

# IOWA'S WORKFORCE & ECONOMY









# **Table of Contents**

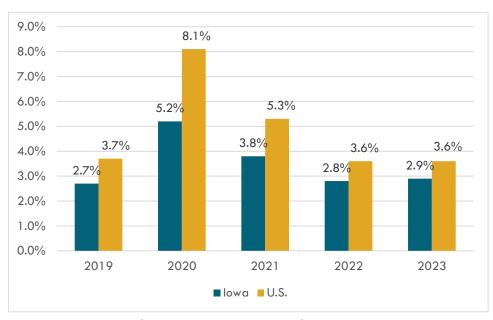
State and Local Labor Force Trends	3
2023 Nonfarm Employment Trends	6
Historically Low Unemployment Insurance Claims	9
lowa Industry Projections Overview, 2022-2032	13
Transportation and Warehousing in Iowa	17
JOLTS Trends and Analysis in lowa	23
2022-2032 lowa Jobs Outlook	29
Analysis of Median Wages & Salary Over Time	33
Workforce Needs Assessment 2023	41

## State and Local Labor Force Trends

#### Written by Kris Henze

## Unemployment Rates, lowa and the Nation

The statewide annual average unemployment rate increased slightly to 2.9 percent in 2023 from 2.8 percent in 2022. The U.S. rate for 2023 remained at 3.6 percent. Based on the state rankings for 2023, North Dakota had the lowest jobless rate among the states at 1.9 percent. Florida, Iowa, Maine, Montana, Virginia, and Wyoming tied for eleventh and Nevada had the highest unemployment rate at 5.1 percent.



Iowa and U.S. Unemployment Rates, 2019-2023

Source: Labor Market Information Division, lowa Workforce Development, in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

The number of unemployed persons in the state averaged 50,300 in 2023, up from the prior year's 48,200. Men accounted for 58 percent of the unemployed compared to 42 percent for women . Minorities and youth the experience highest rates of unemployment: youth, 16 to (8.7 percent), Black or African American (6.7 percent) and Hispanic (4.6 percent). Workers with less education continued to experience a higher unemployment rate than better educated members of the labor force: those with less than a high school diploma (3.4 percent), high school graduates with no college (2.8 percent), some college associate degree (2.1)percent) and bachelor's degree (1.7 percent).

## Unemployment Rates in Metropolitan Statistical Areas (MSAs) for 2023

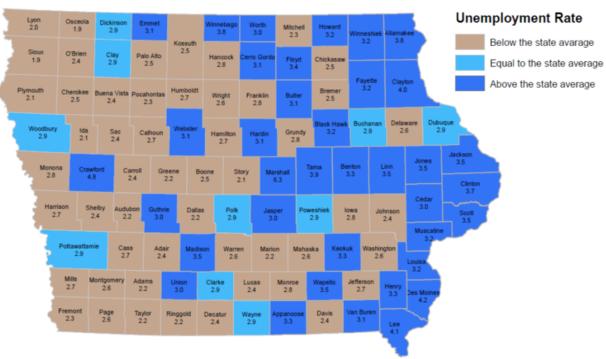
All the state's metropolitan statistical area (MSAs) unemployment rates either remained the same or increased in 2023. County unemployment rates increased in 66 counties, decreased in 21 and were unchanged in 12 from 2022 to 2023. The Ames MSA had the lowest rate of the nine major labor market areas at 2.1 percent. The Davenport-Moline-Rock Island MSA had the highest jobless rate at 4.3 percent. Jobless rates for all 99 counties ranged from a low of 1.9 percent in Osceola and Sioux Counties to a high of 6.3 percent in Marshall County.

#### Metropolitan Statistical Area (MSA)

Adams of the Chartest and Avera (AACA)	Labor	Employed	l la casa lo co d	Unemployment Rate	
Metropolitan Statistical Area (MSA)	Force	стрюуеа	Unemployed	2022	2023
Ames	59,600	58,400	1,300	2.1	2.1
Cedar Rapids	142,800	137,900	4,900	3.2	3.5
Davenport-Moline-Rock Island*	186,000	178,000	8,000	3.9	4.3
Scott County (Iowa Portion)	87,600	84,600	3,000	3.3	3.5
Des Moines-West Des Moines	379,400	368,900	10,500	2.7	2.8
Dubuque	55,800	54,200	1,600	2.9	2.9
Iowa City	98,500	96,100	2,400	2.4	2.4
Omaha-Council Bluffs*	505,000	492,400	12,600	2.4	2.5
Harrison County (Iowa portion)	7,200	7,000	200	2.8	2.7
Mills County (Iowa portion)	7,200	7,000	200	2.4	2.7
Pottawattamie County (Iowa portion)	47,900	46,500	1,400	2.9	2.9
Sioux City*	93,500	91,000	2,500	2.6	2.6
Woodbury and Plymouth Counties (lowa port	70,800	68,900	1,900	2.7	2.7
Waterloo-Cedar Falls	87,300	84,600	2,700	2.9	2.9

Source: Labor Market Information Division, Iowa Workforce Development.

#### 2023 Annual Average Unemployment Rates by County



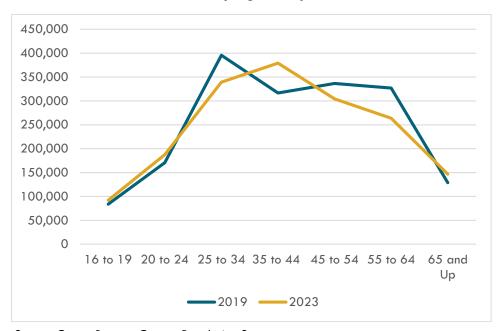
Source: Labor Market Information Division, Iowa Workforce Development.

<sup>\*</sup>Metropolitan Statistical Area includes counties in a neighboring

## Labor Force by Age Group

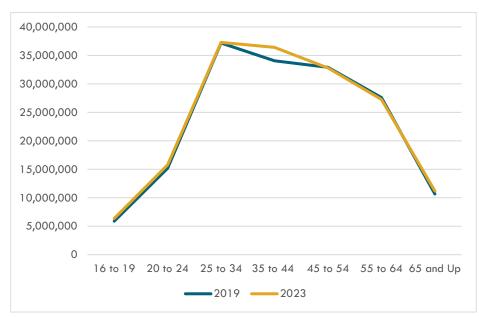
Those 25 to 34 year old made up the largest share of the labor force in 2019, however, they ranked second in labor force participation in 2023. The 35 to 44 year olds saw a 19.7 percent increase in their labor force numbers in 2023. Nationally, this age group saw an increase of over 2 million people from 2019 to 2023 (see chart below). The number one reason people in lowa gave in 2023 for not being in the labor force was due to retirement (61.8 percent) followed by in school (13.4 percent).

#### Labor Force by Age Group for Iowa



Source: Census Bureau, Current Population Survey

#### Labor Force by Age Group for the Nation



Source: Census Bureau, Current Population Survey

# 2023 Nonfarm Employment Trends

## Written by Dennis Schwartz

### The Year at a Glance

lowa's employment demonstrated a positive trend through the year, with gains in all but three months, resulting in a January-to-December total gain of 14,700 jobs. While gains achieved through 2023 were sluggish in comparison to 2022 ( $\pm 25,700$ ), the total gain was greater than the average annual gain in all but three of the past ten years. Monthly losses occurred just three times through the year and all losses were 900 jobs or less. This is the third consecutive year of employment gains following the Covid-19-inspired reduction and a new record high, with an average annual employment of 1,590,200.

Employment increased by 5,200 jobs (based on annual averages) in both government and educational and health services, leading all other sectors. The gains were largely attributed to 4,300 additional jobs in health care and social assistance and 3,000 additional jobs in local government. State government also played a role, adding 1,600 jobs.

The information sector provided a bit of evidence of a potential trend reversal in 2022 when the sector enjoyed its' first employment gain in more than a decade, adding 1.37% (based on average annual employment). However, employment levels did not have the same experience in 2023 with an employment decrease -2.62%. The decrease is less than the ten-year average change of -3.30%.

When compared to surrounding states, lowa's rate of employment gain slipped one position from the previous year and is ranked seventh out of a seven-state field. lowa and all surrounding states experienced employment gains, with Nebraska leading the pack with a 2.20% gain. lowa's rate of gain was 1.10% which is slightly less than half the rate of gain from 2022 (2.21%). The 2023 value falls just below Illinois (1.33%) which slipped six positions from the previous year. In 2021, lowa was in fifth place when compared to the six surrounding states' employment losses, see Figure 1, below.

For eight of the last nine years, the national annual rate of employment growth has outperformed that of lowa. The only exception was 2019 to 2020 when lowa's rate of contraction was lower than the national rate of contraction. In 2023, the nation's rate of growth was 2.32%, compared to lowa's 1.10%, see Figure 2, on the next page.

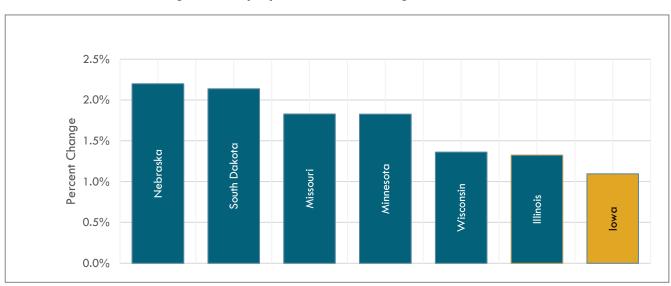


Figure 1: Employment Percent Change 2022 to 2023

| Solution | Solution

Figure 2: Iowa/U.S. Total Nonfarm Employment
(Annual Percent Change)

## Nonfarm Employment Industry Movement

As previously stated, educational and health services and government led all other super-sectors in employment gains (based on annual averages). Gains in educational and health services were largely the result of increased employment in the health care and social assistance sub-sector (+4,300, based on annual averages). This is the largest year-to-year gain in health care and social assistance in recent history. The increased employment in government is the result of gains in every sub-sector; federal government (+500), state government (+1,600) and local government (+3,000).

Financial activities employment has been trending downward since achieving its' peak in 2019. Prior to 2019, the sector had enjoyed an upward trend extending more than 15 years with only three years of reduced employment in that timeframe. Within the sector, the finance and insurance sub-sector bears responsibility for nearly all the downward trend, dropping 1,700 jobs since 2018. Conversely, real estate and rental and leasing has demonstrated a slight upward trend over the past ten years, although over the past seven years employment has seen little movement.

Manufacturing enjoyed its' third consecutive gain, adding 2,900 jobs (+1.28%) with many of those jobs in the non-durable goods sub-sector (+1.700). The three years of gains have resulted in sector employment exceeding the pre-pandemic employment record, set in 2019. Non-durable goods manufacturing was quick to gain employment beyond the 2019 level, having achieved that landmark in 2021. However, durable goods manufacturing employment still falls short (-3.0%) of the level seen prior to the pandemic.

#### Other Economic Indicators

Corn prices demonstrated a downward trend through the year based on lowa State University Extension & Outreach data (annual averages). The trend resulted in a 12.4% reduction in the annual average price per bushel when compared to 2022. Iowa farmers received an average of \$6.01 per bushel in 2023, down \$0.85 from 2022. The reduction follows two years of gains and the \$6.01 price per bushel (2023 average annual price) is more than 82% above the ten-year low of \$3.30 per bushel seen in 2017.

Corn prices were relatively steady from 2014 through 2020, holding within a range of \$3.30 to \$4.13. Significant gains were seen in 2021 and 2022, resulting in gains totaling \$3.40 (97.7%) from 2020 to 2022.

Soybean prices also trended downward through the year and ended 2023 with an average annual price of \$14.06 per bushel, down 4.7% from the previous year. Historically, prices held mostly steady from 2015 to 2020. In 2021 the agriculture community enjoyed a 46.2% gain in soybean prices, followed by a 12.3% gain in 2022.

According to the lowa Association of Realtors, single family detached home sales in lowa decreased 15.2% from 2022 to 2023. Townhouse and condominium sales declined 14.6%. The number of closed sales moved from 43,728 in 2022 to 37,108 in 2023, a 15.1% reduction. The average sale price of homes saw a 5.4% gain, moving from \$248,710 in 2022 to \$262,071 in 2023.

