## IOWA

## In Partnership:

IOWA

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## FROM THE IOWA DEPARTMENT OF HUMAN RIGHT'S COMMISSION ON THE STATUS OF WOMEN

The first iteration of the lowa Gender Wage Equity Study was produced more than 10 years ago via a partnership between the lowa Department of Human Right's Commission on the Status of Women and lowa Workforce Development - Labor Market Information Division.

This version of the report once again relied on this partnership, as well as funding from the Rape Prevention and Education (RPE) program within the lowa Department of Public Health (IDPH). The RPE program along with the Commission on the Status of Women determined that an update of the report was an essential piece to a better understanding of the economic situations and opportunities for women in the state of lowa. The majority of the data aside from the final quarter reported (April to June 2020) has been collected pre-pandemic.

By better understanding the social determinants of health, including economic opportunities and challenges, a variety of solutions ranging from the creation of new policies to the formulation of new public health and human services programming and services can be undertaken in a strategic and thoughtful manner.

The data presented in this report may be used by a variety of stakeholders for these purposes. The Commission on the Status of Women and the RPE program at IDPH support continued access to quality data, analyses, and information provided in this report.

## BACKGROUND INFORMATION ON DATA SOURCES

The lowa Gender Wage Equity Study gathered its information from two sources: lowa Workforce Development and the U.S. Census Bureau through the Longitudinal Employer-Household Dynamics. For the purposes of this report the analysis of this data is broken into two parts.

## PART ONE - STATEWIDE LABORSHED SURVEY DATA

Part one reflects study results completed by lowa Workforce Development (IWD) using 2020 statewide laborshed survey data. It contains detailed information regarding gender by occupational category, age range, full-time/part-time employment, educational level, earnings, industry, and years of experience. This information is derived from a random household employment survey of people 18 to 64 years of age. Laborshed survey data compares earnings reported as hourly wages or annual salaries. Reported wages do not include the additional cost of benefits that the employer provides. We are not evaluating data based on gender bias.

## PART TWO - LOCAL EMPLOYMENT DYNAMICS DATA

Part two looks at Local Employment Dynamics (LED) data which is a product of a partnership between IWD and the U.S. Census Bureau. It contains new information about local labor market conditions. The data is built upon wage records in the Unemployment Insurance (UI) system and state Quarterly Census of Employment and Wages (QCEW). This data can be queried by different levels of geography: state, county, metro, and census block. It also details industry, gender, and age of workers. The data represents private industry and is compatible for all LED partner states. Federal government employment is not generally included. Exempted employment includes farmers and agricultural workers, members of the Armed Services, and certain types of nonprofit employers and religious organizations. The data uses the North American Industry Classification System (NAICS).

## PART ONE: LABORSHED SURVEY DATA

In 1993, lowa Workforce Development (then the Department of Employment Services) conducted a survey to determine if there was a gender gap in wages paid. The results of that survey indicated females were paid 68 cents for every dollar paid to males. Another study was conducted in 1999 which found females made approximately 73 cents for every dollar made by males in lowa. Since then, a survey was again conducted in 2008 and 2010 which indicated females were paid approximately 78 cents and 76 cents respectively for every dollar paid to males.

In February 2021, lowa Workforce Development (IWD) was commissioned again by the Commission on the Status of Women to conduct research concerning gender-wage equity to determine if the wage disparity between males and females had changed since the 2010 study. We selected 2014 as a halfway point from the 2008 study and from then compared the data on a 6 year increment. Although there was a slight dip in females wages in 2010, there was no change between 2008 and 2014.

This study was completed using 2020 statewide laborshed data consisting of responses from 4,716 employed respondents. Of the respondents, 54.7 percent $(2,580)$ were female and 45.3 percent $(2,136)$ were male. Statewide sampling was provided by the University of Northern lowa's Instifute for Decision Making based on the population per ZIP code.

The results of the survey are shown in Figure 1. Employed females who are paid an hourly wage earn 17.0 cents or 17 percent less than ( 0.83 cents for every dollar) employed males earn. Females who are salaried earn 18.0 cents or 18 percent less than their male counterparts. Additional survey results detail the occupational categories, industries, and the education and experience levels of respondents. All of these characteristics contribute to the disparity.

Figure 1
Female Farnings per Male Dollar Earned

| Survey Year | Male Earnings | Female Earnings | Change from <br> Previous <br> Results |
| :---: | :---: | :---: | :---: |
| 2008 | $\$ 1.00$ | $\$ 0.78$ | - |
| 2014 | $\$ 1.00$ | $\$ 0.78$ | - |
| 2020 | $\$ 1.00$ | $\$ 0.83$ | $\uparrow 6 \%$ |

## LABORSHED DATA- RESPONDENT EMPLOYMENT DEMOGRAPHICS

The following sections specifically address issues that may cause wage disparity between the genders. Several factors are analyzed including: age, industry, occupational category, employment status, educational level, and years of experience.


#### Abstract

AGE follows: - $5.9 \%$ - Age 18 to 24 - 18.4\% - Age 25 to 34 - 24.0\% - Age 35 to 44 - $21.4 \%$ - Age 45 to 54 - 30.4\% - Age 55 to 64


A higher wage is often associated with those who are in their mid-to-late career compared to those whom have just entered the workforce. In order to determine if age is a factor in gender-wage disparity it is important to determine if the female workforce is younger than the male workforce.

The total percentage of respondents (male and female together) broken down by age range is as

Figure 2 shows the breakdown of employed respondents into age ranges by gender. The percentage of males and females in each age range are similar across the board. The greatest differences occur in the age ranges of 25 to 34 and 55 to 64 . In the 25 to 34 age range the concentration of males is 1.0 percent greater than females. In the 55 to 64 age range the concentration of females is 0.5 percent greater than males. It is notable that workforce participation is highest among respondents age 35 to 44 and 55 to 64 for males and females.

In 2008 , the average age was 46 and 58.6 percent of the workforce was in the 45 to 64 age range. In comparison, the 2014 results reported an average age of 50 with 74.0 percent of the workforce in the 45 to 64 age range. After the peak in 2014 , the average age trended down by 2020 . The average age of currently employed males and females is 45 with $51.8 \%$ of the workforce in the 45 to 64 age range.

Figure 2
Employed Respondents by Age Range


## INDUSTRY

The type of industry in which an individual is employed can often effect the wages earned. Industry is based on classification of the employer according to the North American Industry Classification System (NAICS). NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data. Figure 3 displays male and female respondents of the laborshed survey by industry. The industries with the highest number of female respondents are healthcare \& social services ( $23.0 \%$ ), wholesale \& retail trade ( $16.1 \%$ ), and education ( $13.6 \%$ ). The greatest percentage of male respondents are in the manufacturing (19.5\%), wholesale \& retail trade ( $14.3 \%$ ), and construction industries ( $11.9 \%$ ).

These results do not differ greatly from those presented in past studies. In 2014, the top three industries for females were education, healthcare \& social services, and wholesale \& retail trade. Of these only the education industry experienced a larger drop in the percentage of females employed ( $20.6 \%$ in 2014 compared to $13.6 \%$ currently). It is notable that the percentage of females employed within the professional services and health care \& social services trade industry have increased by 2.4 and 1.8 percent since 2014.

Similar to the current study, the top four industries for males in 2014 were manufacturing, wholesale \& retail trade, education, and transportation, communications, \& public utilities. The percentage of males within the construction industry has increased by 5.7 percent since 2014 . On the other hand, the total percentage of males employed within the education industry has decreased by 3.6 percent.

