*

A day doesn't go by without the requisite article in *The Wall Street Journal* or *The New York Times* about how artificial intelligence (A.I.) will change the workforce forever and perhaps even eliminate your job very soon. Indeed, even Hollywood writers are worried that new original scripts won't be needed, and actors are concerned that their likeness will be re-created digitally. Will artificial intelligence really replace workers in all occupations? How worried should employees be about their jobs? Will this report be written by ChatGPT next year? Certainly, occupations evolve with automation and technology, but rest assured that this report will not be generated by a chatbot next year, and a little discussion about A.I. will reveal why.

What is generative A.I. and ChatGPT?

Generically, a chatbot is also referred to as generative artificial intelligence (A.I.) because it produces content from text to images through sophisticated systems. ChatGPT, a specific chatbot, was released by OpenAI, a strategic partner of Microsoft. It was created by training on a vast compilation of articles, images, websites, and social-media posts scraped by the internet as well as real-time conversations with human contractors. Sources from a chatbot aren't fact-checked so information coming from a chatbot is not necessarily accurate. GPT stands for Generative Pre-trained Transformer. These transformers are specialized algorithms that find long range patterns in sequences of data. The generative A.I., or ChatGPT learns from inputted data. This means that the company OpenAI has access to the inputs and outputs that people use for the chatbot. ¹

How are people using generative A.I. today?

We have several examples on some ways that people are currently using generative A.I. For instance, *New York Times* reporter Ceylan Yeginsu spent a few days in Milan and decided to compare a generative A.I. (a beta version of Expedia's travel planning chatbot powered by ChatGPT) to a personal Milan-based travel advisor. While the chatbot provided a reasonable itinerary it was not without its faults. The human-provided itinerary was better in that the travel advisor began by asking many questions about the traveler's preferences. In addition, the human travel advisor (not the chatbot version) was able to offer an itinerary that was easy to follow because each stop was a short distance to the next one. The reporter also had greater faith in the judgment of the human advisor rather than the ChatGPT advisor as she felt compelled to confirm the information provided with her own research. But one of the benefits of the ChatGPT was that it was available 24/7 and ready to answer questions and provide information at any time day or night. ²

A.I. technology is being using to create music with voices of established artists and this is raising ethical and legal questions. Former Beatle Paul McCarthy has used new creative technologies over his career and decided to use A.I. to help complete a last Beatles song in which it made use of a demo with John Lennon's voice. ³

Dr. Daniela Lamas, a contributing Opinion writer to *The New York Times*, offered her thoughts on the advantages and disadvantages of generative A.I. in the medical profession. Would A.I. be able to provide better diagnosis than trained professionals? She believes that A.I. could easily be used in work that requires pattern recognition such as reading X-rays. Also, she points to A.I. programs that help write daily patient notes. ⁴ Indeed, Steve Lohr of *The New York Times* focuses on doctors who benefit from their software programs that use A.I. algorithms to help summarize doctors' patients notes, reducing workload by several hours per day. ⁵

In the classroom, a pilot test in the Newark school district is using an automated teaching aid called Khanmigo. It is used as a tutor to help students with their problem-solving skills – not just to provide answers. The teachers in the Pilot Program are finding it useful as it allows them to provide greater attention to those students that need extra help while also allowing students who are understanding the material to advance at their own speed with the help of the chatbot. ⁶

Heather Haddon of *The Wall Street Journal* writes about a different use for a chatbot that has the ability for widespread use. "Julia" works the drive-through at White Castle in Merrillville, Indiana and is an example of a chatbot being used at other fast-food places as well. Customers realize that the order-taker is not human and is not universally liked. In an industry where job turnover is high and it is more difficult to find staff, this may be a trend that becomes more pervasive sooner rather than later. ⁷

Some examples of generative A.I. show that significant disruptions in the workplace are already taking place. For instance, *Washington Post* reporters Verma and DeVynck write about a freelance copywriter and a content writer who both saw their business dry up because of ChatGPT. In both cases, their former clients admitted that the human writers were better than the A.I.-produced content, but for the price, they were fine with the ChatGPT. One of the writers started a dog walking business while the other enrolled in courses to become an HVAC technician. ⁸

Computer coders are not immune to losing their jobs either in this new world of generative A.I. Reporter Christopher Mims of *The Wall Street Journal* describes how tech companies have shifted their hiring practices from a range of skilled workers to using primarily high-skilled software engineers aided by A.I. for the work previously done by the younger early-career programmers. So how will the early-career programmers develop into experienced programmers if they don't get the chance to learn on the job and move up the ladder? ⁹

In an interesting twist, some companies are preventing their employees from using chatbots. They worry that company secrets could be spilled. In fact, to get output from a chatbot, you need to provide specific information into the bot. According to OpenAI, ChatGPT users could "talk with the bot in private mode and prevent their prompts from ending up in its training data." Yet, the black box concept of how the generative A.I. works still raises concerns among employers. A key feature of the chatbot is that bot is designed to provide answers. In some cases, it has provided erroneous answers. In one instance New York lawyers were sanctioned after they filed a ChatGPT-generated legal brief with fictitious cases and legal opinions. ¹⁰

Artificial intelligence (A.I.) or generative A.I. will no doubt change the workforce. But as *New York Times* reporter Sarah Kessler writes, "nobody agrees how." Ten years ago, economists Carl Benedikt Frey and Michael A. Osborne predicted that a whole range of occupations were likely to be automated, but these drastic predications have not yet come to pass. ¹¹ Kessler notes that technology automates tasks, not entire occupations. Consider that A.I. can be used as a tool. For instance, a digger who previously used a shovel now can use an excavator more productively. But it also means that fewer diggers will be needed because of the significant tool enhancement (excavator). In a different instance, technology may provide a nurse or medical professional with enhanced information. Now the medical professional is more productive and can better help the patient. It doesn't mean that fewer medical professionals are needed, but all medical professionals benefit from the enhanced information. In this complementary technology, it does not necessarily lead to fewer professionals, just all being more productive. The question that no one can answer at this point is how much technology will replace labor, and how much will complement it? ¹²

The Washington Post reported on a McKinsey study that predicted more women than men would be negatively impacted by automation and artificial intelligence because they are overrepresented in the low-paying occupations where tasks can be more easily automated such as office support, food services and customer service and sales. In the same vein, African-American and Hispanic men without college degrees would also be negatively impacted. The study looks at job changes through 2030. ¹³

These potential job threats prompt questions about worker protections. *New York Times* reporter Emma Goldberg writes that executives have asked government to take on the responsibility in supporting workers through labor market disruptions. She cites a Goldman Sachs study that generative A.I. could automate activities equivalent to 300 million full-time jobs globally. An IBM chief executive estimates that 30% of white-collar staffers could be impacted. Historically, automating eliminates some jobs but can also create other new jobs. Nevertheless, short term instability of job displacement could be devastating to those workers whose jobs are eliminated. Government re-training programs might offer some help as they have done in the past. Harry Holzer, labor force expert from Georgetown University says that one key problem to A.I. is that it's a moving target. ¹⁴

Potential regulation has only just begun. The White House announced on July 19, 2023, that seven leading A.I. companies in the U.S. agreed to voluntary safeguards on the technology's development. But *The New York Times* noted that the safeguards are not enforceable and could be interpreted differently by each of the companies. ¹⁵

Undoubtedly, A.I. will impact the national – and global – workforce in upcoming years causing disruptions with favorable and unfavorable implications. It was noted that typically entire occupations are not eliminated by technology, but repetitive tasks within occupations can be automated. Workers who take advantage of lifelong learning to continuously update and upgrade their skills will best survive the A.I. environment.