According to 2023 data from the U.S. Census Bureau Building Permits Survey, the total number of new privately owned housing units authorized in lowa (building permits issued), including single and multiple unit structures, decreased 11.6% (-1,474 units). Surrounding states did not fare much better with exception of Wisconsin which enjoyed a 2.0% gain. All other states saw a decline in building permits issued ranging from -17.5% (Minnesota) to -24.9% (South Dakota).

#### References

Corn and soybean prices:

https://www.extension.iastate.edu/agdm/crops/pdf/a2-11.pdf

lowa home listings/sales:

https://www.iowarealtors.com/filesimages/Docs/Monthly%20Stats%20Report/2023/December%20YE.pdf

**Building permits:** 

https://www.census.gov/construction/bps/statemonthly.html

**Employment:** 

https://www.bls.gov/sae/data/

# Historically Low Unemployment Insurance Claims

#### Written by Teresa Wageman

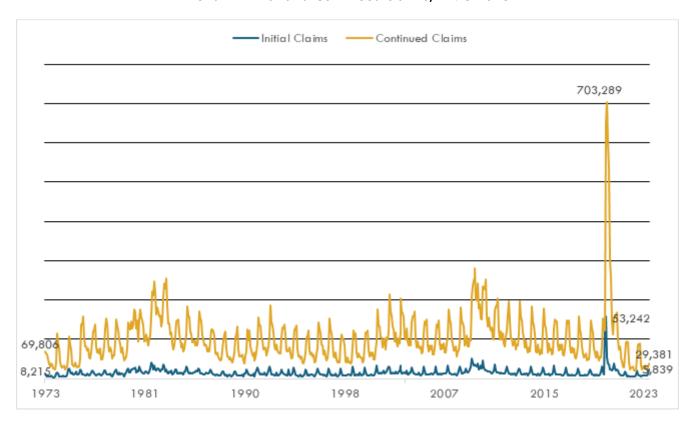
## Initial and Continued Claims Trends in 2023

Initial and continued claims continued to run historically low in 2023 as the state continues to rebound from the pandemic of 2020. An **initial claim** represents a new spell of unemployment for an unemployment insurance claimant. A **continued claim** refers to ongoing weekly benefit claims by workers who previously filed an initial claim. These claims track individuals currently receiving unemployment benefits, in contrast to initial claims, which monitor new filings for benefits.

There were 115,270 initial claims in 2023, which marks a continued low record of initial claims from 2022 (98,161 initial claims), which was the lowest number of claims since 1973 (89,422), the lowest initial claim count in recorded history. For reference, initial claims hit a high of 157,324 claims in April of 2020.

There were 585,340 continued claims in 2023 a decrease from 2022, which had 590,205 continued claims. The lowest number of continued claims in recorded history, again as with initial claims, was in 1973 (508,809). Continued claims hit a high of 723,839 claims in June of 2020.

#### Trend in Initial and Continued claims, 1973-2023

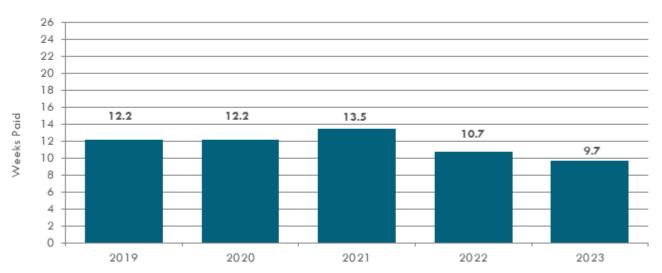


## The Characteristics of Unemployment Recipients In 2023

There were 65,876 unemployment benefit recipients in 2023, a slight increase from the year 2022 (63,035). Both numbers represent a historical low. These counts are well below the 2020 pandemic number of recipients, and the pre-pandemic recipient number in 2019 of 344,206 and 95,159 recipients, respectively. The chart below demonstrates this. The recipient number represents the number of persons receiving at least one UI benefit payment during the year.

The average duration of benefits also marked a significant low at 9.7 weeks for 2023. Down from 10.7 weeks in 2022 and marks the lowest level since 1967 when the average duration was also 9.7 weeks. The average duration is calculated as follows: The number of weeks compensated for a twelve month period divided by the number of first payments for the same period.

#### Average Duration over the Past 5 Years

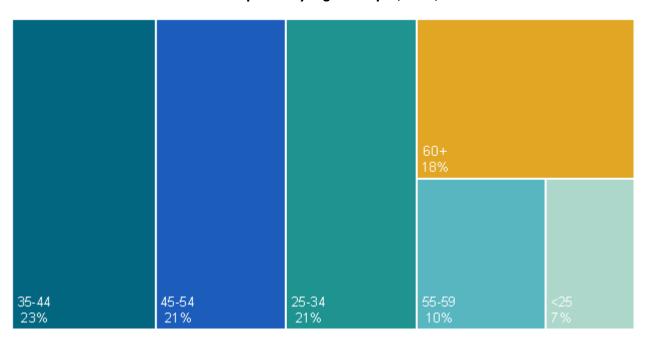


Males made of the higher percentage of 67% of UI recipients in 2023 explained by Male dominated industries having the highest number of claimants for the year. 32% were female while there was a no response rate of 1%. Seasonality affects the trend of this statistic as by mid-year as seasonal industries like construction see fewer claimants and the higher percentage flips to female claimants. In June 2023 the breakdown by gender was 55% female to 44% male. By late autumn the trend moves back to a higher percentage of males as seasonal layoffs begin. Most recipients (23%) were between the age of 35-44 years old and 21% were between the age of 23-34 and 45-54 years old.

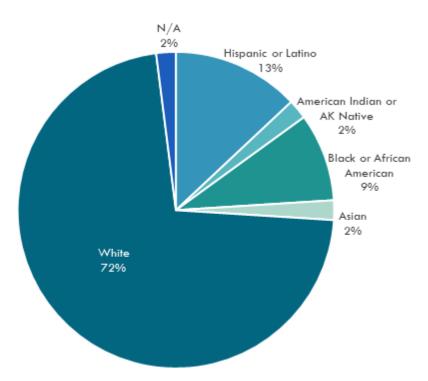
The majority of recipients (72%) were White while 13% were Hispanic or Latino, making up the highest percentage of recipients in 2023 followed by Black or African American (9%).

The charts on the next page show summaries of recipients by age groups and by race and ethnical groupings.

## Recipients by Age Groups (2023)

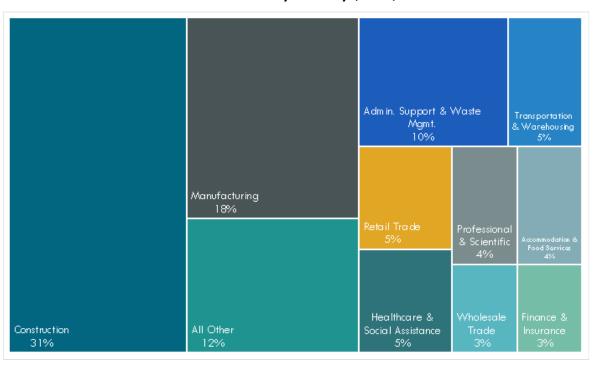


## Race/Ethnicity by Age Groups (2023)

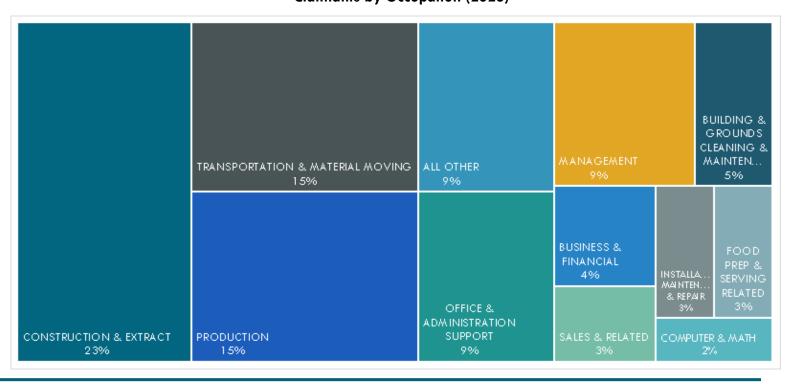


As previously mentioned, male dominated industries and occupation sectors made up the highest percentage of claimants in 2023. Construction (31%) and manufacturing (18%) top the industry list. Construction and extract (23%) and production and transportation and material moving (15%) top the occupation list. Again, seasonality affects these sector counts with temporary seasonal layoffs in industries like construction due to weather restrictions during the winter months and temporary layoffs in manufacturing with some manufacturers having close downs over the holiday weeks. The following charts breakdown claimants by industry and occupation statistics.

#### Claimants by Industry (2023)



## Claimants by Occupation (2023)



# lowa Industry Projections Overview, 2022-2032

## Written by Chap Deit

## Industry Employment in the Next Ten Years

Industry employment in lowa is projected to add 116,720 nonfarm jobs in the next 10 years (2022-2032). Industry employment will increase to 1,853,535 jobs: a 6.7 percent increase from the current 1,736,815 base. The U.S. Bureau of Labor Statistics (BLS) 2022-2032 industry projections shows that the U.S. is expected to add 4.7 million jobs in the same decade and employment will grow 2.8 percent and increase to 169.1 million jobs by 2032.

The healthcare and social assistance sector is projected to add the most jobs in the next ten years, driven by an increase in the number of aging populations. The ongoing adaptation of e-commerce will continue to support growth in transportation and warehousing. Educational services will benefit from a growing need for workers upskilling and reskilling, and from a greater digital economy. Meanwhile, manufacturing, construction, and leisure and hospitality sectors will continue modest growth. The adaptation of new technologies coupled with demand for continuous change will support solid jobs gains in the professional and business services. Figure 1, below, illustrates the projected employment growth for top major industry sectors in lowa for 2022-2032.

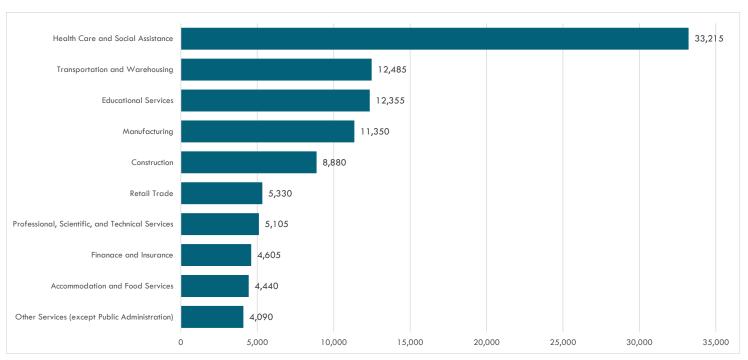


Figure 1: Projected Growth by Major Industry Sectors (Top Ten)

Source: Industry Projections 2022-2032, Research & Analysis Bureau, Iowa Workforce Development

## Growth and Concentration of Industry Sectors in Iowa

One important aspect of the projections data is to offers analysis that is useful for economic developers to make informed decisions related to investment, workforce development for planning, and businesses to understand the economic dynamics and strategic competitiveness within the region. For example, businesses can use location quotients for optimizing and aligning training needs for the local initiative that increase synergies within the region.

#### **Location Quotients**

Analysis of location quotients (LQ) the measurement of the industry concentration, is a useful in identifying and categorizing industry sectors that are leading, emerging, maturing, and declining.

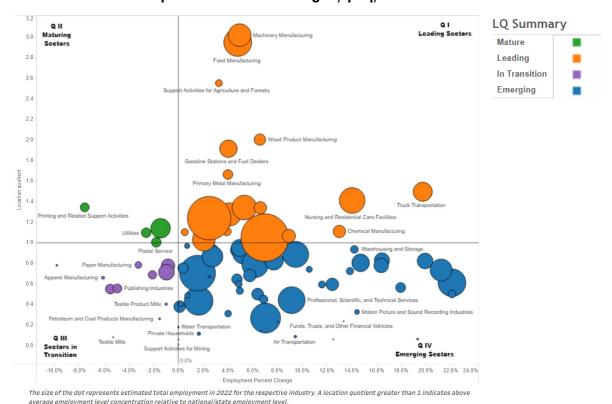
This analysis utilizes location quotients (LQ) as measures of concentration of the industry relative to the nation.