Figure 3
Respondents by Industry


## OCCUPATIONAL CATEGORY

The Standard Occupation Classification (SOC) system is used when clustering occupations for respondents. The main difference between industry and occupation is that industry is based upon the products or services provided by the employer, and occupation is based upon the duties of the employee. For example, an accountant can work in any industry and their data is included with all other occupations of that industry. At the occupational level, only accountants are included in the wage data no matter which industry they work in. An accountant that works in the manufacturing industry will be grouped into the same occupational category as an accountant that works in the retail sector.

Figure 4 represents male and female respondents by occupational category. The majority of the female workforce is in the office \& administrative support ( $21.9 \%$ ), management ( $13.2 \%$ ), and healthcare practitioner \& technical (10.2\%) occupational categories. The majority of the male workforce is in management ( $21.2 \%$ ), production ( $10.2 \%$ ), and transportation \& material moving ( $7.4 \%$ ) occupational categories.

Figure 4
Respondents by Occupational Category


The annual salary and hourly wage disparity between genders is shown by occupational category in Figure 5. There are some occupational categories that indicate little disparity while others reveal large gaps in wages paid. The table shows the median annual salary and median hourly wage for each occupational category by gender. In some cases females earn a higher median salary than their male counterparts. The transportation \& material moving and community \& social service occupational categories show females earn a higher median salary than males. Community \& social services and life, physical, \& social sciences occupational categories show little difference in median salaries between the genders. However, in nearly four-fifths of the occupational categories males earn more than females, and in many cases, much more. The greatest median annual salary disparity is in the legal and healthcare practitioner \& technical occupational categories.

The median hourly wages earned by occupational category shows that in 18 of 23 categories male respondents out earn their female counterparts. The greatest discrepancies are highlighted.

Figure 5
Median Hourly Wages \& Annual Salaries by Occupational Category

| Occupational Category | Female Median Hourly Wage | Male Median Hourly Wage | Wage Differential | Female Median Salary | Male <br> Median Salary | Salary Differential |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Architecture \& Engineering | * | \$30.00 | * | \$77,000 | \$88,500 | -\$11,500 |
| Arts, Design, Entertainment Sports, \& Related | \$20.13 | \$18.50 | \$1.63 | \$39,000 | \$45,000 | -\$6,000 |
| Building \& Grounds Cleaning \& Maintenance | \$12.00 | \$18.00 | -\$6.00 | * | * | * |
| Business \& Financial Operations | \$20.89 | \$28.84 | -\$7.95 | \$70,000 | \$75,000 | -\$5,000 |
| Community \& Social Services | \$15.55 | \$11.93 | \$3.62 | \$57,500 | \$56,000 | \$1,500 |
| Computer \& Mathmatical Sciences | \$20.00 | \$19.50 | \$0.50 | \$79,500 | \$84,500 | -\$5,000 |
| Construction \& Extraction | \$24.98 | \$25.00 | -\$0.02 | * | \$60,000 | * |
| Education, Training, \& Library | \$13.50 | \$23.50 | -\$10.00 | \$55,000 | \$62,000 | -\$7,000 |
| Farming, Fishing, \& Forestry | * | \$15.10 | * | * | \$46,000 | * |
| Food Preparation \& Serving Related | \$10.00 | \$10.00 | \$0.00 | * | \$30,300 | * |
| Healthcare Practitioner \& Technical | \$26.50 | \$25.00 | \$1.50 | \$74,500 | \$115,000 | -\$40,500 |
| Healthcare Support | \$15.14 | \$18.00 | -\$2.86 | \$30,000 | * | * |
| Installation, Maintenance, \& Repair | * | \$23.00 | * | * | \$64,500 | * |
| Legal | \$18.75 | * | * | \$85,000 | \$140,000 | -\$55,000 |
| Life, Physical \& Social Sciences | \$18.15 | \$22.00 | -\$3.85 | \$77,000 | \$80,000 | -\$3,000 |
| Management | \$15.20 | \$20.00 | -\$4.80 | \$72,000 | \$90,000 | -\$18,000 |
| Military Specific | * | * | * | * | * | * |
| Office \& Administration Support | \$17.14 | \$18.45 | -\$1.31 | \$50,000 | \$58,500 | -\$8,500 |
| Personal Care \& Service | \$13.00 | \$11.00 | \$2.00 | \$32,500 | \$37,500 | -\$5,000 |
| Production | \$17.03 | \$19.88 | -\$2.85 | \$50,470 | \$63,000 | -\$12,530 |
| Protective Service | \$14.86 | \$23.10 | -\$8.24 | * | \$82,000 | * |
| Sales \& Related | \$11.25 | \$13.00 | -\$1.75 | \$47,195 | \$62,500 | -\$15,305 |
| Transportation \& Material Moving | \$15.25 | \$18.00 | -\$2.75 | \$65,000 | \$52,000 | \$13,000 |

## *Insufficient survey data to report

## EMPLOYMENT STATUS

Respondents are asked to identify if they are employed outside the home or unemployed. More than three-fourths, 76.4 percent, of female respondents said they are employed compared to 81.7 percent of males. Figure 6 further illustrates the employment status of females and males within lowa. Figure 7 shows most females work full-time ( $83.8 \%$ ) and 16.2 percent of females are employed part-time. This may explain some of the wage disparity as 92.7 percent of males are employed full-time and 7.3 percent are employed part-time. It is notable that $5.2 \%$ of women report as a homemaker, compared to $0.6 \%$ of males.

Figure 6
Respondents Employment Status


Figure 7
Respondents Employed Status


[^0]In addition, 9.9 percent of females are self-employed. The majority of self-employed are operating businesses in professional services (18.2\%), personal services (15.5\%), and daycare (12.5\%). They have been in business for an average of 11 years, ranging from less than one year to 55 years. In 2014, 7.5 percent of females were self-employed and the majority were operating businesses in personal services and daycare.

Figure 8
Hours Worked per Week

| Hours | Male | Female |
| :---: | :---: | :---: |
| 10 or less | $1.5 \%$ | $3.0 \%$ |
| 11 to 20 | $2.9 \%$ | $12.4 \%$ |
| 21 to 30 | $3.4 \%$ | $18.7 \%$ |
| 31 to 40 | $36.1 \%$ | $55.4 \%$ |
| 41 to 50 | $35.1 \%$ | $8.5 \%$ |
| 51 or more | $21.0 \%$ | $2.0 \%$ |
| Total | $100 \%$ | $100 \%$ |

Females and males reported the highest percentage of respondents work 31 to 40 hours per week ( $55.4 \%$ for females and $36.1 \%$ for males) as shown in Figure 8. There are other patterns that show disparities between the genders. For example, the proportion of female respondents who work less than 31 hours per week (34.1\%) is more than four times the percentage of male respondents ( $7.8 \%$ ) that work those hours. In contrast, 21.0 percent of male respondents work over 50 hours per week whereas 2.0 percent of female respondents work over 50 hours per week.
Nearly one-tenth (8.2\%) of females report that they prefer to work more hours, and more than half ( $54.0 \%$ ) of these females stated they prefer to work full-time ( 35 hours/week or more). This fraction of underemployed females may be a contributing factor in the gender wage disparity, but it should be kept in mind that 7.0 percent of males also prefer more hours and nearly three-fourths ( $71.6 \%$ ) prefer full-time hours as well.

Many respondents also report working two or more jobs. 13.4 percent of females and 12.5 percent of males report working more than one job. However, of the total respondents (12.3\%) who report working multiple jobs, 57.5 percent are female and 42.5 percent are male.