Footnotes

- 1. Karen Hao, "What is ChatGPT? What to Know About the AI Chatbot," *The Wall Street Journal*, May 16, 2023.
- 2. Ceylan Yeginsu, "In Milan, Putting an AII Travel Advisor to the Test," *The New York Times*, June 13, 2023.
- 3. Derrick Bryson Taylor, "Paul McCartney Says A.I. Helped Complete Last Beatles Song," *The New York Times*, June 13, 2023.
- 4. Daniela J. Lamas, "There's One Hard Question My Fellow Doctors and I Will Need to Answer Soon," *The New York Times*, July 6, 2023.
- 5. Steven Lohr, "A.I. May Someday Work Medical Miracles," The New York Times, June 26, 2023.
- 6. Natasha Singer, "In Classrooms, Teachers Put A.I. Tutoring Bots to the Test," *The New York Times*, June 26, 2023.
- 7. Heather Haddon, "Welcome to White Castle. Would You Like Human Interaction with That?" *The Wall Street Journal*, June 13, 2023.
- 8. Pranshu Verma and Gerrit De Vynck, "ChatGPT took their jobs. Now they walk dogs and fix air conditioners," *The Washington Post*, June 2, 2023.
- 9. Christopher Mims, "What Will AI Do to Your Job? Take a Look at What It's Already Doing to Coders," *The Wall Street Journal*, June 30, 2023.
- 10. Taylor Telford and Pranshu Verma, "Employees want ChatGPT at work. Bosses worry they'll spill secrets." *The Washington Post*, July 10, 2023.
- 11. Carl Frey and Michael Osborne, "The Future of Employment: How Susceptible are Jobs to Computerization?" Technological Forecasting and Social Change, September 29, 2016.
- 12. Sarah Kessler, "A.I. Revolution Will Change Work. Nobody Agrees How." *The New York Times*, June 10, 2023.
- 13. Annabelle Tismit, "A.I. will take more jobs from women than men by 2030, report says," *The Washington Post*, July 26, 2023.
- 14. Emma Goldberg, "A.I.'s Threat to Jobs Prompts Questions of Who Protects Workers," *The New York Times*, May 24, 2023.
- 15. Michael D. Shear, Cecilia Kang, and David E. Sanger, "Pressured by Biden, A.I. Companies Agree to Guardrails on New Tools," *The New York Times*, July 21, 2023.

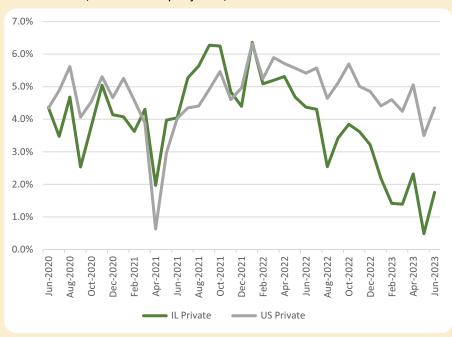
A Variety of Wage Measures

Average Hourly Earnings

Private sector Average Hourly Earnings provide an indicator of wage pressures in the labor market that is available monthly, reported at the same time as the employment situation. Businesses and policymakers fear that accelerating inflationary pressures lead to increased demand for higher wages. Over-the-year gains in U.S. average hourly earnings accelerated in 2021 and moderated slowly in 2022 and 2023. While average hourly earnings can fluctuate from month to month depending on the mix of workers in the labor force (entry-level versus experienced, high wage industries versus low wage industries), there appears to be a slightly moderating trend in annual gains in hourly earnings in the U.S. in 2023.

As illustrated in Exhibit 13, Illinois average hourly earnings often move in the same direction as the nation, but the same factors impact whether wages may be accelerating or decelerating. Is labor demand increasing in high wage occupations, or low paying jobs? Are more entry-level (lower pay) or experienced (higher pay) workers being hired? Aside from the occupational and industry mix of workers being hired, it is also possible that wages are rising at a slower clip. The trend for over-the-year wage gains has moderated significantly in Illinois since 2022 compared with the national average.

Exhibit 13: Average Hourly Earnings, Private All Industry: Over-the-Year Percent Change, U.S. and Illinois, Not Seasonally Adjusted, June 2021-June 2023



Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

Average Weekly Wages

Average weekly wages are available quarterly from the Quarterly Census of Employment and Wages with a lag of about six months. These quarterly data are not adjusted for seasonal variation. Just like the monthly average hourly earnings figures, changes in these data can be a result of a changing mix of workers and industries, not just related to inflationary pressures. Average weekly wages represent average earnings across a broad spectrum of educational levels, years of experience, and occupations. Exhibit 14 shows average weekly wages for the U.S. and Illinois by industry for the four quarters of 2022. Since these figures are not adjusted for seasonal variation, it is important to look at over-the-year changes in wages rather than over-the-quarter changes. Average weekly wages increased over-the-year across the board in the first three quarters of 2022 but then declined over-the-year in the fourth quarter. The over-the-year decline in fourth quarter wages could be reflecting a change in the mix of industry or occupations worked, a change in the number of hours worked, or a change in total compensation. Some items of note: the average weekly wage for all industries (private ownership) was higher in Illinois relative to the national average in all four quarters of the year. However, not all industries showed this pattern. Among Goods-Producing Industries, Construction and Manufacturing average weekly wages are higher in Illinois than the nation while the average weekly wage for Natural Resources and Mining are higher in the nation than Illinois. Among Service-Providing Industries, Information Services and Professional and Business Services had lower wages in Illinois than the nation in some quarters. Some industry wages are very similar in Illinois and the U.S.

Average weekly wages by industry are useful in that they reveal general wage trends in the economy. But as mentioned earlier, they are summary statistics and can be misleading. Not everyone in the Leisure and Hospitality Sector in Illinois earned an average weekly wage of \$537 in the first quarter of 2022. Hotel managers probably earned more, and cleaning staff likely earned less. In high wage sectors such as Financial Activities, not everyone earned a weekly wage of \$2,387 in the fourth quarter: financial advisors likely earned more while bank tellers probably earned less.

Note that Leisure and Hospitality wages moderated significantly in the fourth quarter from the double-digit over-the-year gains posted in the first three quarters of 2022. As employers were able to staff positions in this industry, wage gains diminished.