High location quotients indicate a strong concentration of employment compared to the national average. A location quotient with value of one suggests that the industry has the same employment distribution as the nation. Location quotients with ratios less than one mean that an industry has a small footprint and is underrepresented relative to the nation.

Figure 2 shows location quotients and projected percent change for 2022-2032 industry projections, this is a screenshot from the Tableau visualization on IWD's LMI website. The X-axis shows the 2022-2032 projected percent change in nonfarm employment projections. The Y-axis shows the location quotient ratio based on 2022 estimated annual average nonfarm employment. The size of the bubble indicates the estimated annual average employment for the respective industry in 2022.

Figure 2: Location Quotient and Projected Percent Change for 2022-2032 Industry Projections

Screen Capture: workforce.iowa.gov/iproj/data



Source: Industry Projections 2022-2032, Research & Analysis Bureau, Iowa Workforce Development

Note: The Location Quotients are based on estimated nonfarm industry projections using 3-digit North American Industry Classification System (NAICS). The farm sectors: Crop Production (NAICS 111) and Animal Production and Aquaculture (NAICS 112), have much higher value; LQ= 4.6 and LQ= 11.2, respectively.

In addition to location quotient and projected percent change for 2022-2032 industry projections, Figure 2 (on the previous page) also shows a chart that has four categories (quadrant):

As can be seen in Figure 2 on the upper right-hand quadrant, the 1st quadrant (Q I) contains industry sectors that have strong concentrations in lowa and are projected to grow jobs. They are also expected to continue to have relatively strong concentration within lowa. The leading sectors include machinery manufacturing (LQ=3), food manufacturing (LQ=2.9), support activities for agriculture and forestry (LQ=2.6), wood product manufacturing (LQ=2), and gasoline stations and fuel dealers (LQ=1.9). These industry sectors are highly concentrated, and they are expected to grow for the projected period. Perhaps more important, those high location quotients indicates that lowa manufacturers produce more than local demand. For example, this analysis suggests that machinery manufacturing is an export industry. Furthermore, it is 3 times more concentrated than the nation, well above the 1.2 threshold for export industry. These sectors hold a unique position within the lowa economy; they hold relative competitive advantage for the state.

The  $2^{nd}$  quadrant (Q II) contains industry sectors that have high concentration within lowa. However, these industry sectors are projected to have declining jobs growth, which means declining concentration within lowa. They are the maturing industry sectors that still hold important employment opportunities, but with diminishing growth prospect due to structural change, often driven by technological innovation and advancement. Industry sectors in this category include printing and related support activities, merchant wholesalers, nondurable goods, utilities and postal service.

The 3rd quadrant (Q III) contains industry sectors that have low concentrations of jobs in an area and are projected to have declining growth. They are expected to trend lower, and consequently further decline in concentration within the region. They are the industry sectors in transition. Industry sectors in this category include textile mills, apparel manufacturing, publishing industries, and clothing, clothing accessories, shoe, and jewelry retailers, among others.

The 4th quadrant (Q IV) contains industry sectors that have a low concentration within lowa, but these industry sectors are projected to have strong growth. This growth means they are expected to have an increase in concentration within the region. They are emerging industry sectors that have high growth opportunities for lowa. Industry sectors in this category include ambulatory health care services, social assistance, warehousing and storage, and couriers and messengers, among others. A full analysis of industry projections and related labor market information data can be accessed here.

## Summary

Healthcare and social assistance, professional and technical services, and transportation and warehousing sectors are projected to add the most jobs. Additionally, the expected growth of e-commerce is expected to mitigate projected gradual declines in retail trade activity.

Location quotient analysis on employment levels in lowa provides quantifiable evidence that Manufacturing is an important sector in lowa; it expected to continue to be is a vital sector. Consequently, the advancement in automation technologies can be leveraged for productivity gains. That is, the adoption of automation technologies may potentially increase productivity, which is one way to compensate for the ongoing shifts in demographics in lowa.

Overall, understanding the complementary and distribution structure of industry sectors in lowa gives businesses and policy makers alike the analytical tools to pursue sustainable growth strategies that equilibrate workforce demand and aligns educational and training needs for the labor market demand.

#### References

Employment Projections, September.2022: <a href="https://www.bls.gov/emp/">https://www.bls.gov/emp/</a>

lowa Industry Projections 2022-2032, May 2024: https://workforce.iowa.gov/iproj/data

Location Quotient information, June 2024. Bureau of Labor Statistics (BLS) https://www.bls.gov/cew/about-data/location-quotients-explained.htm

# Transportation and Warehousing in Iowa

Written by James Morris and Jon Mostert

## **Background**

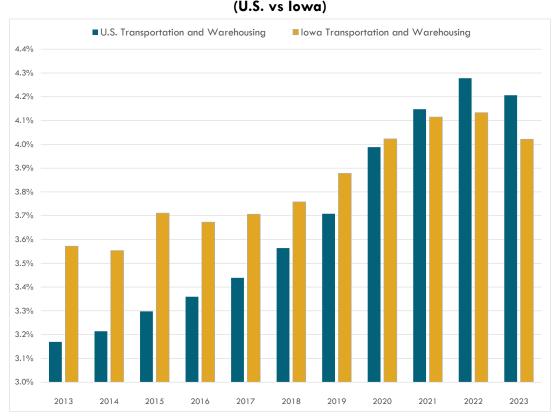
Per Bureau of Labor Statistics definition, the Transportation and Warehousing sector includes industries providing transportation of passengers and cargo, warehousing and storage for goods, scenic and sightseeing transportation, and support activities related to modes of transportation. Establishments in these industries use transportation equipment or transportation related facilities as a productive asset. The type of equipment depends on the mode of transportation. The modes of transportation are air, rail, water, road, and pipeline<sup>1</sup>.

## Transportation and Warehousing Sector Growth

The transportation and warehousing sector continues to grow and an elevated rate compared to all other industries. This sector represented one in twenty-eight private industry jobs in lowa ten years ago, equating to 3.6 percent of all unemployment insurance covered jobs. By the end of 2023, this share increased to one in every twenty-five private sector jobs or 4.0 percent (see Figure 1).

Nationally, the U.S. started with a smaller percentage of private sector employment in transportation and warehousing (3.2 percent). This share rose to 4.2 percent by 2023. In both cases, gains can largely be attributed to the rise in ecommerce since 1996, although improvements in logistics and technology mean that both consumers and businesses have increasingly more choices for fulfilling and processing orders. Ecommerce growth accounted for 0.6 percent of all retail in 1996. This share grew to 15.6 percent by the end of the fourth quarter 2023 (Rosa, 2024).

Figure 1: Transportation and Warehousing as a Percentage of Total Covered Employment



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)

## Iowa Transportation and Warehousing Sector Growth

Over the past ten years, the transportation and warehousing gained 9,096 jobs equating to a gain of 17.0 percent. For contrast, private industry grew by 59,005 jobs or 3.9 percent in lowa.

Put another way, almost one in six jobs gained in the labor market over the prior ten years in lowa was in transportation and warehousing. While most private sectors added jobs during that span, retail trade continues to pare jobs due to changing preferences in shopping.

Along those same lines, the information sector continues to trend down due to advancements in technology coupled with declining demand for printed materials (see Figure 2). Additionally, shifting consumer preferences also affected both wholesale and retail trade; both sectors down 2.2 percent over the last ten years.

Retail Trade Tranportation and Warhousing Information 30% lowa Total Private 20% 17.0% 10% 5.6% 3.9% 0% 2013 2015 2016 2017 2018 201 <del>20</del>23 -2.2% -10% -20% -28.8% -30%

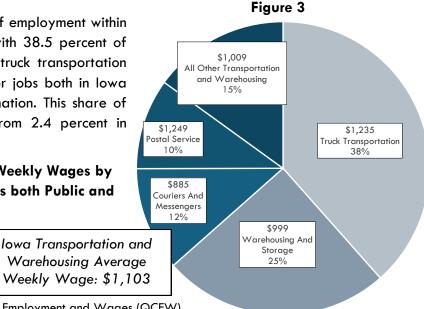
Figure 2: Iowa 10-Year Growth for Selected Industries (%)

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)

Transportation and Warehousing Subsector Characteristics

Truck transportation holds the highest share of employment within the transportation and warehousing sector with 38.5 percent of all sector jobs (see Figure 3). Additionally, truck transportation accounts for 2.1 percent of all private sector jobs both in lowa and shares that same percentage with the nation. This share of total private employment has decreased from 2.4 percent in 2013.

Figure 3: Transportation and Warehousing Weekly Wages by Sub-Sector—2023 Annual Average, Includes both Public and Private Sectors



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)

Warehousing and storage accounts for 25.0 percent of all transportation and warehousing jobs and 1.4 percent of all private sector jobs in lowa and the U.S. This share increased from 0.6 percent of all private sector jobs ten years ago.

Midwest and central U.S. states are attractive options for firms involved in trucking. lowa ranks fifth in location quotient<sup>2</sup> nationally for truck transportation (see Figure 4, below).

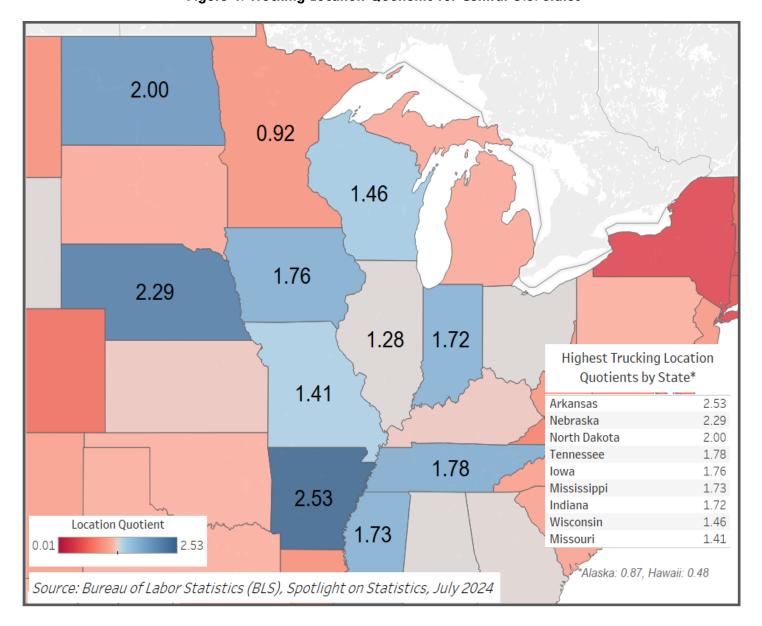


Figure 4: Trucking Location Quotients for Central U.S. States

## Wage Analysis

Average weekly wages for transportation and warehousing workers fall just short of those of all covered employment jobs in lowa, \$1,103 versus \$1,142 per week, respectively. This total falls below the U.S. average weekly covered wage of \$1,391 per week.

Postal service workers earned the highest wages of all transportation and warehousing workers with \$1,249 earned per week on average. Truck transportation follows close behind at \$1,235 per week. Warehousing and storage workers comprised one quarter of all jobs for transportation and warehousing and earned \$999 per week. Couriers and messengers earned the least at \$885 per week.

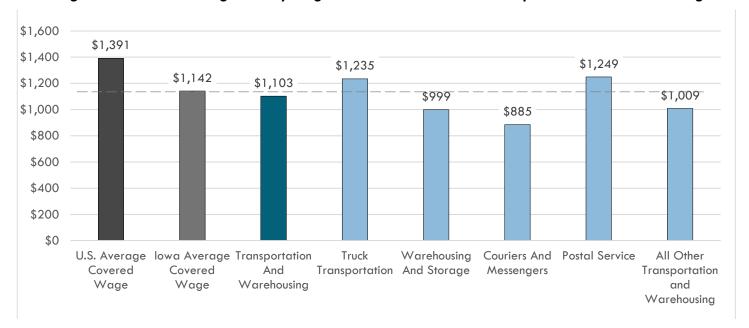


Figure 5: Selected Average Weekly Wages for Iowa and the U.S. Transportation and Warehousing

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2023

## Demographics of Transportation and Warehousing

The transportation and warehousing sector reflects a male-dominated industry with almost 3 out of 4 workers being males (73.9 percent) --21.3 percent higher than the average of all industries at 52.6 percent. Only mining, construction, utilities, and wholesale trade contain up a higher percentage of male workers.