## CURRENT WAGES

Respondents are asked to identify earnings as either hourly wages or annual salaries. Over one-third (36.2\%) of female respondents stated that they earn an annual salary. Figure 9 shows that 16.1 percent of females earn \$35,000 per year or less. Nearly half ( $46.5 \%$ ) of male respondents stated they earn an annual salary, but only 8.1 percent of male respondents report making $\$ 35,000$ or less. Disparity between the genders clearly exists at this income level. When compared to previous studies there has been a decrease in the percentage of females earning an annual salary within this bracket. In 2014, 19.6 percent of females reported an annual salary of $\$ 35,000$ or less. In 200836.5 percent of females reported income at this level. In contrast, 76.0 percent of males report an annual salary of $\$ 50,000$ or greater compared to 62.0 percent of females who report an annual salary of $\$ 50,000$ or greater.

Figure 9 Distribution of Annual Salary Earned


The highest paying four occupational categories for males and females which earn an annual salary are computer \& mathematical sciences, healthcare practitioner \& technical, legal, and management. Females make up a larger percentage ( $85.0 \%$ and $74.6 \%$ ) in healthcare practitioner \& technical and legal than males ( $15.0 \%$ and $25.4 \%$ respectively). While males make up a greater percentage ( $70.2 \%$ and $57.4 \%$ ) in the computer \& mathematical science and management occupational categories than females (29.8\% and $42.6 \%$ ).

A wage disparity is much more apparent when analyzing hourly wage earners. Figure 10 shows

Figure 10 60.7 percent of females that earn an hourly wage earn less than $\$ 18.00 / \mathrm{hr}$. $\$ 18.00$ was chosen as a median distribution point that specifies more than half of the respondents for at least one gender. Only 39.6 percent of males are in this hourly wage bracket. Conversely, 60.4 percent of hourly wage earning males earn over $\$ 18.00 / \mathrm{hr}$ compared to only 39.3 percent of females.

Lower wages for females may be correlated to the occupational category. Many of the hourly wage earning females work in the office \& administrative support (27.8\%) or healthcare practitioner \& technical (12.7\%) occupational categories. The majority of the hourly wage earning males work in production (18.8\%), transportation \& material moving ( $11.7 \%$ ), installation, maintenance, \& repair (11.1\%), or construction (10.8\%) occupations.

## EDUCATIONAL ATTAINMENT

The respondents are asked during the survey to report their highest level of education attained. The category "some education beyond high school" represents those that have taken classes beyond high school and have not yet completed a degree or certification program.
Figure 11 shows a slightly higher percentage of males report having a high school diploma or equivalent ( $21.7 \%$ males, $18.2 \%$ females). However, at most education levels there is little variance between males and females. The greatest difference is at the associate degree level in which females have an edge of 4.2 percent over the males. In 2014, males exceeded females by 1.2 percent at the Master's/ Doctorate/ Professional Degree level and in 2020, females exceed the males by 0.9 percent in this category. This is a 2.1 percent increase since 2014.

Figure 11
Educational Attainment Distribution


Figure 12
$\square$ Female ■ Male Educational Attainment: Bachelor's Degree Plus

Figure 12 shows that the educational attainment of a Bachelor's degree and/ or Master's/ Doctorate/ Professional level has remained relatively constant through the past decade. There was a slight peak in 2014 among females and males but has remained steady overall.


Figures 13 and 14 show a cross section of respondents' hourly wages with their educational attainment by gender. The educational category with the highest number of females ( $24.7 \%$ ) is some level of education beyond high school. In addition, most women (20.4\%) report earning an hourly wage in the $\$ 15.00$ to 17.99 range.

In contrast, the highest education level males have attained is a H.S. diploma/ equivalent with no college experience at 30.6 percent. The highest percentage of males ( $29.4 \%$ ) earn an hourly wage in the $\$ 25.00$ and higher range. To reiterate, most females have more education than males, however the majority of women earn less per hour than males. The majority of males earn more per hour with less education.

Figure 13
Female Hourly Wage Distribution by Educational Attainment

| Female | $\begin{gathered} \text { Less than } \\ \$ 8.00 \\ \hline \end{gathered}$ | $\begin{gathered} \$ 8.00 \text { to } \\ \$ 9.99 \end{gathered}$ | $\begin{array}{\|c} \hline \$ 10.00 \text { to } \\ \$ 11.99 \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \$ 12.00 \text { to } \\ \hline \$ 14.99 \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \$ 15.00 \text { to } \\ \$ 17.99 \\ \hline \end{array}$ | $\begin{array}{\|c} \hline \$ 18.00 \text { to } \\ \$ 20.99 \\ \hline \end{array}$ | $\begin{gathered} \$ 21.00 \text { to } \\ \$ 24.99 \\ \hline \end{gathered}$ | $\$ 25.00$ or Higher | Total | Percentage of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than H.S. Diploma | 7 | 7 | 10 | 10 | 6 | 1 | - | - | 41 | 2.8\% |
| H.S. Diploma/ Equivalent | 18 | 35 | 64 | 76 | 61 | 41 | 15 | 18 | 328 | 22.7\% |
| Some Education Beyond HS, No degree | 17 | 21 | 53 | 81 | 76 | 47 | 30 | 32 | 357 | 24.7\% |
| Trade Certification | - | 4 | 7 | 7 | 17 | 9 | 11 | 9 | 64 | 4.5\% |
| Vocational Training | 1 | 2 | 4 | 9 | 11 | 7 | 8 | 6 | 48 | 3.3\% |
| Associate Degree | 4 | 3 | 29 | 48 | 59 | 44 | 39 | 68 | 294 | 20.3\% |
| Bachelors Degree | 3 | 5 | 19 | 34 | 55 | 38 | 26 | 81 | 261 | 18.0\% |
| Master's/ Doctorate/ Professional Degree | 1 | - | 1 | 4 | 10 | 7 | 4 | 27 | 54 | 3.7\% |
| Female Total | 51 | 77 | 187 | 269 | 295 | 194 | 133 | 241 | 1,447 | 100\% |
| Female Percentage of Total | 3.5\% | 5.3\% | 12.9\% | 18.6\% | 20.4\% | 13.4\% | 9.2\% | 16.7\% | 100\% |  |

Figure 14
Male Hourly Wage Distribution by Educational Attainment

| Males | $\begin{gathered} \text { Less than } \\ \$ 8.00 \end{gathered}$ | $\begin{gathered} \$ 8.00 \text { to } \\ \$ 9.99 \end{gathered}$ | $\begin{gathered} \$ 10.00 \text { to } \\ \$ 11.99 \end{gathered}$ | $\begin{gathered} \$ 12.00 \text { to } \\ \$ 14.99 \end{gathered}$ | $\begin{gathered} \$ 15.00 \text { to } \\ \$ 17.99 \end{gathered}$ | $\begin{gathered} \$ 18.00 \text { to } \\ \$ 20.99 \end{gathered}$ | $\begin{gathered} \$ 21.00 \text { to } \\ \$ 24.99 \end{gathered}$ | $\begin{gathered} \$ 25.00 \text { or } \\ \text { Higher } \end{gathered}$ | Total | Percentage of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than H.S. Diploma | 2 | 4 | 7 | 7 | 5 | 5 | 5 | 5 | 40 | 4.2\% |
| H.S. Diploma/ Equivalent | 11 | 18 | 35 | 42 | 40 | 49 | 41 | 58 | 294 | 30.6\% |
| Some Education Beyond HS, No degree | 4 | 11 | 15 | 30 | 30 | 36 | 30 | 57 | 213 | 22.2\% |
| Trade Certification | 1 | 2 | 1 | 11 | 6 | 7 | 7 | 21 | 56 | 5.8\% |
| Vocational Training | 1 | - | 2 | 2 | 8 | 7 | 6 | 23 | 49 | 5.1\% |
| Associate Degree | - | 1 | 8 | 11 | 13 | 18 | 28 | 49 | 128 | 13.3\% |
| Bachelors Degree | - | 1 | 6 | 18 | 19 | 31 | 21 | 54 | 150 | 15.6\% |
| Master's/ Doctorate/ Professional Degree | 1 | 2 | 1 | 2 | 2 | 4 | 3 | 16 | 31 | 3.2\% |
| Male Total | 20 | 39 | 75 | 123 | 123 | 157 | 141 | 283 | 961 | 100\% |
| Male Percentage of Total | 2.1 \% | 4.1\% | 7.8\% | 12.8\% | 12.8\% | 16.3\% | 14.7\% | 29.4\% | 100\% |  |