Exhibit 14: Average Weekly Wage, Private Ownership: Level and Over-the-Year Percent Change, Not Seasonally Adjusted, U.S. and Illinois, 2022

	Q1: 2022				Q2: 2022			
	Average We	eekly Wage	Over-the-Ye	ear Change	Average W	eekly Wage	Over-the-Ye	ar Change
Private Ownership	U.S.	IL	U.S.	IL	U.S.	IL	U.S.	IL
Total All Industries	\$ 1,398	\$ 1,523	6.9%	7.4%	\$ 1,286	\$ 1,328	4.0%	5.3%
Goods Producing	\$ 1,458	\$ 1,668	7.2%	9.1%	\$ 1,410	\$ 1,479	5.2%	6.3%
Natural Resources and Mining	\$ 1,359	\$ 1,115	11.9%	9.3%	\$ 1,187	\$ 1,055	7.9%	8.3%
Construction	\$ 1,306	\$ 1,446	5.4%	2.6%	\$ 1,351	\$ 1,497	5.4%	4.0%
Manufacturing	\$ 1,560	\$ 1,771	7.7%	11.2%	\$ 1,479	\$ 1,491	4.9%	7.1%
Service-Providing	\$ 1,385	\$ 1,496	6.8%	7.1%	\$ 1,260	\$ 1,299	3.9%	5.1%
Trade Transportation and Utilities	\$ 1,114	\$ 1,245	9.6%	10.6%	\$ 1,079	\$ 1,162	3.5%	6.3%
Financial Activities	\$ 2,961	\$ 3,637	8.1%	6.1%	\$ 1,929	\$ 2,184	0.9%	4.5%
Information	\$ 3,069	\$ 2,592	-1.8%	5.9%	\$ 2,668	\$ 2,351	-2.5%	4.4%
Professional and Business Services	\$ 1,866	\$ 1,873	8.2%	9.2%	\$ 1,711	\$ 1,660	5.4%	4.5%
Education and Health services	\$ 1,096	\$ 1,095	7.0%	8.6%	\$ 1,146	\$ 1,131	5.9%	6.5%
Leisure and Hospitality	\$ 539	\$ 537	12.5%	14.5%	\$ 573	\$ 581	8.9%	11.3%
Other services	\$ 883	\$ 969	5.7%	5.1%	\$ 912	\$ 1,005	5.4%	6.0%
	Q3: 2022				Q4: 2022			
	Average W	eekly Wage	Over-the-Ye	ear Change	Average We	eekly Wage	Over-the-Ye	ar Change
	U.S.	IL	U.S.	IL	U.S.	IL	U.S.	IL
Total All Industries	\$ 1,333	\$ 1,374	6.4%	6.8%	\$ 1,396	\$ 1,454	-2.7%	-3.1%
Goods Producing	\$ 1,458	\$ 1,539	7.7%	8.1%	\$ 1,546	\$ 1,678	-1.0%	-0.4%
Goods Producing Natural Resources and Mining	\$ 1,458 \$ 1,240	\$ 1,539 \$ 1,108	7.7% 9.9%	8.1% 11.0%	\$ 1,546 \$ 1,335	\$ 1,678 \$ 1,228	-1.0% 3.4%	-0.4% 2.9%
ŭ	. ,					. ,		
Natural Resources and Mining	\$ 1,240	\$ 1,108	9.9%	11.0%	\$ 1,335	\$ 1,228	3.4%	2.9%
Natural Resources and Mining Construction	\$ 1,240 \$ 1,442	\$ 1,108 \$ 1,596	9.9% 9.2%	11.0% 7.0%	\$ 1,335 \$ 1,544	\$ 1,228 \$ 1,733	3.4% 1.1%	2.9% 2.1%
Natural Resources and Mining Construction Manufacturing	\$ 1,240 \$ 1,442 \$ 1,500	\$ 1,108 \$ 1,596 \$ 1,534	9.9% 9.2% 6.5%	11.0% 7.0% 8.3%	\$ 1,335 \$ 1,544 \$ 1,576	\$ 1,228 \$ 1,733 \$ 1,676	3.4% 1.1% -2.8%	2.9% 2.1% -1.6%
Natural Resources and Mining Construction Manufacturing Service-Providing	\$ 1,240 \$ 1,442 \$ 1,500 \$ 1,307	\$ 1,108 \$ 1,596 \$ 1,534 \$ 1,342	9.9% 9.2% 6.5% 6.2%	11.0% 7.0% 8.3% 6.5%	\$ 1,335 \$ 1,544 \$ 1,576 \$ 1,365	\$ 1,228 \$ 1,733 \$ 1,676 \$ 1,411	3.4% 1.1% -2.8% -3.1%	2.9% 2.1% -1.6% -3.8%
Natural Resources and Mining Construction Manufacturing Service-Providing Trade Transportation and Utilities	\$ 1,240 \$ 1,442 \$ 1,500 \$ 1,307 \$ 1,129	\$ 1,108 \$ 1,596 \$ 1,534 \$ 1,342 \$ 1,199	9.9% 9.2% 6.5% 6.2% 6.5%	11.0% 7.0% 8.3% 6.5% 7.1%	\$ 1,335 \$ 1,544 \$ 1,576 \$ 1,365 \$ 1,144	\$ 1,228 \$ 1,733 \$ 1,676 \$ 1,411 \$ 1,249	3.4% 1.1% -2.8% -3.1% -1.6%	2.9% 2.1% -1.6% -3.8% 0.2%
Natural Resources and Mining Construction Manufacturing Service-Providing Trade Transportation and Utilities Financial Activities	\$ 1,240 \$ 1,442 \$ 1,500 \$ 1,307 \$ 1,129 \$ 1,942	\$ 1,108 \$ 1,596 \$ 1,534 \$ 1,342 \$ 1,199 \$ 2,145	9.9% 9.2% 6.5% 6.2% 6.5% 3.5%	11.0% 7.0% 8.3% 6.5% 7.1% 3.6%	\$ 1,335 \$ 1,544 \$ 1,576 \$ 1,365 \$ 1,144 \$ 2,163	\$ 1,228 \$ 1,733 \$ 1,676 \$ 1,411 \$ 1,249 \$ 2,387	3.4% 1.1% -2.8% -3.1% -1.6% -7.8%	2.9% 2.1% -1.6% -3.8% 0.2% -10.4%
Natural Resources and Mining Construction Manufacturing Service-Providing Trade Transportation and Utilities Financial Activities Information	\$ 1,240 \$ 1,442 \$ 1,500 \$ 1,307 \$ 1,129 \$ 1,942 \$ 2,761	\$ 1,108 \$ 1,596 \$ 1,534 \$ 1,342 \$ 1,199 \$ 2,145 \$ 2,379	9.9% 9.2% 6.5% 6.2% 6.5% 3.5%	11.0% 7.0% 8.3% 6.5% 7.1% 3.6% 1.1%	\$ 1,335 \$ 1,544 \$ 1,576 \$ 1,365 \$ 1,144 \$ 2,163 \$ 2,690	\$ 1,228 \$ 1,733 \$ 1,676 \$ 1,411 \$ 1,249 \$ 2,387 \$ 2,274	3.4% 1.1% -2.8% -3.1% -1.6% -7.8% -11.7%	2.9% 2.1% -1.6% -3.8% 0.2% -10.4% -6.2%
Natural Resources and Mining Construction Manufacturing Service-Providing Trade Transportation and Utilities Financial Activities Information Professional and Business Services	\$ 1,240 \$ 1,442 \$ 1,500 \$ 1,307 \$ 1,129 \$ 1,942 \$ 2,761 \$ 1,749	\$ 1,108 \$ 1,596 \$ 1,534 \$ 1,342 \$ 1,199 \$ 2,145 \$ 2,379 \$ 1,711	9.9% 9.2% 6.5% 6.2% 6.5% 3.5% -2.5% 6.8%	11.0% 7.0% 8.3% 6.5% 7.1% 3.6% 1.1% 7.5%	\$ 1,335 \$ 1,544 \$ 1,576 \$ 1,365 \$ 1,144 \$ 2,163 \$ 2,690 \$ 1,887	\$ 1,228 \$ 1,733 \$ 1,676 \$ 1,411 \$ 1,249 \$ 2,387 \$ 2,274 \$ 1,853	3.4% 1.1% -2.8% -3.1% -1.6% -7.8% -11.7% -2.5%	2.9% 2.1% -1.6% -3.8% 0.2% -10.4% -6.2% -4.8%
Natural Resources and Mining Construction Manufacturing Service-Providing Trade Transportation and Utilities Financial Activities Information Professional and Business Services Education and Health services	\$ 1,240 \$ 1,442 \$ 1,500 \$ 1,307 \$ 1,129 \$ 1,942 \$ 2,761 \$ 1,749 \$ 1,220	\$ 1,108 \$ 1,596 \$ 1,534 \$ 1,342 \$ 1,199 \$ 2,145 \$ 2,379 \$ 1,711 \$ 1,221	9.9% 9.2% 6.5% 6.2% 6.5% 3.5% -2.5% 6.8% 8.3%	11.0% 7.0% 8.3% 6.5% 7.1% 3.6% 1.1% 7.5% 7.0%	\$ 1,335 \$ 1,544 \$ 1,576 \$ 1,365 \$ 1,144 \$ 2,163 \$ 2,690 \$ 1,887 \$ 1,222	\$ 1,228 \$ 1,733 \$ 1,676 \$ 1,411 \$ 1,249 \$ 2,387 \$ 2,274 \$ 1,853 \$ 1,239	3.4% 1.1% -2.8% -3.1% -1.6% -7.8% -11.7% -2.5% -1.2%	2.9% 2.1% -1.6% -3.8% 0.2% -10.4% -6.2% -4.8% -0.6%