Conversely, health care and social assistance had the highest concentration of female to male workers with 82.7 percent, followed by education services (66.2 percent) and then finance and insurance (61.8 percent).

Further information regarding lowa sector employment by Gender can be viewed in Figure 6, on the next page.

Figure 6: Iowa Sector Employment by Gender 2023, 4th Quarter

Sector	Male vs. Female	Female vs. Male	
Sector	Ratio	Ratio	
Mining, Quarrying, and Oil and Gas Extraction	87.1%	12.9%	
Construction	86.1%	13.9%	
Utilities	75.7%	24.3%	
Wholesale Trade	75.4%	24.6%	
Transportation and Warehousing	73.9%	26.1%	
Manufacturing	70.9%	29.1%	
Agriculture, Forestry, Fishing and Hunting	69.3%	30.7%	
Information	57.3%	42.7%	
Administrative and Support and Waste Management and Remediation Services	55.8%	44.2%	
Real Estate and Rental and Leasing	55.5%	44.5%	
Total Covered Jobs*	52.6%	47.4%	
Other Services (except Public Administration)	51.2%	48.8%	
Retail Trade	50.2%	49.8%	
Public Administration	50.0%	50.0%	
Management of Companies and Enterprises	49.4%	50.6%	
Professional, Scientific, and Technical Services	48.4%	51.6%	
Arts, Entertainment, and Recreation	47.7%	52.3%	
Accommodation and Food Services	41.6%	58.4%	
Finance and Insurance	38.2%	61.8%	
Educational Services	33.8%	66.2%	
Health Care and Social Assistance	17.3%	82.7%	

<sup>\*</sup>Total Covered Jobs are those covered by Iowa's unemployment insurance tax laws

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)

# Transportation and Warehousing Forecasting

Transportation and warehousing will continue to add jobs at an elevated pace over the next ten years. Whereas lowa non-agricultural employment is expected to grow by 6.7 percent, transportation and warehousing is projected to increase at a faster rate at 17.0 percent. This increase equates to 12,465 jobs gained (see Figure 7, on the next page).

Within this sector, support activities for transportation will gain jobs at the fastest rate ( $\pm 22.1$  percent) and will add 1,055 jobs. Warehousing and storage will gain 3,815 jobs ( $\pm 19.9$  percent) followed by truck transportation with 5,630 jobs ( $\pm 19.7$  percent). Only the postal service is forecast to shed jobs over the next ten years ( $\pm 130$  jobs or 1.8 percent).

For comparison, the U.S. is predicting to grow by 2.8 percent over the next ten years, equating to 4.7 million jobs gained. The growth rate for the nation is markedly lower than the lowa growth rate by 3.9 percent. The transportation and warehousing sector in the U.S. is predicted to gain 570,000 jobs or 8.6 percent.

Figure 7: Industry Projections for Transportation and Warehousing, 2022-2032)

NAICS Subsector	Description	Base Employment	Projected Growth	Growth (%)
	Total All Industries*	1,736,815	116,720	6.7%
48-49	Transportation and Warehousing	73,260	12,465	17.0%
488	Support Activities for Transportation	4,780	1,055	22.1%
493	Warehousing and Storage	19,175	3,815	19.9%
484	Truck Transportation	28,565	5,630	19.7%
492	Couriers and Messengers	7,670	1,375	17.9%
485	Transit and Ground Passenger Transportation	4,650	660	14.2%
481	All Other Transportation and Warehousing	1,135	60	5.3%
491	Postal Service	7,285	-130	-1.8%
	Total All Industries (U.S.)*	164,483	4,666	2.8%
48-49	Transportation and Warehousing U.S.	6,651	570	8.6%

<sup>\*</sup>Excludes agricultural industries , U.S. data in thousands

Source: Industry Projections 2022-2032, Research & Analysis Bureau, Iowa Workforce Development

#### References

<sup>1</sup>Quarterly Census of Employment and Wages Industry Finder. (2024, July 23).

Retrieved from U.S. Bureau of Labor Statistics: <a href="https://data.bls.gov/cew/apps/bls-naics/v3/bls-naics-app.htm#tab=search&naics=2022&keyword=48&searchType=titles&fromHier=true&filter=nothing&sort=text-asc&resultIndex=0">https://data.bls.gov/cew/apps/bls-naics/v3/bls-naics/v3/bls-naics/v3/bls-naics/v3/bls-naics-v3/bls-nai

<sup>2</sup>Rosa, J. D. (2024, February 27). Report: Transportation, warehousing job growth exceeds other sectors.

Retrieved from TB&P: <a href="https://talkbusiness.net/2024/02/report-transportation-warehousing-job-growth-exceeds-other-sectors">https://talkbusiness.net/2024/02/report-transportation-warehousing-job-growth-exceeds-other-sectors</a>

# JOLTS Trends and Analysis in Iowa

#### Written by Kusum Adhikari

## Background

Job Openings and Labor Turnover Survey (JOLTS), conducted by U.S. Bureau of Labor Statistics (BLS), provides crucial insights into the U.S. labor market. Each month, approximately 21,000 private, nonagricultural businesses participate in the survey. JOLTS tracks metrics such as job openings, hires, and separations (including voluntary quits). Economists, government officials, and data analyst rely on JOLTS data to understand labor demand and workforce dynamics. By analyzing trends in job vacancies and turnover, stakeholders gain valuable information for policy decisions and economic assessments.

## Methodology of JOLTS

- Job Openings encompass all available positions on the last business day of the reference month. To qualify as an open job, three conditions must be met: a specific position exists with available work (whether fulltime, part-time, permanent, short-term, or seasonal); the job could start within 30 days; and the employer actively recruits external candidates to fill the position through various means such as advertising, networking, and interviews.
- Hires encompass all payroll additions during the reference month, including new and rehired employees—both full-time and part-time. This category includes permanent, short-term, and seasonal workers, as well as those recalled after a layoff lasting more than 7 days. Additionally, it covers on-call or intermittent employees who return to work after formal separation, as well as workers hired, separated, or transferred within the same month.
- Total Separations includes all separations from the payroll during the entire reference month and is reported by type of separation: "quits", "layoffs" and "discharges" and "other separations".
  - Quits: These involve voluntary departures by employees, except for retirements or transfers to other locations.
  - Layoffs and Discharges: These are involuntary separations initiated by the employer. They include layoffs without intent to rehire, layoffs lasting more than 7 days, discharges due to mergers, downsizing, or closings, firings for cause, and terminations of both permanent and short-term employees. Seasonal employees are also covered.
  - Other Separations: This category includes retirements, transfers to other locations, separations due to disability, and deaths. Transfers within the same location, employees on strike, temporary help agency workers, employee leasing company employees, and outside contractors (consultants) are excluded from other separations (BLS, Job Openings and Labor Turnover Survey: Concepts, 2024).

The JOLTS data in this article use rate values which normalize indicator values versus the sum of employment to standardize the data and allow for easier comparison. See the BLS.gov website for more information1.

## Job Openings

The number of job openings increased across all regions around 2021 (Figure 1). Prior to that, there were fluctuations, but the overall trend was positive. Job openings steadily increased until 2020, followed by a slight decline in USA. The decline in job openings was primarily attributed to the COVID-19 pandemic and the efforts to contain it. The longest employment recovery and expansion in U.S. history abruptly ended, resulting in historic and widespread job losses (BLS, Monthly Labor Review, 2021). Like the nation, there was growth until 2020 in lowa. The Midwest region experienced a similar pattern as the national trend. The Northeast also followed the overall positive trend. Job openings increased consistently until 2021 in South and West. The surge in job openings around 2021 could be attributed to economic recovery, industry shifts, or other factors. Policymakers and businesses can use this data to inform workforce planning and economic development strategies.

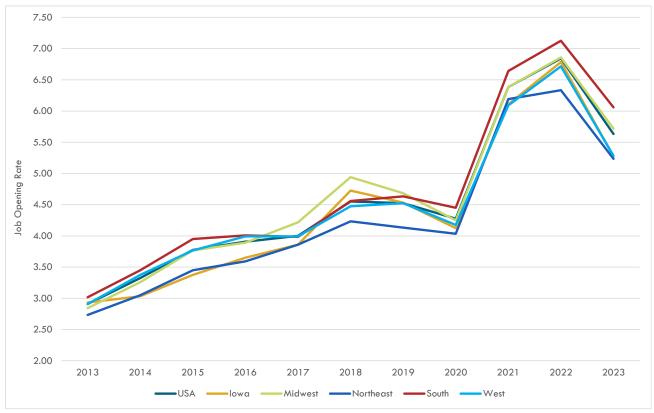


Figure 1: Job Openings by Area

Source: Bureau of Labor Statistics, JOLTS Program

#### Hires

The national average for hires increased from 3.37 percent in 2013 to 4.20 percent in 2022, with a slight dip to 3.79 percent in 2023. This growth trend indicates overall positive employment conditions in the country during this period. Iowa's average hires showed consistent growth, reaching 4.11 in 2021. However, it declined to 3.57 percent in 2023. This suggests that while Iowa experienced strong hiring both leading up to the Coronavirus pandemic in 2020 and immediately following the implementation of social distancing measures, rising wages and uncertainty in supply chains began to reduce hire rates nationally. The Midwest region also demonstrated steady growth, with an average of 4.35 hires in 2021. However, it decreased to 3.68 in 2023. This aligns with the national trend but highlights regional variations. The Northeast remained relatively stable, maintaining an average of 3.24 hires in 2023.

This consistency indicates a balanced employment landscape in that region. The South had robust hiring, averaging 4.71 hires in 2021. Although it decreased slightly to 4.29 in 2023, it remained significantly higher than other regions. The South's economy appears resilient. The West followed a similar trajectory, averaging 4.25 percent in 2021 and dropping to 3.51 percent in 2023. Despite the decline, it remained competitive in terms of job opportunities.

5.00 4.50 4.00 Hire Rate 3.50 3.00 2.50 2013 2015 2016 2017 2018 2019 2020 2021 2022 2023 USA Northeast South Midwest

Figure 2: Hires by Area

Source: Bureau of Labor Statistics, JOLTS Program

# **Total Separations**

The national total separations rate started at 3.23 percent in 2013, gradually increased to 4.77 percent in 2020, and then decreased slightly to 3.63 in 2023. The South shows consistently higher separation numbers than other regions, beginning at 3.39 percent in 2013, reaching 4.82 percent in 2020, and settling at 4.07 percent in 2023. Iowa and Northeast both have lower separation figures compared to other individual regions. lowa had a similar trend with national level, starting at 2.83 percent in 2013, reaching a peak of 4.34 percent in 2020, and settling back to 3.60 in 2023. The Northeast maintained relatively lower separations, starting at 2.90 percent in 2013, peaking at 4.42 percent in 2020, and ending at 3.04 percent in 2023. Midwest and West regions exhibit moderate separation levels throughout the years. The difference in regional separations for the JOLTS can be attributed to several factors, including varying economic conditions, industry composition, and labor market dynamics across different regions in the United States. Factors such as local demand for specific skills, regional industries, and population density also play a significant role in shaping these variations. Overall, the trend remains relatively stable, with a noticeable increase in separations around 2019-2020, most likely attributed to COVID-19 shutdowns.