Figure 15 highlights the differences between the hourly wage groupings, including each level of educational attainment. For instance, nearly two-thirds (65.2\%) of males earn an hourly wage, have an educational attainment beyond high school, and 60.4 percent of hourly wage earning males earn a median hourly wage of $\$ 18.00$ or greater. Nearly three-fourths ( $74.5 \%$ ) of female respondents earn hourly wages, have an education beyond high school, and only 39.3 percent of these females report a median hourly wage of $\$ 18.00$ or higher.

Figure 15
Hourly Wage Distribution Percentage Comparison Among All Education Levels

|  | $\begin{gathered} \text { Less than } \\ \$ 8.00 \end{gathered}$ | $\begin{gathered} \$ 8.00 \text { to } \\ \$ 9.99 \end{gathered}$ | $\begin{gathered} \$ 10.00 \text { to } \\ \$ 11.99 \end{gathered}$ | $\begin{gathered} \$ 12.00 \text { to } \\ \$ 14.99 \end{gathered}$ | $\begin{gathered} \$ 15.00 \text { to } \\ \$ 17.99 \end{gathered}$ | $\begin{gathered} \$ 18.00 \text { to } \\ \$ 20.99 \end{gathered}$ | $\begin{gathered} \$ 21.00 \text { to } \\ \$ 24.99 \end{gathered}$ | $\begin{aligned} & \$ 25.00 \text { or } \\ & \text { Higher } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female | 3.5\% | 5.3\% | 12.9\% | 18.6\% | 20.4\% | 13.4\% | 9.2\% | 16.7\% |
| Male | 2.1\% | 4.1\% | 7.8\% | 12.8\% | 12.8\% | 16.3\% | 14.7\% | 29.4\% |
| \% Difference Female to Male | 1.4\% | 1.3\% | 5.1 \% | 5.8\% | 7.6\% | -2.9\% | -5.5\% | -12.8\% |

Figures 16 and 17 delineate the number of respondents by annual salary earned per educational attainment level, broken out by gender. The percentage of total is included for easier comparison between the genders.
For instance, the percentage of male ( $89.7 \%$ ) and female ( $91.8 \%$ ) respondents that earn an annual salary and have completed education levels beyond high school are fairly similar. Yet, over 76.0 percent of male annual salary earners receive a median salary of $\$ 50,000$ or greater while only 65.0 percent of female respondents report a median salary of $\$ 50,000$ or more.

More males ( $36.1 \%$ ) and females ( $35.4 \%$ ) have attained a bachelors degree than any other educational attainment level. There are more females $34.9 \%$, earning $\$ 50,000-75,000$ than any other salary range. However the highest percentage of males ( $28.1 \%$ ) fall in the salary bracket of $\$ 100,000$ or higher. Figure 18 highlights the differences between the genders who earn an annual salary. Only 11.7 percent of females fall in the salary bracket $\$ 100,000$ or higher, which is a difference of 16.4 percent from males, and by far the highest difference between genders among all salary brackets.

Figure 16
Female Annual Salary Distribution by Educational Attainment

| Female | Less than \$5,000 | $\begin{aligned} & \$ 5,001 \text { to } \\ & \$ 10,000 \end{aligned}$ | $\begin{gathered} \$ 10,001 \text { to } \\ \$ 15,000 \end{gathered}$ | $\begin{gathered} \$ 15,001 \text { to } \\ \$ 20,000 \end{gathered}$ | $\begin{gathered} \$ 20,001 \text { to } \\ \$ 25,000 \end{gathered}$ | $\left\|\begin{array}{c} \$ 25,001 \text { to } \\ \$ 35,000 \end{array}\right\|$ | $\begin{gathered} \$ 35,001 \text { to } \\ \$ 50,000 \end{gathered}$ | $\begin{gathered} \$ 50,001 \text { to } \\ \$ 75,000 \end{gathered}$ | $\begin{aligned} & \$ 75,001 \text { to } \\ & \$ 100,000 \end{aligned}$ | \$100,000 or Higher | Total | Percentage of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than H.S. Diploma | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 3 | 0.3\% |
| H.S. Diploma/ Equivalent | 1 | 1 | 4 | 7 | 3 | 8 | 17 | 18 | 7 | 3 | 69 | 7.8\% |
| Some Education Beyond HS, No degree | 1 | 3 | 1 | 3 | 7 | 15 | 17 | 39 | 22 | 9 | 117 | 13.3\% |
| Trade Certification | 0 | 1 | 0 | 2 | 0 | 2 | 2 | 5 | 1 | 0 | 13 | 1.5\% |
| Vocational Training | 0 | 0 | 2 | 1 | 1 | 2 | 9 | 2 | 0 | 1 | 18 | 2.0\% |
| Associate Degree | 1 | 1 | 2 | 1 | 3 | 10 | 25 | 35 | 20 | 8 | 106 | 12.0\% |
| Bachelors Degree | 1 | 2 | 4 | 4 | 4 | 27 | 72 | 107 | 62 | 29 | 312 | 35.4\% |
| Master's/ Doctorate/ Professional Degree | 0 | 3 | 2 | 2 | 1 | 8 | 24 | 101 | 50 | 53 | 244 | 27.7\% |
| Female Total | 4 | 11 | 16 | 20 | 19 | 72 | 167 | 308 | 162 | 103 | 882 | 100\% |
| Female Percentage of Total | 0.5\% | 1.2\% | 1.8\% | 2.3\% | 2.2\% | 8.2\% | 18.9\% | 34.9\% | 18.4\% | 11.7\% | 100\% |  |