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics

Occupational Wages

Occupational wage data are produced annually by the U.S. Bureau of Labor Statistics, reported about three to four months after the end of the year. In April 2023, the U.S. reported 2022 occupational wages for the U.S. and 50 states as well as local areas such as large Metropolitan Statistical Areas (MSAs). In addition, Illinois produces occupational wages by Economic Development Region (EDR), Local Workforce Investment Area (LWIA) and by county. These annual occupational wages are based on responses from six semiannual panels collected over a 3-year period. The 2022 estimates are based on panels from May 2022, November 2021, May 2021, November 2020, May 2020, and November 2019. Consequently, it is not appropriate to compare annual changes in occupational wages to assess a percentage change in wages. These should be considered a point in time snapshot.

Exhibit 15 shows employment in each of the major occupational groupings, along with the median hourly wage and the median annual wage in Illinois and the U.S. Detailed information for Illinois is available on the IDES website in the Labor Market section entitled <u>Wage Information</u>. Detailed information for the U.S. is available at the U.S. BLS website, Occupational Wages.

Comparing Illinois to the U.S., Exhibit 15 shows that the median annual wage for all occupations averaged \$47,480 in Illinois while it averaged \$46,310 in the U.S. In Illinois and the nation, Office and Administrative Support Occupations were the largest major group accounting for 12.7% of all occupations. In this largest occupational group, the median annual pay was \$43,170 in Illinois versus \$40,910 in the U.S. The highest and lowest paying occupations in this category were the same in Illinois and the U.S. although Illinois median wages were slightly below the national median wages for these occupations. Highest paid were Executive Secretaries and Executive Administrative Assistants with median salary of \$64,270 in Illinois and \$65,980 in the U.S. The lowest paying occupation was Hotel, Motel and Resort Desk Clerks with a median salary of \$28,110 in Illinois and \$28,910 in the U.S.

In Illinois, the second largest group was Transportation and Material Moving Occupations with median annual pay of \$38,340 and accounting for 10.7% of the occupations. Airline Pilots, Co-Pilots, and Flight Engineers had the highest median annual salary in this grouping at \$225,270 while Taxi Drivers had the lowest annual wage at \$28,600. This grouping of occupations was the second largest in the U.S. as well

Exhibit 15: Median Hourly and Annual Wages by Occupational Grouping, Sorted by Illinois % Share, U.S. and Illinois, 2022

	Illinois		Н	ourly	-	Annual	U.S.		н	ourly	A	Annual
	Employment	% share	M	ledian	٨	/ledian	Employment	% share	M	edian	٨	/ledian
All Occupations	5,883,920		\$	22.83	\$	47,480	147,886,000		\$	22.26	\$	46,310
Office and Administrative Support Occupations	746,560	12.7%	\$	20.75	\$	43,170	18,674,770	12.6%	\$	19.67	\$	40,910
Transportation and Material Moving Occupations	631,420	10.7%	\$	18.43	\$	38,340	13,560,460	9.2%	\$	18.24	\$	37,940
Management Occupations	514,390	8.7%	\$	50.77	\$	105,600	9,860,740	6.7%	\$	51.62	\$	107,360
Sales and Related Occupations	486,390	8.3%	\$	17.11	\$	35,580	13,183,250	8.9%	\$	16.96	\$	35,290
Food Preparation and Serving Related Occupations	454,770	7.7%	\$	13.94	\$	29,000	12,514,620	8.5%	\$	14.25	\$	29,640
Production Occupations	409,860	7.0%	\$	19.11	\$	39,750	8,738,980	5.9%	\$	19.19	\$	39,910
Business and Financial Operations Occupations	391,090	6.6%	\$	37.27	\$	77,530	9,677,720	6.5%	\$	36.95	\$	76,850
Healthcare Practitioners and Technical Occupations	362,000	6.2%	\$	36.85	\$	76,650	9,043,070	6.1%	\$	37.38	\$	77,760
Educational Instruction and Library Occupations	357,260	6.1%	\$	25.71	\$	53,480	8,496,780	5.7%	\$	27.64	\$	57,490
Healthcare Support Occupations	218,390	3.7%	\$	16.30	\$	33,910	6,792,310	4.6%	\$	16.16	\$	33,600
Installation, Maintenance, and Repair Occupations	205,740	3.5%	\$	24.83	\$	51,640	5,823,400	3.9%	\$	24.08	\$	50,080
Computer and Mathematical Occupations	187,150	3.2%	\$	46.53	\$	96,780	5,003,910	3.4%	\$	48.29	\$	100,440
Construction and Extraction Occupations	176,280	3.0%	\$	35.90	\$	74,670	6,075,520	4.1%	\$	24.31	\$	50,570
Building and Grounds Cleaning and Maintenance Occupations	168,880	2.9%	\$	16.89	\$	35,130	4,316,350	2.9%	\$	16.28	\$	33,870
Protective Service Occupations	142,530	2.4%	\$	24.91	\$	51,820	3,437,610	2.3%	\$	21.85	\$	45,450
Personal Care and Service Occupations	100,520	1.7%	\$	15.45	\$	32,140	2,835,650	1.9%	\$	15.07	\$	31,340
Community and Social Service Occupations	81,790	1.4%	\$	23.20	\$	48,260	2,313,620	1.6%	\$	23.74	\$	49,380
Architecture and Engineering Occupations	80,110	1.4%	\$	39.95	\$	83,090	2,481,170	1.7%	\$	40.24	\$	83,700
Arts, Design, Entertainment, Sports, and Media Occupations	73,250	1.2%	\$	25.46	\$	52,950	2,063,380	1.4%	\$	27.90	\$	58,030
Legal Occupations	50,820	0.9%	\$	46.66	\$	97,050	1,216,600	0.8%	\$	45.76	\$	95,170
Life, Physical, and Social Science Occupations	38,340	0.7%	\$	36.64	\$	76,220	1,314,360	0.9%	\$	35.74	\$	74,330
Farming, Fishing, and Forestry Occupations	6,390	0.1%	\$	18.34	\$	38,150	461,750	0.3%	\$	16.33	\$	33,970

Source: Occupational Employment and Wage Statistics, U.S. Bureau of Labor Statistics

and accounted for 9.2% of the occupations (\$37,940) with the highest median salary also registered for Airline Pilots, Co-Pilots, and Flight Engineers (\$211,790) and the lowest annual wage held by Ambulance Drivers and Attendants, except Emergency Medical Technicians (\$30,380).