6.00 5.00 4.00 **Total Separation Rate** 3.00 2.00 1.00 0.00 2013 2020 2021 2022 2014 2015 2016 2017 2018 2019 2023 ■ lowa ■ Midwest ■ Northeast ■ South

Figure 3: Total Separations by Area

Source: Bureau of Labor Statistics, JOLTS Program

#### Quits

Quits increased gradually over the years in USA, starting at 1.68 percent in 2013 and reaching 2.38 percent in 2023. Despite fluctuations, the overall trend indicates a willingness among employees to seek new opportunities. The South consistently had higher quit rates, peaking at 3.18 in 2022. Factors like job market dynamics, industry growth, and quality of life likely contribute to this trend. The Northeast maintained relatively lower quit rates, with a peak of 2.11 percent in 2022. Stable industries and strong employer-employee relationships play a role here. Iowa and the Midwest followed similar patterns, with moderate increases over the years, suggesting a balance between job stability and career progression. The West experienced fluctuations, ranging from 2.0 percent to 2.7 percent. Economic diversity and lifestyle preferences impact employee decisions.

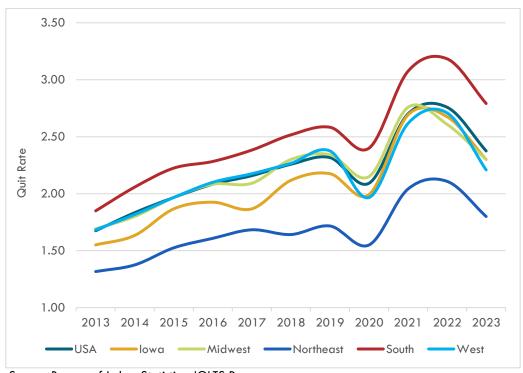


Figure 4: Quits by Area

Source: Bureau of Labor Statistics, JOLTS Program

## Layoffs and Discharges

The chart visualizes the annual trends in layoffs and discharges across different regions in the United States. Layoffs and discharges were highest in 2020 suggesting increased involuntary separations during that period. The Northeast showed higher layoffs and discharges, followed by the West, Midwest, USA, and South in 2020. The COVID-19 pandemic significantly impacted employment across various industries, leading to widespread layoffs. Many businesses faced economic challenges, resulting in workforce reductions. Layoffs and discharges in lowa followed a similar pattern to the national trend.

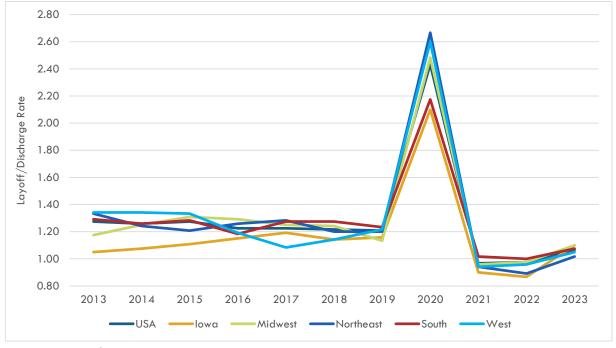


Figure 5: Layoffs and Discharges by Area

Source: Bureau of Labor Statistics, JOLTS Program

## Other Separations

All other separations decreased to 0.23 percent in 2017 and remained at lower level until 2023 for the nation. The Midwest region follows a similar pattern; however, it appears slightly lower overall. The Northeast region also mirrors the USA trend. The South region shows more significant fluctuations with both higher peaks and lower troughs compared to the national level. The West region has a distinct pattern. It starts lower than the USA trend, rises sharply, and then declines (data at the state level is not available for this category).

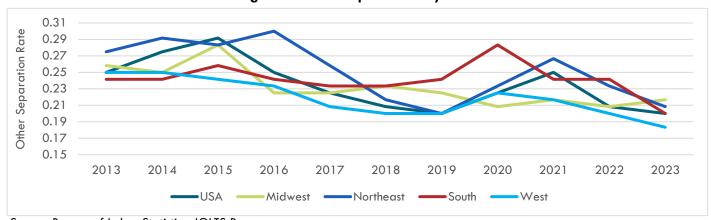


Figure 6: Other Separations by Area

Source: Bureau of Labor Statistics, JOLTS Program

#### lowa

The State's job openings rate started just above the 5.0 percent in January and shows a slight decrease over the months, ending just below 5.0 percent in May. This suggests that there were consistently more job openings than hires during this period. Hires begins just under 4 in January and follows a relatively stable trend with a slight increase towards May. Hires remained consistent, but the gap between job openings and hires persisted. Total separations (which include both voluntary quits and involuntary layoffs) starts at approximately 3.5 percent and shows an increase until March, followed by a slight decline towards May indicating changes in workforce stability. Quits starts around 2.20 percent and decreases in May. Quits contribute to total separations but remain at lower levels than hires or job openings, suggesting moderate job satisfaction or labor market mobility. Layoffs and Discharges starts just above 1 and remains quite flat throughout the period. This indicates little change in layoffs and discharges from month to month, suggesting relative employment security or fewer involuntary separations.

In summary, the chart below reveals that job openings consistently exceeded hires, implying a demand for workers. Total separations fluctuated, while quits remained relatively stable. Layoffs and discharges were minimal. Overall, lowa's labor market dynamics in 2024 reflect a competitive job market with opportunities for job seekers.

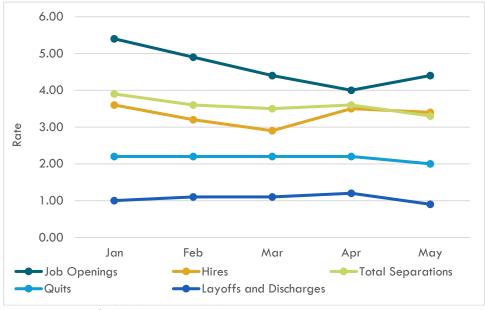


Figure 7: JOLTS in Iowa, Jan-May 2024

Source: Bureau of Labor Statistics, JOLTS Program

## References

- BLS. (2021, June). Monthly Labor Review. Retrieved from U.S. Bureau of Labor Statistics: <a href="https://www.bls.gov/opub/mlr/2021/article/covid-19-ends-longest-employment-expansion-in-ces-history.htm">https://www.bls.gov/opub/mlr/2021/article/covid-19-ends-longest-employment-expansion-in-ces-history.htm</a>
- BLS. (2024, July). Databases, Tables & Calculators by Subject. Retrieved from U.S. Bureau of Labor Statistics: <a href="https://data.bls.gov/PDQWeb/jt">https://data.bls.gov/PDQWeb/jt</a>
- BLS. (2024, March 29). Job Openings and Labor Turnover Survey: Concepts. Retrieved from U.S. Bureau of Labor Statistics: <a href="https://www.bls.gov/opub/hom/ilt/concepts.htm">https://www.bls.gov/opub/hom/ilt/concepts.htm</a>

39,880 (29.9%)

## 2022-2032 Iowa Jobs Outlook

#### Written by Brent Paulson

## Occupational Projections—Past, Present, and Projected

lowa's total occupational employment is projecting an increase of 6.2 percent (doubling the national rate of 3%) between 2022 and 2032 resulting in 113,420 new jobs. Already at a decade's long low, the rate continues a downward trend emanating from the 2008 recession with the lone exception being a projected growth surge following the unexpected Covid-19 period. Currently, a slower growing labor force saddled with economic uncertainties including low unemployment, higher relative interest rates, an aging population, and lower birth and labor participation rates remain challenges for lowa. A review of past, present, and projected employment levels for occupational groups follows.

Analysis of worker movements and trends warrant a look to the recent past. Occupational employment estimates in lowa from 2012 through 2022, for example, report stronger double-digit growth in the Management, Business/Financial, Computer/Mathematical, Architecture/Engineering, Life/Physical/Social Science, Healthcare, Agriculture, Construction, and Transportation/Material Moving occupational groups of which the top two (Transportation and Management) added 68,390 jobs out of lowa's net occupational increase of 78,905 jobs (or 87%). High growth in these groups were due primarily to increases in the transportation, trades, and STEM occupations. Adding more than 10,000 jobs over the decade include Transportation (39,880), Construction (10,285), Healthcare (27,365), Business/Financial (15,640), and Management (28,510). Conversely, occupational groups experiencing job losses over the period include Community/Social Services, Arts/Entertainment/Media, Food Prep, Building/Grounds Maintenance, Personal Care, Sales, Office/Admin, and Production. Figure 1 illustrates these occupational group employment changes.

**28.510 (17.6%)** Management Business & Financial **15,640 (20.6%)** Computer & Mathematical 8.925 (26.7%) 3.425 (18.3%) Architecture & Engineering 2,990 (23.9%) Life, Physical, & Social Science -1,055 (-4.1%) Community & Social Services **595 (7.2%)** Legal 7,800 (6.7%) Education, Training, & Library -715 (-0.4%) Arts/Entertain/Media 11,480 (13.5%) Healthcare Practitioner 15,885 (32.3%) Healthcare Support Protective Service 2,165 (9.7%) **-4,900 -3.7%)**  Food Prep & Serving-Related -1,660 (-2.8%) Bldg & Grounds Cleaning/Maint Personal Care & Service -12,910 (-7.3%) Sales & Related -41,210 (-16.7%) Office & Admin Support Farming, Fishing, & Forestry 4.485 (29.1%) **10,285** (13.6%) Construction & Extraction 5,930 (8.6%) Installation, Maint, & Repair

Production

Figure 1: 2012-2022 Change in Occupational Group Employment by Number and Percent

Source: Occupational Projections, Research & Analysis Bureau, Iowa Workforce Development

Trans & Material Moving

-9,925 (-6.1%)

Marketplace stability certainly benefits the business community when conducting long-term strategic and operational planning (including the setting of employment levels). In the years following the Covid-19 pandemic, however, lowa's employers and the nation at large faced economic uncertainty and unpredictable business cycles due to drops in demand, labor shortages, and inflation. At present, efforts at controlling inflation (i.e., Federal Reserve interest rate hikes followed by expected Fall 2024 cuts) further embolden consumer spending and economic stability in the marketplace.

Figure 2 presents job growth projections for 2022 to 2032 largely following pre pandemic trends. Not unlike the previous 2012-2022 decade, the 2022-2032 state of lowa projections foresee STEM and service-providing jobs outpacing occupations considered non-STEM and/or goods producing. Major occupational groups expected to exceed the state 6.2% ten-year growth rate include Business/Financial, Computer/Mathematical, Architecture/Engineering, Life/Physical/Social Science, Community/Social Services, Legal, Education, Arts/Entertainment/Media, Healthcare, Personal Care, Construction, Installation/Maintenance/Repair, and Transportation/Material Moving.

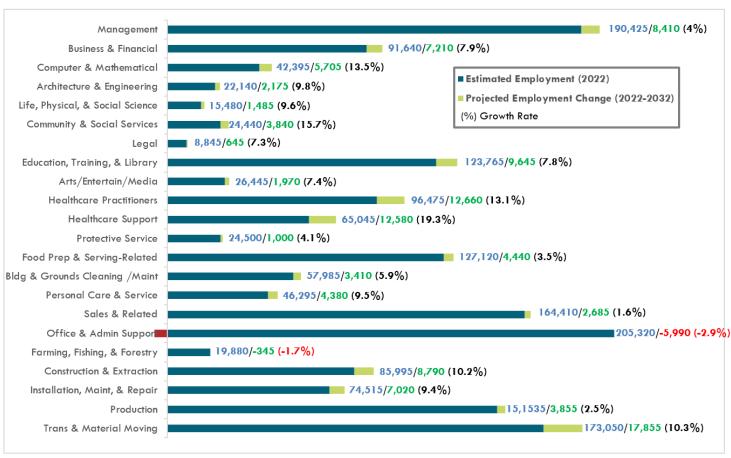


Figure 2: 2022-2032 Iowa Occupational Group Projections by Number and Percent

Source: Occupational Projections, Research & Analysis Bureau, Iowa Workforce Development

## Occupational Openings: New Growth Jobs and Separations

Aside from forecasted job numbers, the occupational projections reveal marketplace turnover. This metric is essential for not only the business community but also jobseekers and workers on the move. Essentially, occupational openings reflect new growth jobs (projected number of new jobs stemming from growth) and separations, namely exits (projected number of workers leaving an occupation and exiting the labor force entirely) and transfers (projected number of workers leaving an occupation and transferring to a different occupation).

The lowa 2022-2032 projections, as portrayed in Figure 3, denote that more job openings are occurring through transfer than by exit or new growth (Management, Education, and Healthcare Practitioner occupational groups being exceptions). Notably, transfers make up over half of separations in many occupational groups with exits a close second and new growth jobs a distant third. During periods of economic stability, job mobility is generally perceived positively reflecting labor market fluidity and worker satisfaction.