Figure 17
Male Annual Salary Distribution by Educational Attainment

| Male | Less than \$5,000 | $\begin{aligned} & \$ 5,001 \text { to } \\ & \$ 10,000 \end{aligned}$ | $\begin{gathered} \$ 10,001 \text { to } \\ \$ 15,000 \end{gathered}$ | $\begin{aligned} & \$ 15,001 \text { to } \\ & \$ 20,000 \end{aligned}$ | $\begin{gathered} \$ 20,001 \text { to } \\ \$ 25,000 \end{gathered}$ | $\begin{gathered} \$ 25,001 \text { to } \\ \$ 35,000 \end{gathered}$ | $\begin{gathered} \$ 35,001 \text { to } \\ \$ 50,000 \end{gathered}$ | $\begin{gathered} \$ 50,001 \text { to } \\ \$ 75,000 \end{gathered}$ | \$75,001 to \$100,000 | \$100,000 or Higher | Total | Percentage of Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than H.S. Diploma | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 0 | 0 | 8 | 0.9\% |
| H.S. Diploma/ Equivalent | 0 | 4 | 2 | 2 | 4 | 3 | 18 | 20 | 13 | 22 | 88 | 9.5\% |
| Some Education Beyond HS, No degree | 0 | 1 | 4 | 3 | 3 | 11 | 36 | 34 | 26 | 27 | 145 | 15.6\% |
| Trade Certification | 0 | 1 | 0 | 0 | 0 | 2 | 8 | 9 | 5 | 4 | 29 | 3.1 \% |
| Vocational Training | 0 | 1 | 0 | 0 | 0 | 3 | 7 | 9 | 5 | 2 | 27 | 2.9\% |
| Associate Degree | 0 | 0 | 2 | 2 | 0 | 10 | 20 | 26 | 20 | 14 | 94 | 10.1\% |
| Bachelors Degree | 0 | 3 | 2 | 0 | 2 | 4 | 40 | 95 | 92 | 97 | 335 | 36.1\% |
| Master's/ Doctorate/ Professional Degree | 0 | 0 | 0 | 3 | 0 | 2 | 14 | 54 | 35 | 95 | 203 | 21.9\% |
| Male Total | 0 | 10 | 10 | 10 | 9 | 36 | 148 | 249 | 196 | 261 | 929 | 100\% |
| Male Percentage of Total | 0.0\% | 1.1\% | 1.1\% | 1.1\% | 1.0\% | 3.9\% | 15.9\% | 26.8\% | 21.1\% | 28.1\% | 100.0\% |  |

Figure 18
Annual Salary Distribution Percentage Comparison Among All Education Levels

|  | Less than \$5,000 | $\$ 5,001$ to \$10,000 | $\begin{gathered} \$ 10,001 \text { to } \\ \$ 15,000 \end{gathered}$ | $\begin{gathered} \$ 15,001 \text { to } \\ \$ 20,000 \end{gathered}$ | $\begin{gathered} \$ 20,001 \text { to } \\ \$ 25,000 \end{gathered}$ | $\begin{array}{\|c\|} \hline \$ 25,001 \text { to } \\ \$ 35,000 \end{array}$ | $\begin{gathered} \$ 35,001 \text { to } \\ \$ 50,000 \end{gathered}$ | $\begin{gathered} \$ 50,001 \text { to } \\ \$ 75,000 \end{gathered}$ | $\$ 75,001$ to \$100,000 | \$100,000 or Higher |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Female | 0.5\% | 1.2\% | 1.8\% | 2.3\% | 2.2\% | 8.2\% | 18.9\% | 34.9\% | 18.4\% | 11.7\% |
| Male | * | 1.1\% | 1.1\% | 1.1\% | 1.0\% | 3.9\% | 15.9\% | 26.8\% | 21.1\% | 28.1\% |
| \% Difference Female to Male | 0.5\% | 0.2\% | 0.7\% | 1.2\% | 1.2\% | 4.3\% | 3.0\% | 8.1\% | -2.8\% | -16.4\% |

[^1]In 2014 females at the Master's/ Doctorate/ Professional degree level earned a median of 80.0 percent $(\$ 60,000)$ of the median male salary $(\$ 75,000)$ with the same educational attainment. In 2020 females at the Masters/ Doctorate/ Professional educational attainment level earn, on average, 72.0 percent $(\$ 72,000)$ of median males salary ( $\$ 100,000$ ). This is a $\$ 25,000(33.3 \%)$ increase in males annual salary while females with the same educational attainment see an increase of 20.0 percent, or $\$ 12,000$.

As indicated in Figures 19 and 20, males have higher annual salaries and hourly wages than females in all educational attainment levels. In the high school diploma/equivalency category, the median hourly wage for males is $\$ 18.00$ / hour (up from $\$ 16.50$ in 2014). Meanwhile, females currently earn a median wage of $\$ 13.50$ / hour (up from $\$ 11.76$ in 2014). Males with an associate degree receive a median hourly wage of $\$ 23.25 /$ hour and females receive $\$ 18.00 /$ hour. Although the difference in the percentage of females to males that have a bachelor's degree is very similar among genders ( $24.3 \%$ females to $24.4 \%$ males), males again have a higher hourly median wage level ( $\$ 20.85 /$ hour ) than females (\$19.45/hour).

Only with the hourly wage earners does the gap begin to noticeably reduce at the Masters/Doctorate/ Professional degree level in which females earn 98.0 percent ( $\$ 24.50$ ) of males median hourly wage of $\$ 25.00$. All other categories present a much larger discrepancy of wages between the genders as the values in the orange boxes indicate the percentage

Figure 19 of female earnings to male earnings.

Median Hourly Wage by Educational Attainment


Figure 20
Median Annual Salary by Educational Attainment


## YEARS OF EXPERIENCE

Males have worked an average of 15 years and females have worked an average of 13 years with regard to years of experience on the job. As Figure 21 shows, over one-third (36.8\%) of females have work experience of five years or less in their current occupation. A similar portion of males (31.5\%) also have work experience of five years or less with their current occupation. These high percentages may be due to the recent economic decline and resulting layoffs. However, there is still a substantial number of respondents with a great amount of work experience. Nearly one-fourth (23.9\%) of females have been employed in their current occupation for over 20 years. Likewise, 30.2 percent of males have over 20 years of experience at their current occupation.

Figure 21
Years of Work Experience in Current Occupation
Figure 22 graphs the median hourly wages for males and females with years of experience when considering full-time employment only. The greatest wage disparities between the genders start to occur as early 2 to 5 years of experience, when males earn $\$ 3.46 / \mathrm{hr}$ more than females, $\quad(22.1 \%$ more). This disparity continues as experience grows for those with 16 to 20 years in which males earn $\$ 4.02$ (21.3\%) more,
 than females, and for those that have 21 or more years of experience, males earn $\$ 4.25 / \mathrm{hr}$ (21.3\%) more than their female counterparts.

Notice that males tend to start their occupation with a slightly higher hourly wage than females, a difference of $\$ 0.70(4.7 \%)$ higher. Females earn an average of 82.6 percent of males wage with the same years of experience after 1 year of experience.

Figure 22
Hourly Wage Comparison by Occupational Experience


Figures 23 and 24 show the average hourly wage increases by years of experience among females and males separately. Each figure represents the same data with Figure 23 displaying the data as a percent and Figure 24 by dollar amount. The jump from 1 year experience to 2 - 5 years presents the largest percent increase for males ( $22.1 \%$ ) while female hourly wages increase by only 4.7 percent between these years of experience. The largest hourly wage increase for females is the shift from 5 years to $6-10$ years at 7.3 percent, while males can see a 4.3 percent increase. Males can expect a hourly wage increase of 26.4 percent while females can see a 12.0 percent hourly wage increase between 1 to 10 years of experience.

Figure 23
Gender Comparison of Hourly Wage Increase by Percentage and Years of Experience

Figure 24
Gender Comparison of Hourly Wage Increase by Years of Experience

|  | 5.9\% |  |  | \$1.35 |
| :---: | :---: | :---: | :---: | :---: |
|  | 4.4\% |  |  | \$0.96 |
|  | 9.7\% | - 20 Years to 21 or More Years |  | \$1.94 |
| 5.9\% |  | - 15 Years to 16-20 Years |  |  |
|  | 4.3\% | -10 Years to 11-15 Years | \$1.12 |  |
| 4.9\% | 22.1\% | - 5 Years to 6-10 Years | \$0.88 | \$0.83 |
| 6.8\% |  | - 1 Year to 2-5 Years | \$1.14 | \$3.47 |
| 7.3\% |  |  | \$1.15 |  |
| 4.7\% |  |  | \$0.71 |  |
| Females | Males |  | Females | Males |

## TREND ANALYSIS

As shown in Figure 25, from 2014 to 2020 the educational attainment of males and females experienced similar changes. Males and females had a decrease in the percentage of high school graduates/ equivalent earners. An increase of associate degree earners was seen in each gender. Males and females each experienced a slight decrease in bachelor's degrees earned, however females saw a slight increase of Master's/ Doctorate/ Professional degrees earned while males slightly decreased in this educational attainment level.