The third largest occupational grouping in Illinois was Management Occupations with 8.7% of the occupations and an annual median wage of \$105,600. This grouping ranked fifth in the U.S. (6.7%) with an annual median wage of \$107,350. Chief Executives were the highest paid occupation in Illinois (\$220,390) and the U.S. (\$189,520). The lowest paid occupation in this grouping was Education and Childcare Administrators, Preschool and Daycare in Illinois (\$48,370) and the U.S. (\$49,690).

In the U.S., Sales and Related Occupations were the third largest grouping with 8.9% of the occupations and with median annual earnings of \$35,290. Sales and Related Occupations were the fourth largest group in Illinois accounting for 8.3% of the total with median annual pay of \$35,580. Illinois and the nation had the same highest paying occupations in this category. (Sales Engineers with median annual pay \$97,030 in Illinois vs. \$108,530 in the nation.) Telemarketers had the lowest median annual earnings in

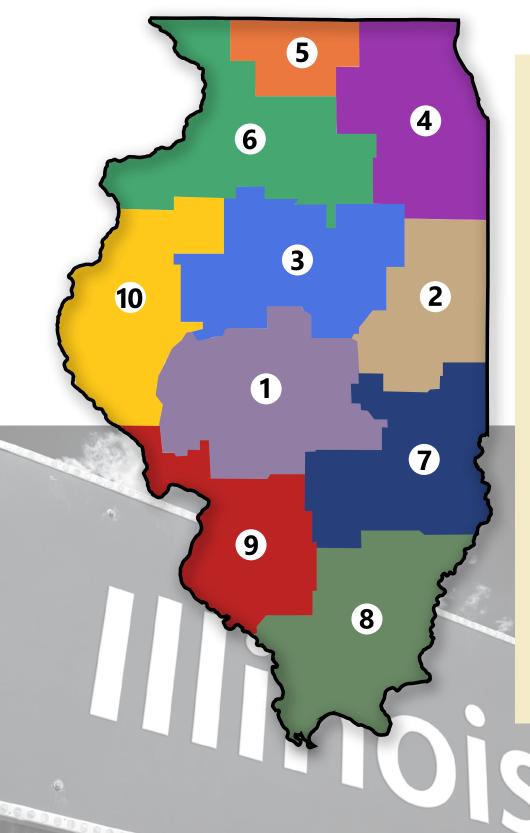
Illinois (\$27,410) while nationally, Cashiers had the lowest median annual pay \$28,240. Employers and workers equally benefit from knowing about specific occupational wages by type of job and by experience level. These annual data are compiled by the U.S. Bureau of Labor Statistics but are gathered in conjunction with the fifty states as surveys are conducted twice a year by state agencies. In Illinois, the Economic Information & Analysis Division regularly contact employers to gather employment and wage data from Illinois-based companies.

In sum, it is useful to keep in mind that the various wage measures provide different types of information. Over-the-year changes in average hourly earnings provide input on whether wage pressures are mounting or abating in a labor market. This indicator has the shortest lag among the wage indicators. The quarterly average weekly wages provide greater information on industry wage patterns but are available with a longer lag. Both are confounded by changes in occupation and industry mix in addition to wage compensation. Occupational wages are released with the longest lag but provide employers and employees with the information they need to determine typical levels of wages and earnings for various occupations.

Footnotes

- 1. NBER announcements of peak to trough of 2020 recession dates found here: https://www.nber.org/news/business-cycle-dating-committee-announcement-june-8-2020 and https://www.nber.org/news/business-cycle-dating-committee-announcement-july-19-2021
- 2. Press Release, Federal Reserve issues FOMC statement, July 26, 2023.
- 3. Steve Matthews, "Fed's Bostic Says Tackling High Inflation is Top Priority," Yahoo!Finance, June 23, 2023.
- 4. Nick Timiraos, "Jerome Powell Says Next Phase of Rate Rises Will be Harder to Predict," *The Wall Street Journal*, June 29, 2023.
- 5. Rachel Siegel and Abha Bhattarai, "Inflation eased further in June as economy slowly cools," *The Washington Post*, July 12, 2023.
- 6. Source: Board of Governors of the Federal Reserve System, Consumer Credit, Statistical Release G.19 via Haver Analytics.
- 7. Clare Ansberry, "They Retired. Now They Are Taking Care of Other Retirees," The Wall Street Journal, March 5, 2023.
- 8. Abha Bhattarai and Luis Melgar, "Most of the country's missing workers are back, propelling the economy," *The Washington Post*, May 5, 2023.
- 9. Jeffrey Sparshott, "Americans in Their Prime Are Flooding into the Job Market," *The Wall Street Journal*, July 22, 2023.
- 10. Jeanne Smialek and Ben Casselman, "The Pandemic's Labor Market Myths," The New York Times, July 19, 2023.

Section 2: A Year in Review Across the Regions



- **1 Central** Cass, Christian, Greene, Logan, Macon, Macoupin, Menard, Montgomery, Morgan, Sangamon, Scott, Shelby Counties
- **2 East Central** Champaign, Douglas, Ford, Iroquois, Piatt, Vermilion Counties
- **3 North Central** DeWitt, Fulton, Livingston, McLean, Marshall, Mason, Peoria, Stark, Tazewell, Woodford Counties
- **4 Northeast** Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, McHenry, Will Counties
- **5 Northern Stateline** Boone, Ogle, Stephenson, Winnebago Counties
- **6 Northwest** Bureau, Carroll, Henry, Jo Daviess, LaSalle, Lee, Mercer, Putnam, Rock Island, Whiteside Counties
- **7 Southeast** Clark, Clay, Coles, Crawford, Cumberland, Edgar, Effingham, Fayette, Jasper, Lawrence, Marion, Moultrie, Richland Counties
- **8 Southern** Alexander, Edwards, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jefferson, Johnson, Massac, Perry, Pope, Pulaski, Saline, Union, Wabash, Wayne, White, Williamson Counties
- **9 Southwest** Bond, Calhoun, Clinton, Jersey, Madison, Monroe, Randolph, St. Clair, Washington Counties
- **10 West Central** Adams, Brown, Hancock, Henderson, Knox, McDonough, Pike, Schuyler, Warren Counties

Labor Supply by Economic Development Region

The ten Economic Development Regions (EDRs) vary in geographic size as well as size of the labor force. Most of the EDRs comprise nine or ten counties although the Northern Stateline region (EDR 5) in northern Illinois has only four counties while the Southern region (EDR 8) in southern Illinois has 19 counties. In terms of labor force size, the Northeast region (EDR 4) incorporates the Chicagoland area and has the largest labor force (71% of the state). Exhibit 16 shows labor force levels for 2022. Aside from the sizable Northeast region, several EDRs are more similar in labor force size, although the underlying economic base for each region varies as some are focused on manufacturing activity, some on trade, transportation and utilities and others on government and education. (See 2023 Annual Report Chart Supplement for additional information on industries.)