Such diverse variables as stock market fluctuations, business cycles, consumer spending, AI, interest rates, government policy, inflation, an aging population, and many more can impact openings necessitating active involvement from policy makers. Yet, responding to identifiable financial state interruptions to the labor market continually challenge policy makers due to their interwoven economic complexity. Observers of today's economy, for example, have seen efforts from the Federal Reserve at stymying relative high interest rates with accompanying inflationary economic pressures and, as a result, seen dramatically falling rates revealing a resilient, if not strong, economy.

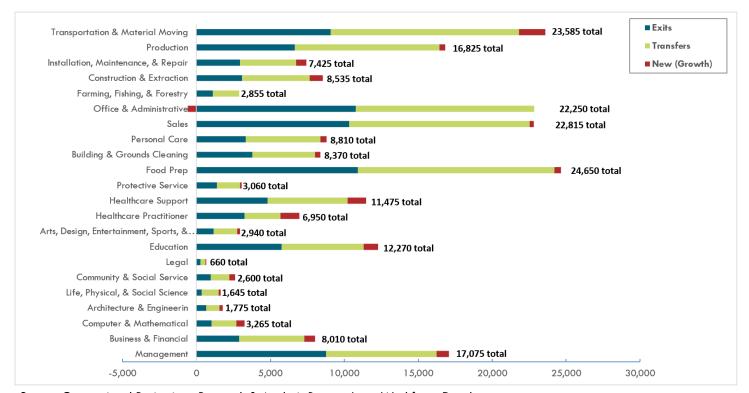


Figure 3: 2022-2032 Exits, Transfers, and New Jobs by Occupational Group

Source: Occupational Projections, Research & Analysis Bureau, Iowa Workforce Development

## Education

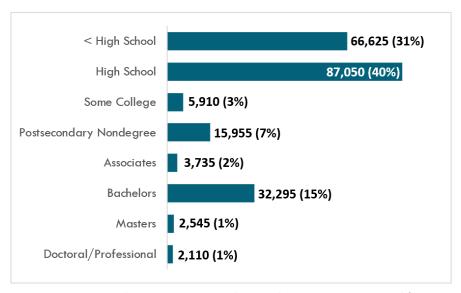
Occupational growth in many industries across lowa are varied and often dependent upon worker skills, training, and education levels. Employing level of education as an occupational outlook measure, Figure 4 (on the next page) illustrates that occupational growth by percent correlates with increased levels of education. Nearly all occupations purporting levels of education beyond high school are growing above 1% annually with Less than High School, High School, and Some College educational levels being exceptions (less than .5% annual growth). Conversely, Figure 5 (on the next page) shows that most of the numerical employment growth stems from occupations characterized with less education.

High School
High School
Some College
Postsecondary Nondegree
Associates
Bachelors
Masters
Doctoral/Professional
1.3

Figure 4: 2022-2032 Annual Occupational Growth Rates by Education Level

Source: Occupational Projections, Research & Analysis Bureau, Iowa Workforce Development

Figure 5: 2022-2032 Annual Occupational Employment Openings & Percent of Total by Education Level



Source: Occupational Projections, Research & Analysis Bureau, Iowa Workforce Development

## References

lowa Workforce Development, Occupational Projections, 2012-2022, 2022-2032 <a href="https://workforce.iowa.gov/oproj/data">https://workforce.iowa.gov/oproj/data</a>

# Analysis of Median Wages and Salary Over Time

#### Written by Sam Queen

## Introduction

The statewide Laborshed survey conducted by Iowa Workforce Development, in partnership with the Iowa Economic Development Authority, is a survey of lowa residents between the ages of 18–64. This survey collects data related to participants' workforce characteristics. Some of the characteristics include, current employment status, educational attainment level, gender status, and wages. This article will investigate the wage changes that the Laborshed survey has captured and analyze those changes vis-à-vis the characteristics displayed in the Laborshed survey, with a particular focus on reported wages over time.

## **Employment Status**

In terms of median hourly wages and annual salary, we see a steady increase in reported wages of both employed and non-employed groups. Comparing 2023 hourly wages to 2008 hourly wages there has been a 60.9% increase in earnings for employed people in lowa. A similar increase can be seen in the annual salary changes with a 63.0% increase in 2023 compared to 2008.

#### Wage Comparison 2008-2023 by Employment Status

#### by Hourly Wage and Annual Salary Earners

Median Hourly Wages - % Difference from 2008							
Year	Employed	Homemaker	Retired	Unemployed			
2008	**	**	**	**			
2009	-1.24%	4.29%	-16.14%	10.00%			
2010	4.97%	7.18%	10.71%	11.20%			
2011	8.56%	10.08%	-7.14%	9.50%			
2012	11.27%	15.87%	19.29%	10.00%			
2013	17.04%	15.87%	14.29%	10.00%			
2014	13.39%	15.87%	7.14%	10.00%			
2015	17.04%	21.67%	14.29%	10.00%			
2016	17.04%	27.46%	14.29%	18.40%			
2017	24.36%	33.26%	23.21%	30.00%			
2018	24.36%	27.46%	23.93%	26.30%			
2019	26.92%	27.46%	21.43%	30.00%			
2020	35.33%	27.46%	3.57%	30.00%			
2021	42.65%	50.64%	28.57%	37.50%			
2022	46.31%	73.81%	28.57%	47.50%			
2023	60.94%	70.68%	42.86%	70.00%			
** denotes base year of wages for comparison							

Median Annual Salary - % Difference from 2008							
Year	<b>Employed</b>	Homemaker	Retired	Unemployed			
2008	**	**	**	**			
2009	6.52%	7.33%	-10.00%	-3.75%			
2010	8.70%	25.22%	0.00%	5.00%			
2011	19.57%	14.49%	-2.00%	5.00%			
2012	23.91%	7.33%	4.00%	12.50%			
2013	30.43%	18.07%	8.00%	12.50%			
2014	30.43%	35.96%	20.00%	10.00%			
2015	30.43%	43.11%	20.00%	25.00%			
2016	30.43%	25.22%	20.00%	23.75%			
2017	39.13%	43.11%	20.00%	45.00%			
2018	34.78%	50.27%	20.00%	16.81%			
2019	39.13%	28.80%	20.00%	21.25%			
2020	50.00%	61.00%	30.00%	17.50%			
2021	47.83%	52.06%	40.00%	30.00%			
2022	54.35%	52.06%	50.00%	27.50%			
2023	63.04%	69.95%	58.00%	50.00%			
** denotes base year of wages for comparison							

Source: Laborshed survey data, 2008-2023, Iowa Workforce Development

Since 2008, the unemployed and homemaker categories have had the lowest wages when compared to other groups. The percent difference for unemployed annual salary in 2023 versus 2008 is 51.8% while homemakers saw a percent difference of 40% from 2023 to 2008.

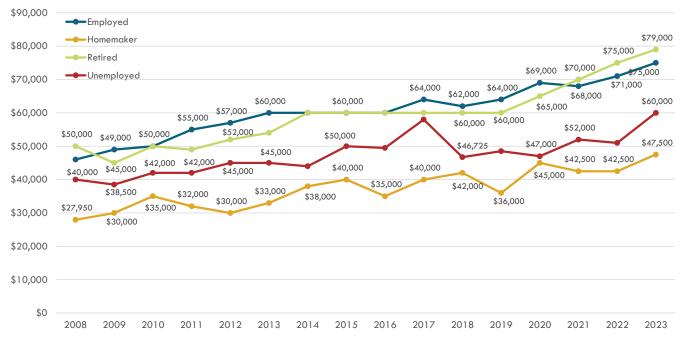
A general glance over the timeline presented shows that median wages have steadily increased over time (since 2008) and continue to trend upward. Median wages in 2023 for employed peoples was \$22.00 per hour and \$75,000 per year. Compare this to 2008 wages where the median hourly rate was \$13.67, and the annual salary was \$40,000.

#### Median Hourly Wage by Employment Status



Source: Laborshed survey data, 2008-2023, lowa Workforce Development

### **Median Annual Salary by Employment Status**



Source: Laborshed survey data, 2008-2023, lowa Workforce Development

Focusing on the non-employed groups, it is vital to remember that these are self-reported statuses and the wages themselves reflect the respondent's salary level when they were last employed. So, for the unemployed, homemakers, and retired categories the reported values are their wage level at the last time of employment. Retired persons median hourly wages and salary mirrors the wages reported by employed people. This phenomenon is understandable as most workers tend to retire when their wages are high, mainly due to age and seniority. Workers can also try and strategically retire such that their retirement benefits and pensions are at their highest when they decide to leave the workforce. In the 2022 State of Iowa Laborshed Report, unemployed persons reported that health/disability reasons, continuing/furthering education, employer layoffs, and employer termination are some of the top reasons they were unemployed at the time of study. With this in mind, we may be able to further understand why these groups garner lower wages.

## Education

Observing wage trends over time by comparing education levels yields interesting results as well. The charts below show median hourly wages and median annual salary split by education level, ranging from "Less than High School Diploma" to "Master's/Doctorate/Professional Degree", with varying degree types in between.

#### \$90,000 \$80,000 \$80,000 \$75,00 \$75,000 \$74,000 \$72,000 \$70.000 \$70.00 \$70,000 \$70.000 \$68.00 \$70,000 \$68,000 \$65,000 \$65.00 \$65,000 \$65,000 \$65,000 \$62,000 \$63,500 \$59,000 \$63,000 \$60,000 \$56,000 \$56,000 \$60,00 \$50,000 \$52,500 \$50,000 \$50,000 \$47,000 \$50,000 \$47,500 \$40,000 \$40,000 \$40,000 \$39,000 \$33,000 \$30,000 Bachelor's Degree H.S. Diploma/Equivalent \$20,000 ess than H.S. Diploma Master's/Doctorate/Professional Degree Some Education Beyond H.S., No Degre \$10,000 Trade Certification Vocational Training 2008 2019 2020 2023

#### Median Annual Salary by Education Level

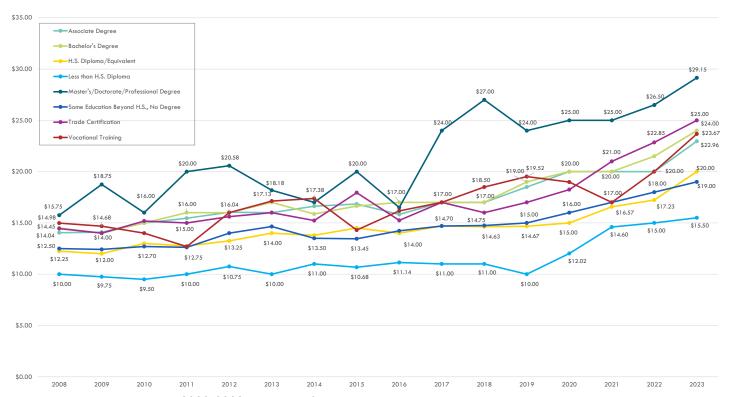
Source: Laborshed survey data, 2008-2023, Iowa Workforce Development

The percent difference of hourly wages between the top education category (Master's/Doctorate/Professional) and the bottom education category (Less than High School Diploma) in 2008 was 44.7% while in 2023 the percent difference was 61.1%. The general knowledge that more investment in education yields higher paying jobs holds true in lowa.

Meanwhile, the percent difference in hourly wages between bachelor's degree and master's/Professional/ Doctorate is quite stark. In 2008, said difference was 8.6% while in 2023 the difference was 21.5%. The value of a postsecondary degree may be increasing over time as well.

Median annual salary follows a similar trend to the median hourly wage chart. The higher your level of education, the higher your earnings tend to be. The lower one goes on the education scale, the more volatile their earnings may be as well. There are many factors that may play a role in this, such as job type, number of hours worked, and population sampling. Outside shocks to the labor market may be felt harder by workers with a lower education level than those with a higher education level.