Median hourly wages earned rose for males and females. In 2014 females with an associate degree earning an hourly wage earned 78.2 percent of their male counterparts wage. By 2020 , this number stayed relatively the same at 77.4 percent. Males and females earning an hourly wage with a bachelor's degree or higher experienced a median wage increase. Females were earning 83.3 percent of males wages in 2014 and by 2020 disparity decreased to females earning 93.3 percent of males wages.

Median annual salaries rose for males and females with an exception of male associates degree earners and females with a high school diploma/ equivalent. In 2014 females earning an annual salary with a bachelor's degree were earning 65.8 percent of their male counterparts salary. In 2020 this disparity has decreased to females earning 75.0 percent of males salary.

Figure 25

| Average Age (males \& females combined) |  | 2008 | 2014 | 2020 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 46 | 50 | 45 |
| Education Level: |  |  |  |  |
| Male | High School Diploma/ Equivalent | 31.4\% | 27.2\% | 21.7\% |
|  | Trade Certification | 4.2\% | 3.5\% | 4.7\% |
|  | Vocational Training | 1.4\% | 2.0\% | 3.2\% |
|  | Associate Degree | 12.5\% | 10.0\% | 11.8\% |
|  | Bachelor's Degree | 20.2\% | 24.8\% | 24.4\% |
|  | Master's/ Doctorate/ Professional Degree | 12.4\% | 12.7\% | 11.2\% |
| Female | High School Diploma/ Equivalent | 25.9\% | 24.8\% | 18.2\% |
|  | Trade Certification | 3.4\% | 3.6\% | 3.3\% |
|  | Vocational Training | 2.7\% | 2.2\% | 2.8\% |
|  | Associate Degree | 16.3\% | 13.5\% | 16.0\% |
|  | Bachelor's Degree | 21.7\% | 25.2\% | 24.3\% |
|  | Master's/ Doctorate/ Professional Degree | 12.1\% | 11.5\% | 12.1\% |
| Median Hourly Wages by Education Level: |  |  |  |  |
| Male | High School Diploma/ Equivalent | \$15.50 | \$16.50 | \$18.00 |
|  | Associate Degree | \$17.00 | \$19.18 | \$23.25 |
|  | Bachelor's Degree or higher | \$16.84 | \$18.00 | \$20.85 |
| Female | High School Diploma/ Equivalent | \$11.30 | \$11.76 | \$13.50 |
|  | Associate Degree | \$13.60 | \$15.00 | \$18.00 |
|  | Bachelor's Degree or higher | \$14.96 | \$15.00 | \$19.45 |
| Median Annual Salary by Education Level: |  |  |  |  |
| Male | High School Diploma/ Equivalent | \$45,000 | \$54,000 | \$67,500 |
|  | Associate Degree | \$48,000 | \$65,000 | \$60,000 |
|  | Bachelor's Degree or higher | \$60,000 | \$79,000 | \$80,000 |
| Female | High School Diploma/ Equivalent | \$35,000 | \$45,000 | \$45,000 |
|  | Associate Degree | \$35,000 | \$50,000 | \$57,500 |
|  | Bachelor's Degree or higher | \$45,000 | \$52,000 | \$60,000 |
| Average Years of Experience: |  |  |  |  |
|  | Male | 15 | 15 | 15 |
|  | Female | 12 | 14 | 13 |

Figure 26


Wages often differ based on the location of the employer workplace in which the wages are earned. Generally, both hourly and salary wages tend to be higher in metropolitan areas than in nonmetropolitan areas. Figure 26 defines the lowa Department of Public Health Service Regions in which each county is color coded based on whether the county is a MSA (Metropolitan Statistical Area) or a Non-MSA county within the state. There are two colors for MSA to differentiate between the counties that are generally grouped together. The region borders are separated by the black bold borders. Figure 27 combines all MSA areas and all Non-MSA areas throughout the state and compares annual salaries and hourly wages among genders. Females earning an hourly wage that live in a Non-MSA area earn 77.2 percent of the males earnings that live in Non-MSA areas. However females that earn an hourly wage and live in a MSA area earn 84.1 percent of male earnings who live in an MSA area. This is a difference of 6.9 percent among females earnings to male earnings overall for hourly wage earners from MSA to

Figure 27 Non-MSA.

Female and Male Earnings Among MSA \& Non-MSAs
The difference among annual salary earners for females residing in Non -MSA earn 80.0\% compared to

| Area | Female Earnings | Male Earnings | Female Earnings as a <br> Percentage of Male Earnings |
| :---: | :---: | :---: | :---: |
| MSA Hourly | $\$ 16.81$ | $\$ 20.00$ | $84.1 \%$ |
| MSA Salary | $\$ 65,000$ | $\$ 80,000$ | $81.3 \%$ |
| Non-MSA Hourly | $\$ 15.25$ | $\$ 19.75$ | $77.2 \%$ |
| Non-MSA Salary | $\$ 54,000$ | $\$ 67,500$ | $80.0 \%$ | males earnings who also reside in a Non-MSA. Females earning an annual salary and residing in a MSA earn $81.3 \%$ of male earnings who also reside in a MSA and earn an annual salary. This is a difference of only $1.3 \%$.

The difference when comparing hourly wage earning females living in Non-MSA to those females living in a MSA. Females living in a Non-MSA earn $90.7 \%$ of females who live in a MSA. While annual salary earning females that live in a Non-MSA earn $83.1 \%$ of those female salaries residing in MSAs. For males, hourly wage earners living in a Non-MSA earn $98.8 \%$ of those males living in an MSA. For males who earn an annual salary and live in a Non-MSA they earn 84.4 percent of males earning an annual salary who live in a MSA. The difference between female hourly wage and annual salary earners is $7.6 \%$ while males is $14.4 \%$.

Figures 28 and 29 illustrates female earnings as a percentage of male earnings by median hourly wages and annual salaries within the lowa Department of Public Health Service Regions defined in Figure 26 for the years 2008, 2014 , and 2020.

Figure 28
Hourly Wage- Female Earnings as a Percentage of Male Earnings by IDPH Region


Figure 29
Annual Salary- Female Earnings as a Percentage of Male Earnings by IDPH Region


## METHODOLOGY FOR PART ONE

lowa Workforce Development contracted a vendor to administer a random household telephone survey to individuals age 18 to 64 residing within the state of lowa during January 2020 to February 2021. The survey was designed by the Institute for Decision Making at the University of Northern lowa (UNI) with assistance from the Center for Social and Behavioral Research at UNI. Statewide sampling was provided by the University of Northern lowa's Institute for Decision Making based on the population per ZIP code. Validity of survey results is estimated within $+/-5.0 \%$. The overall goal of the study was achieved.

Survey administrators posed questions to determine the respondents' gender, age, education level, place of residence, and current employment status. Employed respondents also identified the location of their employer, employer type, occupation, years of employment in their occupation, employment status, current salary or wage, additional education/skills possessed, number of jobs currently held, distance traveled to work, and the hours worked per week.