Unemployment Rates by Economic Development Region

While the Illinois unemployment rate* (not seasonally adjusted) edged down to 4.5% in June 2023 from 4.8% in June 2022, all but one of the ten Economic Development Regions posted over-the-year gains in their unemployment rates in June 2023. The Northeast Region, which includes the Chicago metro area as well as several other metro areas, was the one region that saw a decline in its unemployment rate in June 2023 from June 2022 (4.4% compared to 5.1% a year ago.) Exhibit 17 shows that changes in the EDRs were not uniform with some regions posting smaller over-the-year gains (Southeast, Southern, Southwest, and West Central) and some EDRs posting larger gains (Central, East Central, North Central, Northern Stateline, and

Exhibit 16: Civilian Labor Force by Economic Development Region, 2022 Average

	Labor Force	2022
	Illinois	6,472,663
EDR 1	Central	246,905
EDR 2	East Central	179,312
EDR 3	North Central	301,860
EDR 4	Northeast	4,588,801
EDR 5	Northern Stateline	202,941
EDR 6	Northwest	231,739
EDR 7	Southeast	129,977
EDR 8	Southern	157,950
EDR 9	Southwest	337,474
EDR 10	West Central	95,705

Source: Illinois Department of Employment Security, Economic Information & Analysis

Exhibit 17: Unemployment Rates by Economic Development Region, June 2021 - 2023

Unemployment Rates (NSA)											
		June 2021	June 2022	June 2023							
	Illinois	7.2	4.8	4.5							
EDR 1	Central	6.2	4.3	4.9							
EDR 2	East Central	5.9	4.2	4.9							
EDR 3	North Central	6.1	4.2	4.8							
EDR 4	Northeast	7.6	5.1	4.4							
EDR 5	Northern Stateline	8.6	5.1	6.0							
EDR 6	Northwest	5.6	4.0	5.0							
EDR 7	Southeast	5.4	4.0	4.4							
EDR 8	Southern	6.6	4.6	5.1							
EDR 9	Southwest	5.7	3.9	4.4							
EDR 10	West Central	5.2	4.0	4.5							

Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis

^{*}The official seasonally adjusted unemployment rate decreased from 4.4% in June 2022 to 4.0% in June 2023. The unadjusted figure is shown here to be comparable to the unadjusted data for the EDRs.

Northwest). Seven of the regions had unemployment rates below 5%, two had unemployment rates at or above 5%, and one had a 6% unemployment rate in June 2023.

The number of unemployed persons decreased in Illinois but increased over-the-year in June 2023 in all but one region, as seen in Exhibit 18. The Northeast Region (EDR 4) was the only EDR to post a drop in in the number of unemployed (-14.6%). Exhibit 18 shows that the Northwest Region posted the largest over-the-year gain in the number of unemployed persons (+23.5%), following by the East Central Region (+16.0%) and the Northern Stateline Region (+15.8%).

Exhibit 18 also shows a varying combination of labor force changes across the ten regions. For instance, the East Central, North Central and Southeast Regions posted the smallest over-the-year declines (-0.1%) in June 2023 from June 2022. The Northern Stateline (-1.6%), Northeast (-1.4%), and West Central (-1.0%) Regions posted the largest over-the-year declines.

The number of people employed in each region also declined over-the-year in June 2023 from June 2022 with the smallest drop in the Northeast (-0.6%) and Southeast (-0.6%) Regions and the largest declines in the Northern Stateline (-2.5%) and Northwest (-1.7%) Regions.

Exhibit 18: Over-the-Year Percent Change in Labor Force, Number Employed and Number of Unemployed Persons in Illinois and Economic Development Region, Not Seasonally Adjusted, June 2023

June 2022 to June 2023 (NSA)											
		Labor Force	Employed	Unemployed							
	Illinois	-1.1%	-0.8%	-7.1%							
EDR 1	Central	-0.8%	-1.3%	11.8%							
EDR 2	East Central	-0.1%	-0.8%	16.0%							
EDR 3	North Central	-0.1%	-0.7%	15.2%							
EDR 4	Northeast	-1.4%	-0.6%	-14.6%							
EDR 5	Northern Stateline	-1.6%	-2.5%	15.8%							
EDR 6	Northwest	-0.6%	-1.7%	23.5%							
EDR 7	Southeast	-0.1%	-0.6%	11.1%							
EDR 8	Southern	-0.7%	-1.2%	10.1%							
EDR 9	Southwest	-0.6%	-1.2%	13.8%							
EDR 10	West Central	-1.0%	-1.6%	13.5%							

Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis



Labor Demand by Economic Development Region

Industry Employment by Economic Development Region

Exhibits 19 and 20 provide a summary of industry employment and how each of the Economic Development Regions compared with statewide industry employment trends. Remember that all Economic Development Region data are not seasonally adjusted so that the Illinois statewide data used here are also not seasonally adjusted to make the comparisons legitimate. The ten charts depict total nonfarm payroll growth over-the-year relative to the over-the-year change in statewide payrolls. The charts show the growth that occurred between June 2022 and June 2023. For the most part, the trend is downward – that is, over-the-year growth rates are moderating in Illinois and in most of the regions.

Several of the regions are moving in the same direction as the state. However, a few EDRs are showing somewhat diverse trends. For instance, the Northern Stateline Region was growing a bit faster than the state between June 2022 and February 2023, and then moderated sharply and began to post significantly slower growth from March 2023 to June 2023. In contrast, the Northwest Region was growing much slower than the state from June 2022 to February

2023 and then accelerated, posting larger over-theyear gains from March to June 2023.

The West Central and Southwest Regions grew more slowly than the state throughout this period (June 2022 to June 2023). The West Central managed to post slight over-the-year gains between 1% and 2% during the period. In contrast, the Southwest had some zero/negative growth months between October 2022 and February 2023 before turning up again. Nonetheless, the over-the-year gains are slight in this region.

While Exhibit 19 offers a quick overview of how the regions are faring compared to the state, Exhibit 20 provides a more detailed view of the regions by specific industries. The color-coded table offers a quick view of which industries performed well, which did not, and which industries were weakest across the board. Illinois and each of the regions had several key industries that posted over-the-year gains. Here we look at the super sectors and the key subsectors. Statewide, the four largest gainers were Leisure and Hospitality (+6.2%), Local Government (+5.1%), and tied for third Educational and Health Services (+3.8%), and Financial Activities (+3.8%).



Exhibit 19: Total Nonfarm Payrolls: Illinois and Economic Development Regions, Over-the-Year Percent Change, Not Seasonally Adjusted, June 2022 – June 2023



State Government (\pm 4.1%). EDR 2, the East Central Region had the fastest growth in Leisure and

EDR 1, the Central Region had the strongest over-the-year growth in

Construction and Mining (+4.8%), Other Services (+4.5%) and

EDR 2, the East Central Region had the fastest growth in Leisure and Hospitality (+12.7%), Transportation, Warehousing and Utilities (+6.3) and Local Government (+4.3%).

EDR 3, the North Central Region had the strongest growth in Durable Goods Manufacturing (+5.4%), Educational and Health Services (+3.5%) and Local Government (+5.0%).

EDR 4, the Northeast Region had the fastest over-the-year growth in Leisure and Hospitality (+8.6%), Educational and Health Services (+4.9%) and Federal Government (+3.7%).

EDR 5, the Northern Stateline Region had the strongest over-the-year growth in Transportation, Warehousing and Utilities (+4.7%), Federal Government (+4.5%), and Educational and Health Services (+4.2%).