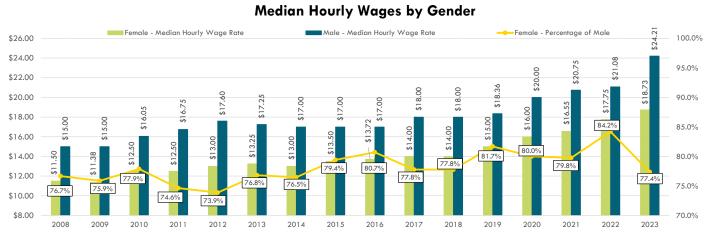
## Median Hourly Wage by Education Level



Source: Laborshed survey data, 2008-2023, lowa Workforce Development

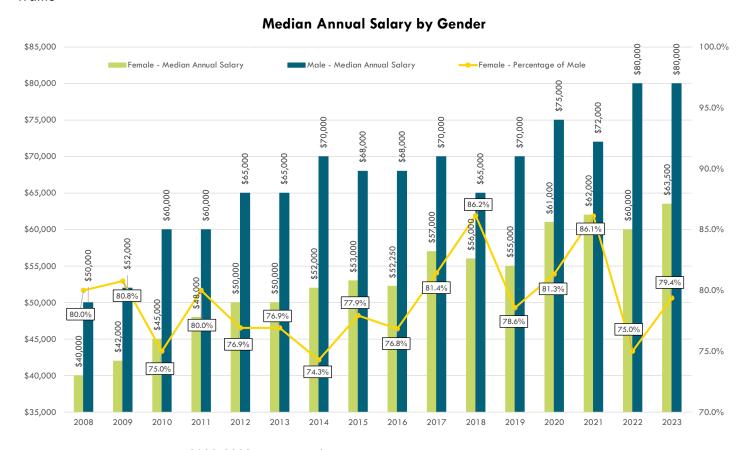
#### Gender

The gender wage gap is present still in lowa and has not changed much in terms of percent differences over time. In 2008, female workers took home only 76.7 cents on the dollar compared to male workers. The median hourly rate for males was \$15.00 per hour and female hourly wages were \$11.50 per hour. Comparing the 2008 values to current 2023 values, we find that males made \$24.21 per hour while females earned \$18.73 per hour. In other words, females earned 77.4 cents on the dollar compared to males in 2023.



Source: Laborshed survey data, 2008-2023, lowa Workforce Development

Median annual salary tells a similar story to the one above. Males continue to bring home a higher median salary compared to females in lowa. Females in 2008 earned 80.0% of wages compared to males while in 2023 they earned 79.4% of what males earned. A decrease of 1.4 cents on the dollar in a 15-year time frame



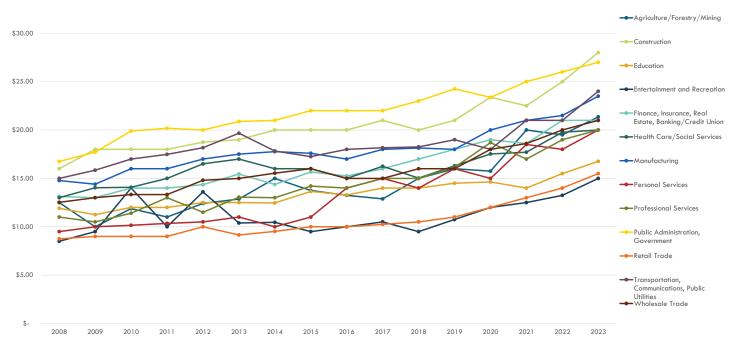
Source: Laborshed survey data, 2008-2023, Iowa Workforce Development

The closest the ratio of wages between males and females was in the past 15 years was in 2018 when female median annual salary was reported at \$56,000 and males earned a median salary of \$65,000, a ratio of 86.2 cents to 1 dollar. In terms of hourly rates, 2022 was the closest the female: male ratio (over the same time frame). Males earned \$21.08 per hour while females earned \$17.75 per hour, or a ratio of 84.2 cents to 1 dollar. Much is still to be done to lower and eventually eliminate this wage gap that exists in lowa.

# Industry Type

Wages compared and contrasted by industry type have rose across the board, with varying degrees of separation over time. Digging into this further, in 2008 the percentage difference between the "Public Administration, Government" industry (highest paid median hourly wage) and the "Entertainment and Recreation" industry (lowest paid median hourly wage) was 65.3%, \$16.75 per hour and \$8.50 per hour respectively. In 2023 the largest gap we see is between the "Construction" industry at \$28.00 per hour and again "Entertainment and Recreation" at \$15.00 per hour, a 60.5% difference. So while hourly wage rates have increased, the gaps between each industry still remain.

#### **Median Hourly Wages by Industry**

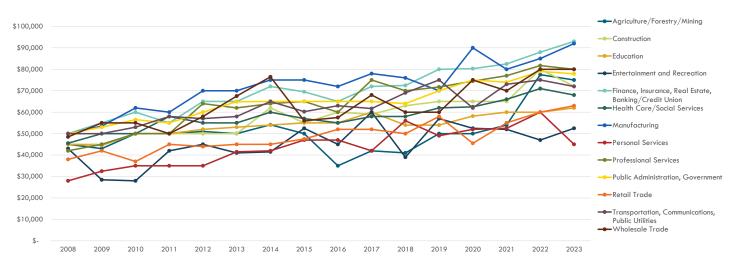


Source: Laborshed survey data, 2008-2023, Iowa Workforce Development

The changes in wages over time for each industry displays interesting characteristics as well. In 2008, the "Construction" industry reported a hourly rate of \$16.00 per hour and \$28.00 per hour in 2023, this is a 75.0% increase in wages over 15 years. The "Public Administration, Government", "Education", "Finance, Insurance, Real Estate", "Manufacturing", and "Professional Services" industries saw a percentage increase of 61.2%, 40.7%, 57.9%, 59.0%, 81.8%, respectively. While wages continue trending upwards, the rate at which they trend depends greatly on industry type.

The change over time of annual salary shows similar trends to hourly wage rates, with some added variability. The largest median salary in 2008 was \$50,000 per year (a tie between four industries) and the smallest median salary was \$28,000 per year (Personal Services), a 56.4% difference. In 2023 however, the largest percentage difference was 69.6% between "Finance, Insurance, and Real Estate" at \$93,000 per year and "Personal Services" at \$45,000 per year.

## Median Annual Salary by Industry



Source: Laborshed survey data, 2008-2023, Iowa Workforce Development

There is some additional volatility displayed in the median salary chart that is not seen in the hourly rate chart. The "Agriculture/Forestry/Mining" and "Entertainment and Recreation" industries displayed the largest year over year percent changes in salary level. From 2015 to 2016 the "Agriculture/Forestry/Mining" salary level decreased by 30.0% and from 2021 to 2022 saw a 43.5% increase in salary.

#### Median Annual Salary by Industry - Measured by Year-Over-Year Percent Changes

Year	Agriculture/Forestry/ Mining	Construction	Education	Entertainment and Recreation	Finance, Insurance, Real Estate, Banking/Credit Union	Health Care/Social Services	Manufacturing	
2008	**	**	**	**	**	**	**	
2009	-4.44%	0.00%	-1.11%	-33.72%	10.00%	9.77%	7.00%	
2010	16.28%	11.11%	12.36%	-1.75%	9.09%	0.00%	15.89%	
2011	0.00%	0.00%	0.00%	50.00%	-8.33%	16.00%	-3.23%	
2012	2.00%	0.00%	4.00%	7.14%	18.18%	-5.17%	16.67%	
2013	-1.96%	0.00%	1.92%	-8.89%	0.00%	0.00%	0.00%	
2014	8.30%	24.00%	1.89%	1.22%	10.77%	9.09%	7.14%	
2015	-7.66%	-11.29%	1.85%	26.51%	-3.47%	-5.00%	0.00%	
2016	-30.00%	9.09%	0.00%	-14.29%	-6.47%	-3.51%	-4.00%	
2017	20.00%	-1.67%	9.09%	33.33%	10.77%	5.45%	8.33%	
2018	-2.38%	6.78%	-10.00%	-35.00%	0.69%	0.00%	-2.56%	
2019	21.95%	3.17%	0.00%	46.15%	10.34%	6.90%	-7.89%	
2020	0.00%	0.00%	7.77%	-7.89%	0.38%	0.81%	28.57%	
2021	8.00%	0.00%	3.10%	-0.95%	2.74%	5.60%	-11.11%	
2022	43.52%	23.08%	0.00%	-9.62%	6.67%	7.58%	6.25%	
2023	-3.23%	-9.81%	3.33%	11.70%	5.68%	-4.23%	8.24%	
**deno	**denotes starting year for year-over-year percentage changes							

Year	Personal Services	Professional Services	Public Administration, Government	Retail Trade	Transportation, Communications, Public Utilities	Wholesale Trade		
2008	**	**	**	**	**	**		
2009	16.07%	7.14%	6.00%	10.53%	0.00%	13.40%		
2010	7.69%	11.11%	6.60%	-11.90%	6.00%	0.00%		
2011	0.00%	0.00%	-2.65%	21.62%	9.43%	-9.09%		
2012	0.00%	28.00%	9.09%	-2.22%	-1.72%	16.00%		
2013	18.57%	-3.13%	8.17%	2.27%	1.75%	16.38%		
2014	1.20%	3.23%	0.15%	0.00%	12.07%	13.33%		
2015	11.90%	1.56%	0.00%	5.56%	-7.31%	-26.80%		
2016	0.00%	-7.69%	0.00%	9.47%	4.56%	2.68%		
201 <i>7</i>	-10.64%	25.00%	0.00%	0.00%	-2.06%	18.26%		
2018	33.33%	-6.67%	-1.54%	-3.85%	11.83%	-11.76%		
2019	-12.50%	2.50%	9.38%	16.00%	8.70%	0.00%		
2020	6.12%	3.83%	7.14%	-21.51%	-17.33%	25.00%		
2021	0.96%	3.36%	-1.33%	20.81%	17.74%	-6.67%		
2022	14.29%	6.17%	6.76%	9.09%	2.74%	14.29%		
2023	-25.00%	-2.14%	-1.39%	5.00%	-4.00%	0.00%		
**deno	**denotes starting year for year-over-year percentage changes							

Legend:

Red: (largest salary decrease in industry)

Green: (largest salary increase in industry)

Blue: (top 3 salary increases across all industries)

Orange: (top 3 decreases in salary across all industries)

Source: Laborshed survey data, 2008-2023, Iowa Workforce Development

The "Entertainment and Recreation" industry showed the largest increase and decreases in salary level across all industries. From 2008 to 2009 the salary level dropped 33.7% and then rose up 50.0% from 2010 to 2011. A similar rise and fall occurs in 2018 and 2019 where salary levels dropped 35.0% and rose again by 46.2% respectively for "Entertainment and Recreation". Other industries such as "Manufacturing", "Personal Services", "Retail Trade", and "Wholesale Trade" saw smaller shocks to their salary levels during various years in the studied timeframe.

## Wrap-Up

To conclude, wages across the board, regardless of specific characteristics have risen tremendously in the past 15 years. Employed groups have seen a 60.9% increase in median hourly wages and a 63.0% increase in annual salary since 2008 and continue to trend upward. Those who hold a higher level of educational attainment (bachelor's and master's degrees) see the most return on education investments with high paying jobs, however the gap between all educational levels is widening. The gender wage disparity is as apparent as ever and has not improved in terms of female wages as a ratio of male wages (both hourly rates and annual salary). Much needs to be done to address this concern. And lastly, wages within each industry type have risen with "agriculture" and "entertainment" seeing the most volatile changes in wages year over year.