It is notable that the survey sample size of this study was substantially larger $(6,000)$ than the sample size in $1999(1,060)$ therefore more detailed information was available for this analysis. The survey sample size for the $2008(5,669)$ and $2010(6,000)$ studies were much closer or matched in size to the 2020 study.

## INDUSTRY CATEGORIES

To provide consistency with other labor market information, the industrial categories identified in this study using Laborshed data will follow a similar format of the North American Industry Classification System (NAICS). The NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data. NAICS uses a sixdigit hierarchical coding system to classify all economic activity into twenty industry sectors. Five sectors are mainly goods-producing sectors and fifteen are entirely services-providing sectors. For further information please visit the NAICS Association website www.naics.com.

## OCCUPATIONAL CATEGORIES

The Standard Occupational Classification (SOC) system was used for this report when clustering occupations for male and female respondents. This system is being adopted by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into 1 of more than 800 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupations requiring similar job duties, skills, education, or experience. For more detail visit the Bureau of Labor Statistics website www.bls.gov.

## PART TWO: LOCAL EMPLOYMENT DYNAMICS DATA

SCOPE AND METHODOLOGY

The data presented in industry and age/gender aggregations have been compiled from all employees in lowa that work for establishments that are covered by Unemployment Insurance. lowa Workforce Development has assembled the report using the wage records of $1,500,869$ workers. These wage records have been merged with administrative demographic data obtained from the US Census Bureau through the Longitudinal Employer Household Dynamics partnership. The time period covers four calendar quarters ending June 30, 2020, which was the most current data available at the time of publishing this study. The majority of the data aside from the final quarter reported (April to June 2020) has been collected pre-pandemic.

The Longitudinal Employer-Household Dynamics program provides innovative demographic employment information for local decision makers, economic development agencies, education and training institutions, and transportation agencies. Just as national economic indicators measure the performance of the overall economy, the Quarterly Workforce Indicators measure the performance of the local economy.
It is important to note that although the wage distribution shown here is sorted by industry, the data does not identify occupations within the industry. Many industries have different skill levels, e.g. nurse's aide versus physician, secretary versus engineer. Therefore, when analyzing the data, this must be taken into consideration. It is also of note that the following demographics are not concurrently reported by LEHD: race, disability status, sexual orientation, citizenship status, and share of household labor.

For available demographic workforce data, please access the following website:
https://lehd, ces,census,gov/

## LONGITUDINAL EMPLOYER-HOUSEHOLD DYNAMICS DATA

## WAGES BY INDUSTRY

Using Longitudinal Employer-Household Dynamics (LEHD) data the following sections analyze gender wage disparities by industry. Figure 30 illustrates the variance in wages earned by males and females by industry.

The LEHD data shows that males earn more than females in average monthly wages in every industry. The greatest wage difference occurs in the healthcare \& social assistance industry in which females earn an average monthly wage which is 50.7 percent of what males earn per month. This is an increase from 2014 when females earned 48.1 percent of what males earned in the healthcare \& social assistance industry. Additionally, females comprise 82.1 percent of the workforce within the healthcare \& social assistance industry (see Figure 31 on the following page).

The average female earnings compared to male earnings across all industries is 68.8 percent. The smallest variance between male and female wages across all industries is shown in the accommodations \& food services industry. Females employed within this industry earn an average monthly wage of $\$ 1,309$. This female monthly wage is 81.8 percent of males monthly wage which is $\$ 1,601$.

Figure 30
Average Monthly Wages by Industry


[^2]Figure 31
Gender Distribution by Industry

| Industry | Employed Males | Employed Females | $\%$ of Females in <br> Workforce |
| :--- | :---: | :---: | :---: |
| Healthcare and Social Assistance | 39,351 | 180,230 | $82.1 \%$ |
| Educational Services | 44,938 | 101,684 | $69.4 \%$ |
| Finance and Insurance | 34,682 | 56,172 | $61.8 \%$ |
| Accomodations \& Food Services | 49,164 | 65,637 | $57.2 \%$ |
| Arts, Entertainment \& Recreation | 9,501 | 11,172 | $54.0 \%$ |
| Retail Trade | 83,917 | 86,958 | $50.9 \%$ |
| Professional, Scientific, Technical Services | 25,789 | 26,299 | $50.5 \%$ |
| Other Services (except Public Administration) | 20,327 | 20,556 | $50.3 \%$ |
| Management of Companies \& Enterprises | 11,064 | 10,927 | $49.7 \%$ |
| Information | 11,006 | 9,076 | $45.2 \%$ |
| Real Estate, Rental, Leasing | 8,141 | 6,479 | $44.3 \%$ |
| Administrative, Support, Waste Management | 36,980 | 28,677 | $43.7 \%$ |
| Public Administration | 35,096 | 26,926 | $43.4 \%$ |
| Agriculture, Forestry, Fishing \& Hunting | 14,073 | 5,932 | $29.7 \%$ |
| Manufacturing | 160,989 | 64,206 | $28.5 \%$ |
| Transportation \& Warehousing | 46,527 | 15,348 | $24.8 \%$ |
| Utilities | 5,514 | 1,762 | $24.2 \%$ |
| Wholesale Trade | 49,290 | 15,718 | $24.2 \%$ |
| Construction | 68,583 | 9,791 | $12.5 \%$ |
| Mining, Quarrying, and Oil and Gas Extraction | 2,123 | 269 | $11.2 \%$ |
| Total All Industries | 757,053 | 743,816 | $49.6 \%$ |

Statistics compiled from 1,500,869 wage record recipients covered by Unemployment Insurance
Source: lowa Workforce Development, U.S. Census Bureau-Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators, 4 qtr average ending 6-30-20

Figure 31 shows the distribution of males and females in the workforce by industry. This reflects data reported by employers in lowa for the year ending June 30, 2020. The distribution of females (49.6\%) in the workforce, across all industries, is slightly less than that of males (50.4\%). When considered with the data in Figure 30 on the previous page the concentration of females within an industry can be compared to the average monthly wage earned.

Figure 32 represents the wage disparities among industries that have a gender variance of less than 10.0 percent. Males have an edge in regards to earnings in all of the following industries even though the fields employ genders comparably. The management of companies \& enterprises industry is the most equally distributed among the genders, ( $50.3 \%$ male to $49.7 \%$ female), however females only earn 58.1 percent of their male counterparts wage.

Figure 32
Average Monthly Wage Comparison in Industries with Similar Gender Distribution

| Industry | Male Average <br> Monthly Wages | Female Average <br> Montly Wages | Female Earnings <br> as a \% of Male <br> Earnings | $\%$ of Females in <br> Workforce |
| :--- | :---: | :---: | :---: | :---: |
| Arts, Entertainment \& Recreation | $\$ 1,979$ | $\$ 1,202$ | $60.8 \%$ | $54.0 \%$ |
| Retail Trade | $\$ 2,987$ | $\$ 1,939$ | $64.9 \%$ | $50.9 \%$ |
| Professional, Scientific, Technical Services | $\$ 7,682$ | $\$ 4,538$ | $59.1 \%$ | $50.5 \%$ |
| Other Services (except Public Administration | $\$ 3,847$ | $\$ 2,402$ | $62.4 \%$ | $50.3 \%$ |
| Management of Companies \& Enterprises | $\$ 7,339$ | $\$ 4,262$ | $58.1 \%$ | $49.7 \%$ |
| Information | $\$ 6,044$ | $\$ 4,212$ | $69.7 \%$ | $45.2 \%$ |

[^3]
## TREND ANALYSIS

According to current LEHD data females across all industries earn 68.8 percent of the average monthly wages earned by males.