EDR 6, the Northwest Region had the fastest over-the-year growth in Other Services (+16.6%), Leisure and Hospitality (+8.0%), and Financial Activities (+5.4%).

EDR 7, the Southeast Region had the strongest over-the-year growth in Construction and Mining (+6.7%), Local Government (+5.9%) and Federal Government (+5.5%).

EDR 8, the Southern Region had the fastest over-the-year growth in Information Services (+6.1%), Financial Activities (+5.7%) and Nondurable Goods Manufacturing (+5.8%).

EDR 9, the Southwest Region had the strongest over-the-year growth in Leisure and Hospitality (+4.1%), Wholesale Trade (+4.1%) and Educational and Health Services (+2.4%).

EDR 10, the West Central Region had the fastest over-the-year growth in Construction and Mining (+5.1%), Nondurable Goods Manufacturing (+3.4%) and Federal Government (+5.4%).

Illinois posted the largest over-the-year decline in Information Services. Eight of the 10 EDRs posted over-the-year declines in Information Services. While Professional and Business Services had posted healthy over-the-year gains for much of the year, it declined -0.2% over-the-year in Illinois hobbled by double-digit declines in one of its largest subsectors, Employment Services. As a result, seven of the 10

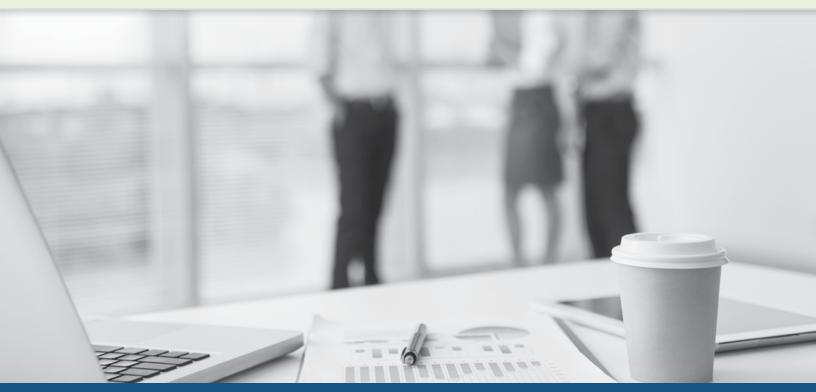
EDRs posted over-the-year declines in this industry in June 2023. The largest declines in this industry were posted in the Southern (-7.6%), East Central (-5.3%) and Southeast (-3.5%) Regions. The North Central, Northern Stateline, and Northwest Regions posted small over-the-year gains in Professional and Business Services.

Exhibit 20: Over-the-Year Growth by Industry by State and Economic Development Region, Not Seasonally Adjusted, June 2022-June 2023

	Illinois	EDR 1	EDR 2	EDR 3	EDR 4	EDR 5	EDR 6	EDR 7	EDR 8	EDR 9	EDR 10
Total Nonfarm (NSA)	2.2%	1.3%	2.2%	2.4%	2.0%	0.5%	3.0%	2.1%	1.3%	0.5%	1.0%
Total Private (NSA)	1.9%	0.7%	1.6%	2.4%	2.1%	0.3%	3.1%	1.4%	1.1%	0.6%	0.9%
Goods Producing (NSA)	0.9%	1.1%	0.6%	3.6%	1.5%	-4.9%	1.3%	1.3%	2.7%	1.9%	3.3%
Construction and Mining (NSA)	3.2%	4.8%	1.7%	0.7%	2.8%	-1.0%	3.2%	6.7%	2.4%	3.6%	5.1%
Manufacturing (NSA)	-0.1%	-0.6%	0.2%	4.7%	0.8%	-5.9%	0.7%	-0.1%	2.9%	0.8%	2.8%
Durables (NSA)	0.7%	2.3%	1.1%	5.4%	1.3%	-7.6%	2.8%	0.4%	0.0%	1.2%	2.5%
Nondurables (NSA)	-1.3%	-3.0%	-0.9%	1.9%	0.4%	0.0%	-3.7%	-1.5%	5.8%	0.2%	3.4%
Service-Providing (NSA)	2.3%	1.3%	2.4%	2.1%	2.1%	2.0%	3.5%	2.3%	1.0%	0.2%	0.5%
Trade, Transportation, and Utilities (NSA)	0.2%	0.7%	-0.2%	0.8%	0.2%	0.6%	0.7%	-0.3%	0.1%	-2.1%	-0.8%
Wholesale trade (NSA)	0.0%	1.7%	-0.7%	1.0%	1.2%	-1.5%	-0.1%	0.3%	-1.0%	4.1%	2.5%
Retail Trade (NSA)	-0.9%	-0.1%	-2.8%	0.1%	-1.2%	-1.1%	1.0%	-0.9%	-0.9%	-3.0%	-3.2%
Transportation, Warehousing, and Utilities (NSA)	2.2%	2.1%	6.3%	2.7%	1.6%	4.7%	0.8%	0.6%	3.2%	-3.5%	0.2%
Information (NSA)	-3.8%	-11.7%	-9.6%	-3.5%	-3.2%	-3.5%	-3.3%	-0.3%	6.1%	1.4%	-3.3%
Financial Activities (NSA)	3.8%	0.5%	-0.3%	-0.1%	2.1%	-1.9%	5.4%	1.8%	5.7%	-0.9%	1.1%
Professional and Business Services (NSA)	-0.2%	-1.0%	-5.3%	2.9%	-0.5%	1.5%	1.1%	-3.5%	-7.6%	-1.3%	-1.5%
Educational and Health Services (NSA)	3.8%	-0.2%	2.9%	3.5%	4.9%	4.2%	3.2%	3.7%	2.7%	2.4%	0.9%
Leisure and Hospitality (NSA)	6.2%	3.4%	12.7%	3.3%	8.6%	4.1%	8.0%	3.1%	-0.7%	4.1%	2.4%
Other Services (NSA)	2.9%	4.5%	1.6%	3.4%	2.6%	3.1%	16.6%	1.9%	1.4%	1.5%	1.5%
Government (NSA)	4.0%	3.5%	3.8%	2.0%	1.0%	1.5%	2.7%	5.3%	2.0%	-0.3%	1.2%
Federal Government (NSA)	2.8%	-0.2%	0.6%	-0.2%	3.7%	4.5%	2.3%	5.5%	-1.3%	-5.6%	5.4%
State Government (NSA)	-0.2%	4.1%	3.8%	-9.0%	-0.5%	0.6%	0.8%	3.6%	0.4%	1.0%	1.3%
Local Government (NSA)	5.1%	3.5%	4.3%	5.0%	0.8%	1.4%	3.0%	5.9%	3.4%	0.5%	0.9%

Source: U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

Losses Gains



Wages

Average Weekly Wage

In the earlier statewide section that focuses on Average Weekly Wages, we saw that wages in Illinois and the nation vary by industry. Wages depend on education, experience, and skill level. Some industries entail a greater number of high-skilled, highly educated workers (Financial Activities, Professional and Business Services), while other industries need fewer occupations with highly educated workers and more occupations where educational attainment is less a barrier to entry (Leisure and Hospitality). All industries require a range of skills, experience, and education, and each requires a different mix to meet industry demand.