## Bibliography

State of Iowa Laborshed Survey (2008-2023), Iowa Workforce Development <a href="https://workforce.iowa.gov/laborshed">https://workforce.iowa.gov/laborshed</a>

State of Iowa Laborshed Report (2022), Iowa Workforce Development <a href="https://workforce.iowa.gov/laborshed">https://workforce.iowa.gov/laborshed</a>

## Workforce Needs Assessment 2023

#### Written by Eleazar Escalante

#### Introduction

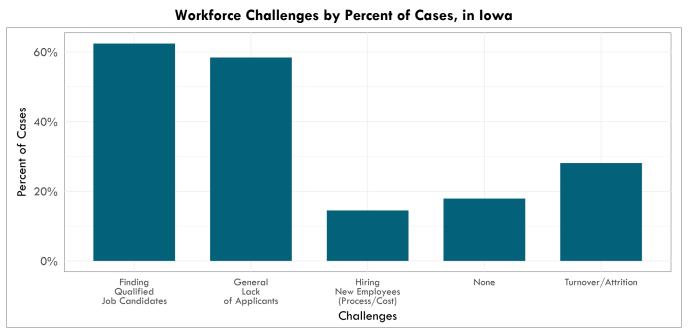
In addressing the workforce challenges in lowa, an extensive analysis was conducted based on data collected from employers across the state. The insights gained shed light on the needs of the lowan workforce postpandemic. As industries continue to evolve, a tight labor market presents challenges that require targeted intervention.

lowa Workforce Development administered its seventh annual Workforce Needs Assessment survey to understand employer's experiences in the current labor market. The survey provides valuable information about current employment levels and expectations for job vacancies. Its goal is to identify the skills needed by workers statewide and by area. The synthesized data informs government officials, employers, educators, and economic developers, aiding in recruitment, training, and workforce development.

In the fall of 2022, 25,160 employers with 39,254 locations in lowa were asked to participate, with 11,212 locations responding for a 28.6% response rate by the end of the survey period, March 2023. An executive summary was released for the whole state, along with an area regional analysis by agency, for a total of seven report analyses.

## Workforce Challenges Overview

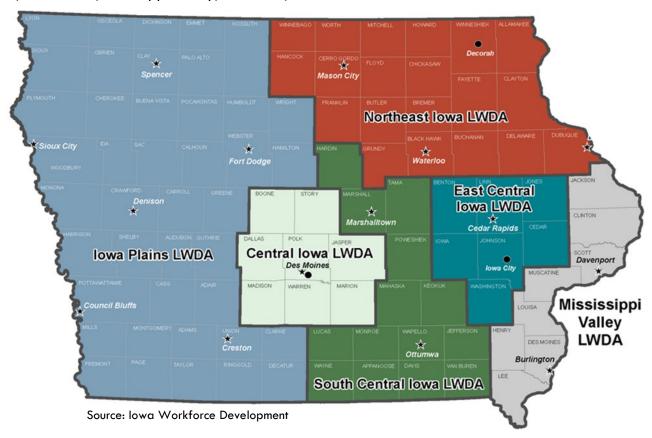
The top five workforce challenges reported statewide are finding qualified job candidates (62.4%), dealing with a general lack of applications (58.4%), managing turnover/attrition (28.1%), hiring new employees (14.5%), and addressing professional development and training needs (3.8%). Approximately 17.9% of employers reported no specific challenges.



Source: Workforce Needs Assessment survey, 2023, Iowa Workforce Development

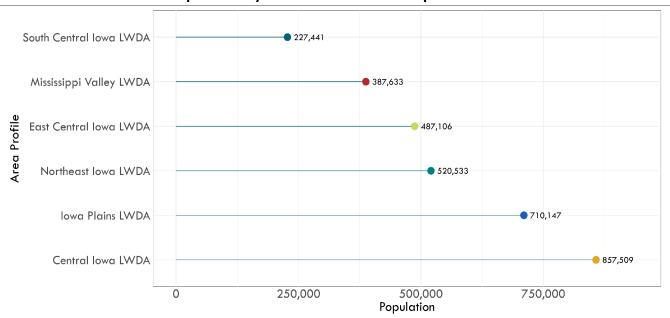
## Local Workforce Development Areas

While a regional view of the data may initially appear similar, important distinctions emerge among lowa's area profiles. As shown in the graphic below, Local Workforce Development Area and Metropolitan Profiles are created using lowa Workforce Development, Bureau of Labor Statistics (BLS) and U.S. Census Bureau data. The area profiles help economic developers and policymakers distinguish differences in the challenges of workforce development in the state. In the graphic below, lowa is divided into six area profiles: Central, East Central, lowa Plains, Mississippi Valley, Northeast, and South Central.



# Characteristics of the Geographical Areas

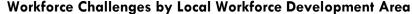
There are important characteristics to note for the area profiles. Either one or a few statistical areas comprise most of the labor force for the geographical region. The largest combined statistical area (CSA) is the Des Moines-West Des Moines-Ames, IA CSA located in Central lowa. The second largest is Cedar-Rapids-lowa City CSA located in East Central, followed by the Davenport-Bettendorf area in the Mississippi Valley that also includes Moline and Rock Island over the Mississippi river in Illinois. Northeast lowa contains the fourth largest statistical labor force area with the Waterloo-Cedar Falls Metropolitan Statistical Area (MSA), and lowa Plains, the largest area profile by proportion, holds the fifth and sixth largest statistical areas, with the Siouxland surrounding Sioux City and the Council Bluffs metro area that borders Nebraska. The graphic on the next page illustrates the population total of each of the area profiles.

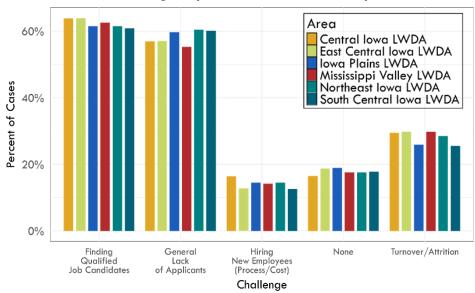


Source: U.S. Census Bureau

## Workforce Challenges by Area

Although the employers in the state hold the same challenges among the regions, there is variation to the percentage of challenges each area faces. For example, when analyzing the differences, Central lowa and East Central lowa, which include the cities of Des Moines, Cedar Rapids, and lowa City, have struggles finding "qualified job candidates", whereas Northeast lowa, South Central lowa, and the lowa Plains areas have trouble "finding applicants, in general". The "process/cost of hiring" new employees is more of a challenge in Central lowa, while East Central and Mississippi Valley regions face difficulty with "turnover" than others. Close to twenty percent of the employers in the lowa Plains and Central lowa regions find that there are no problems with the current labor market. In each of the top five challenges statewide, the range of percentage of employers does not exceed ten percent, with differences among the highest and lowest region normally hovering at five to seven percent of the obstacles among employers.



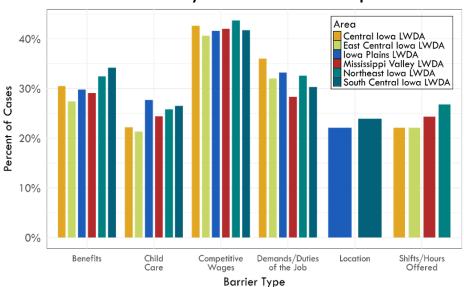


Source: Workforce Needs Assessment survey, 2023, lowa Workforce Development

#### **Barriers to Recruitment**

Employers were also surveyed regarding what they consider were barriers to recruiting. The top six were "competitive wages", "duties for the job", "location", "childcare", "benefits", and the "shift/hours offered". Northeast and Central hold higher percentages for "competitive wages" as a barrier, while "location" is a larger concern for the lowa Plains and South Central areas. The "shifts offered by employers" in Northeast lowa are noted as a larger barrier than other areas, with Central and East Central having less employers who note this as a concern. The area with the largest percentage of employers who find "childcare" a barrier to recruitment is the lowa Plains area, with East Central holding the lowest percentage. "Location" was not cited as a barrier to recruitment by Central, East Central, Mississippi Valley and South Central areas, and employers in the lowa Plains found "shifts/hours offered" to not be a barrier as well. "Competitive wages" followed by "benefits" held the highest percentage of cases reported as a concern for lowan employers.

### Barriers to Recruitment by Local Workforce Development Area

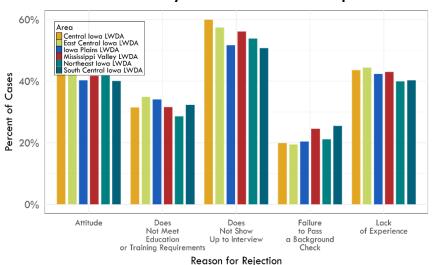


Source: Workforce Needs Assessment survey, 2023, Iowa Workforce Development

# Perception of Applicants

For the available labor force that seek these positions, employers have a variety of reasons for why they reject the applicant. The number one reason for rejection across all areas was that the "applicant did not show up to the interview" – with Central lowa having the highest percentage and lowa Plains holding the lowest. East Central has the second highest percentage followed by the Mississippi Valley. There is close to a twenty percent difference in the percentage of employers who note "absence at an interview" as a reason for rejection to the second highest cause of rejection, which is "lack of experience", followed closely by "attitude". "Lack of experience" holds the second highest percentage of reasons for rejection, with East Central employers unable to recruit "experienced individuals", followed closely by Central and Mississippi Valley areas. Around forty percent of the areas note "attitude" as a reason for rejection for employers, with small variation. "Employer training/education requirements" and "failure to pass a background check" round out the top five reasons for rejection from employers, with East Central lowa and lowa Plains having more difficulty recruiting a trained workforce and East Central and Mississippi Valley employers noting the failure for candidates to "pass background checks" more than others. These issues, by area, are summarized in the chart at the top of the next page.

Barriers to Recruitment by Local Workforce Development Area

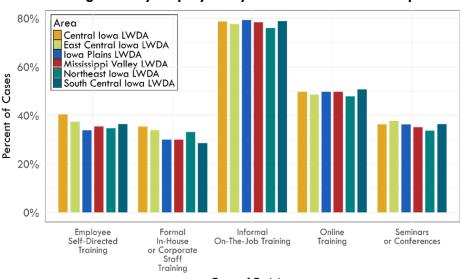


Source: Workforce Needs Assessment survey, 2023, Iowa Workforce Development

## Improving Skillsets

To ameliorate the challenges faced by employers with the labor market, many have employed different types of training to address the gaps in their workforce. Types of training utilized are "informal on-the-job training", "online training", "seminars/conferences", and "employee self-directed training". By far, "informal job training" remains the most popular choice among employers, with all areas hovering close to eighty percent of employers citing this as a type of training, with South Central and Iowa Plains leading the state. "Online training" serves as the second method of choice of training, with South Central once again leading the areas among percentage of employers' survey utilizing this type of training. East Central takes leverage of "seminars or conferences" to train its workforce, while Central lowa trusts its employees to "self-direct" their training as they take on their new role. Both trainings have percentages hovering in the thirty-five to forty percent mark of employers surveyed utilizing these trainings. To round out the top five, "formal in-house or corporate staff training" is also utilized, with the highest percentage of employers coming from the Central Iowa area.

Types of Training Used by Employers by Local Workforce Development Area



Type of Training

Source: Workforce Needs Assessment survey, 2023, Iowa Workforce Development

## Conclusion

In examining the challenges, recruitment barriers, and reasons for employer rejections across lowa, one concludes that workforce concerns differ among the area profiles. While the percentage of employers noting each barrier or concern remains relatively consistent, it underscores the need for tailored approaches to address workforce gaps in each area. The types of training used by employers reflect their current efforts to bridge these gaps. Additionally, analyzing demographic, industry, and occupational differences within the labor force can offer a more nuanced understanding of each area's workforce needs. In summary, while the workforce needs survey provides valuable insights into employer requirements, further exploration of demographics, industry trends, and occupational composition could reveal additional unaddressed concerns.

## References

- lowa Workforce Development. (2023). State of Iowa Executive Summary, Workforce Needs Assessment.

  Retrieved July 26, 2024, <a href="https://workforce.iowa.gov/wna">https://workforce.iowa.gov/wna/data</a>
- U.S. Census Bureau. (2020). Profile of General Population and Housing Characteristics. Decennial Census, DEC Demographic Profile, Table DP1. Retrieved July 26, 2024, from <a href="https://data.census.gov/table/DECENNIALDP2020.DP1?q=2020 Census&q=040XX00US19\$0500000">https://data.census.gov/table/DECENNIALDP2020.DP1?q=2020 Census&q=040XX00US19\$0500000</a>.



Katie Green, Bureau Chief

Labor Market Information Division lowa Workforce Development 1000 East Grand Avenue Des Moines, Iowa 50319-0902

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any of the information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.