Figure 33 delineates the average monthly wages earned by females as a percentage of wages earned by males, and it compares the average percentage of wages, female to male, as reported in 2008, 2014, and June 30, 2020. This is the most recent LEHD data available at time of publication. It is evident that the percentages are trending steadily in an upward direction over the years. The greatest differences of female earnings to male earnings occur within the healthcare and social assistance, management of companies \& enterprises, and professional, scientific, \& technical services, in which females experience an increase in wages of 2.6 percent, 3.0 percent, and 5.1 percent, respectively, since 2014. Five categories have experienced a drop in the discrepancy of female earnings as a percentage of male earnings. These industries are: mining, quarrying, and oil and gas extraction ( $-3.2 \%$ ), information $(-3.0 \%)$, real estate, rental, leasing ( $-0.6 \%$ ), public administration ( $-0.4 \%$ ), and arts, entertainment, \& recreation ( $-0.1 \%$ ).

When the current data is compared to the data from 2008 the largest gain by females in closing the wage gap can be seen in the wholesale trade industry, in which females earn 79.0 percent of what their male counterparts earn when compared to the 52.6 percent females earned in 2008 . That is an increase in female wages of 26.4 percent. Large gains can also be seen in the mining industry with females experienced an increase of 12.6 percent. The professional, scientific, technical services industry experienced an increase of 10.5 percent, and the management of companies \& enterprises industry experienced an increase of 10.1 percent. The only female earnings percentage decrease since 2008 occur in the arts, entertainment, \& recreation ( $-6.9 \%$ ) and public administration ( $-0.2 \%$ ) industries.

Figure 33
Female Earnings as a Percentage of Male Earnings by Industry

| Industry | $2008^{*}$ | $2014^{* *}$ | $2020 * * *$ |
| :--- | :---: | :---: | :---: |
| Accomodations \& Food Services | $77.3 \%$ | $80.3 \%$ | $81.8 \%$ |
| Administrative, Support, Waste Management | $77.2 \%$ | $78.9 \%$ | $81.0 \%$ |
| Wholesale Trade | $52.6 \%$ | $73.5 \%$ | $79.0 \%$ |
| Public Administration | $78.0 \%$ | $78.2 \%$ | $77.8 \%$ |
| Educational Services | $69.2 \%$ | $76.4 \%$ | $77.2 \%$ |
| Manufacturing | $70.2 \%$ | $74.4 \%$ | $76.9 \%$ |
| Mining, Quarrying, and Oil and Gas Extraction | $62.8 \%$ | $78.6 \%$ | $75.4 \%$ |
| Agriculture, Forestry, Fishing \& Hunting | $71.6 \%$ | $72.0 \%$ | $73.6 \%$ |
| Construction | $67.1 \%$ | $68.7 \%$ | $73.6 \%$ |
| Real Estate, Rental, Leasing | $67.0 \%$ | $74.1 \%$ | $73.5 \%$ |
| Transportation \& Warehousing | $70.1 \%$ | $72.5 \%$ | $73.1 \%$ |
| Utilities | $65.6 \%$ | $70.4 \%$ | $72.9 \%$ |
| Information | $68.6 \%$ | $72.7 \%$ | $69.7 \%$ |
| Retail Trade | $59.1 \%$ | $62.0 \%$ | $64.9 \%$ |
| Other Services (except Public Administration) | $57.9 \%$ | $56.5 \%$ | $62.4 \%$ |
| Arts, Entertainment \& Recreation | $67.7 \%$ | $60.9 \%$ | $60.8 \%$ |
| Finance and Insurance | $51.4 \%$ | $56.0 \%$ | $60.5 \%$ |
| Professional, Scientific, Technical Services | $48.6 \%$ | $53.9 \%$ | $59.1 \%$ |
| Management of Companies \& Enterprises | $48.0 \%$ | $55.1 \%$ | $58.1 \%$ |
| Healthcare and Social Assistance | $42.0 \%$ | $48.1 \%$ | $50.7 \%$ |

*Source: lowa Workforce Development, U.S. Census Bureau-Longitudinal Employer-Household Dynamics (LEHD), 4 qtr average ending 12-31-08 Statistics compiled from 1,456,975 wage record recipients covered by Unemployment Insurance
**Source: lowa Workforce Development, U.S. Census Bureau-Longitudinal Employer-Household Dynamics (LEHD), 4 qtr average ending 12-31-14 Statistics compiled from 1,498,420 wage record recipients covered by Unemployment Insurance
***Source: lowa Workforce Development, U.S. Census Bureau-Longitudinal Employer-Household Dynamics (LEHD), 4 qtr average ending 6-30-20 Statistics compiled from 1,500,869 wage record recipients covered by Unemployment Insurance

Figure 34 illustrates female earnings as a percentage of male earnings by county throughout the state. The location of the wages is based on respondents residence. In every county, females earn less than males. The lowest percentage of female earnings per male earnings is in Grundy County where females live and earn 55.0 percent of males earnings. The highest percentage of female earnings per male earnings is in Johnson County where females live and earn 78.4 percent of male earnings. The average female earnings compared to male earnings across all counties is 66.8 percent.

Figure 34
Female Earnings as a Percentage of Male Earnings by County of Residence


Figure 35
Distribution of Iowa Counties by Range of Female Earnings as a Percentage of Male Earnings

Figure 35 uses the data in Figure 34 to represent the percent of counties within each range. Females earn less than 61.0 percent of male earnings in 13.1 percent of all 99 counties in lowa. Females earn less than 64.2 percent in 29.3 percent of counties. The highest earning females reside within 14.1 percent of the counties. They earn 71.5 percent to 78.4 percent of male earnings.


Figure 36
Annual Earnings by IDPH Region


Source: Iowa Workforce Development, U.S. Census Bureau-Longitudinal Employer-Household Dynamics (LEHD), 4 qtr average ending 6-30-20
Statistics compiled from 1,500,869 wage record recipients covered by Unemployment Insurance

Figure 36 illustrates female earnings as a percentage of male earnings by IDPH Region. The location of the wages is based on respondents residence. In every region, females earn less than males. The lowest percentage of female earnings per male earnings is in Region 1 where females live and earn 65.3 percent of males earnings. The highest percentage of female earnings per male earnings is in Region 4 where females live and earn 70.1 percent of male earnings. The average female earnings compared to male earnings across all regions is 67.4 percent. As seen in Figure 34, the average female earnings compared to male earnings across all counties is 66.8 percent. The reason for the $.06 \%$ difference occurs when comparing individual counties versus multiple counties which form an IDPH region. This occurs when using the average employee count from multiple counties to create an overall number used for a region. Using the average presents slightly higher female earnings as a percentage to male earnings as shown in the annual earnings by IDPH region when compared to each individual county.

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This publication was supported by the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$3,435,965 with 100 percent funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS, or the U.S. Government.

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[^0]:    *Employment status is self-identified by the survey respondent. The
    unemployment percentage above does not reflect the unemployment rate
    published by the U.S. Bureau of Labor Statistics, which applies a stricter definition.

[^1]:    *No males reported making less than \$5,000

[^2]:    Statistics compiled from 1,500,869 wage record recipients covered by Unemployment Insurance
    Source: Iowa Workforce Development, U.S. Census Bureau-Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators, 4 qtr average ending 6-30-20

[^3]:    Statistics compiled from 1,500,869 wage record recipients covered by Unemployment Insurance
    Source: Iowa Workforce Development, U.S. Census Bureau-Longitudinal Employer-Household Dynamics (LEHD), Quarterly Workforce Indicators, 4 qtr average ending 6-30-20