Average weekly wages are not available for all industries for each of the Economic Development Regions. Exhibit 21 shows the Average Weekly Wage for the four quarters of 2022, as well as the over-the-year gain in the average weekly wage by EDR. Keep in mind that aside from the industry mix that varies across the state, each Economic Development Region also has a different cost-of-living with the highest cost-of-living in the Northeast Region (EDR 4) and a lower cost-of-living in smaller metros around the state and in the Central and Southern Regions of the state.

Exhibit 21: Average Weekly Wage, Private Ownership: Level and Over-the-Year Percent Change by Economic Development Region, Not Seasonally Adjusted, 2022

	Q1-2022			Q2-2022			Q3-2022			Q4-2022		
Illinois	\$	1,523	7.4%	\$	1,328	5.3%	\$	1,374	6.8%	\$	1,454	-3.1%
EDR 1 Central	\$	1,109	8.6%	\$	1,000	3.2%	\$	1,088	9.0%	\$	1,121	2.8%
EDR 2 East Central	\$	981	4.5%	\$	1,058	11.9%	\$	1,058	11.1%	\$	1,052	-0.4%
EDR 3 North Central	\$	1,390	15.7%	\$	1,112	3.6%	\$	1,174	8.0%	\$	1,225	0.3%
EDR 4 Northeast	\$	1,641	6.4%	\$	1,402	4.6%	\$	1,442	5.8%	\$	1,534	-4.4%
EDR 5 Northern Stateline	\$	1,045	8.7%	\$	1,029	7.8%	\$	1,092	8.5%	\$	1,124	0.6%
EDR 6 Northwest	\$	1,072	5.8%	\$	1,003	4.8%	\$	1,069	6.7%	\$	1,268	-0.9%
EDR 7 Southeast	\$	872	5.8%	\$	884	5.4%	\$	931	6.6%	\$	951	0.6%
EDR 8 Southern	\$	836	7.3%	\$	897	10.3%	\$	924	9.3%	\$	943	2.4%
EDR 9 Southwest	\$	962	9.1%	\$	945	4.7%	\$	999	7.6%	\$	1,047	-1.3%
EDR 10 West Central	\$	861	8.3%	\$	889	8.9%	\$	937	5.1%	\$	1,004	2.3%

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics

Occupational Wages

As noted in the statewide section, the U.S. Bureau of Labor Statistics produces annual wages by occupation for the nation, states, and metro areas. The Economic Information & Analysis Division also compiles occupational wages for Economic Development Regions, Local Workforce Innovation Areas, and Counties. These can be found at Wage Information: Occupational Employment and Wage Statistics (OEWS) (illinois.gov). The table below summarizes average occupational wages for 2022 (released in July 2023) by Economic Development Region. The average for

Total All Occupations for each region depends on the Occupational mix in each region as well as the experience level for these workers. We've already noted that the regional wages depend on local cost-of-living in addition to demand for workers. Exhibit 22 simply reflects average wages for all occupations by the Economic Development Regions. The detailed occupational wage tables with specific job titles are available at the link provided above which will help workers determine which wage levels are appropriate when seeking work, and help employers determine average wages that are being paid by businesses.

Exhibit 22: Occupational Wages by Economic Development Region, 2022

		Entry Wage Median Wage				Experienc	ed Wage
Geography	Occupational Title	Hourly	Annual	Hourly	Annual	Hourly	Annual
Illinois	Total all occupations	\$15.29	\$31,809	\$23.60	\$49,108	\$40.04	\$83,282
EDR 1	Total all occupations	\$14.51	\$30,189	\$22.64	\$47,094	\$36.08	\$75,051
EDR 2	Total all occupations	\$14.51	\$30,184	\$22.45	\$46,689	\$36.90	\$76,741
EDR 3	Total all occupations	\$14.39	\$29,938	\$22.26	\$46,303	\$35.83	\$74,536
EDR 4	Total all occupations	\$15.71	\$32,688	\$24.12	\$50,179	\$42.03	\$87,416
EDR 5	Total all occupations	\$14.45	\$30,067	\$21.26	\$44,218	\$33.58	\$69,847
EDR 6	Total all occupations	\$14.17	\$29,474	\$21.43	\$44,578	\$33.13	\$68,913
EDR 7	Total all occupations	\$13.86	\$28,825	\$19.85	\$41,291	\$31.37	\$65,249
EDR 8	Total all occupations	\$13.72	\$28,533	\$19.83	\$41,247	\$31.61	\$65,748
EDR 9	Total all occupations	\$14.15	\$29,441	\$21.34	\$44,393	\$33.27	\$69,203
EDR 10	Total all occupations	\$13.93	\$28,979	\$20.06	\$41,721	\$30.84	\$64,153

Source: Occupational Wage and Employment Statistics, U.S. Bureau of Labor Statistics and Illinois Department of Employment Security, Economic Information & Analysis

As stated previously in the statewide section, various wage measures provide different types of information. The average weekly wage by industry is available quarterly and provides information on industry wages and can be used to see over-the-year changes in average weekly wages. The occupational wages are a

snapshot for the year but more descriptive by specific occupational title.

For more detail on each of the Economic Development Regions, see the <u>2023 Annual Economic Report Chart Supplement</u>.

Looking Ahead

This report has described Illinois' labor market conditions from June 2022 through June 2023 as per our requirement with the Department of Labor's Employment and Training Administration's mandate. It is good to know where we have been as it sets the stage as to where we might be headed. Two labor market indicators are useful in providing hints as to the direction of labor market conditions. One was mentioned in the statewide section - Job Openings and Exhibit 12 on Page 20 showed that job openings moderated from levels seen early in the recovery from the 2020 recession but remained elevated. The second labor market indicator that helps provide information on labor market demand is unemployment insurance claims. It is important to realize that businesses lay off workers during good times and bad as their specific situations require. In addition, one needs to keep in mind that some work is seasonal so that seasonal trends appear in these unadjusted data. But overall, more workers are laid off when general economic conditions worsen, and fewer workers are laid off when conditions are robust.

Exhibit 23 depicts monthly initial unemployment claims (UI) by month for 2022 and 2023 compar-

ing these to the historical average (2001 – 2022). As noted in the monthly patterns, unemployment claims tend to rise in the autumn months (October and November) staying elevated in the winter months (December and January) before decreasing again between February and September. UI claims followed this typical pattern in 2022 and in the first seven months of 2023. UI initial claims were lower in 2023 than in 2022 in January and May. They were nearly identical in February, March, and April. They were a touch higher in June and July. Early indications for August (weekly claims) point to little change in August versus July as the typical pattern would indicate.

As summer turns to fall and winter, UI claims will rise, as is the typical behavior for these months. To better gauge whether UI claims are on trend or accelerating, one would be wise to view the data considering normal seasonal patterns and historical context. Unemployment claims are available weekly and monthly and can be found at this link <u>Unemployment Insurance</u> (UI) Program Data (illinois.gov).

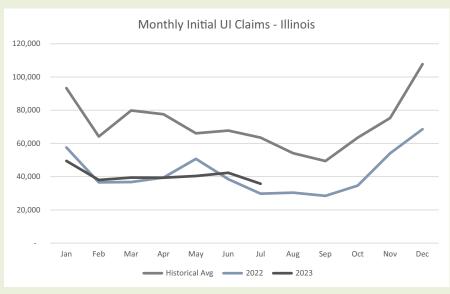


Exhibit 23: Illinois Monthly Initial Unemployment Claims, Not Seasonally Adjusted

Source: ETA 5159, U.S. Department of Labor and Illinois Department of Employment Security, Economic Information & Analysis via Haver Analytics