



Telework and Non-Telework Occupations

Effects of the Pandemic

By Nicholas Holom, Economist

January marks the 10th month since Montana recorded its first case of COVID-19, and the pandemic recession began. The economic recovery has been faster than previous recessions. The first vaccine doses administered in December offer a light at the end of the tunnel and hope for a return to normal. However, many still struggle with the health and economic effects of the virus. Workers unable to telework have been some of the hardest hit by both impacts, with greater initial layoffs and a higher risk of contracting the virus when returning to work. Workers able to telecommute and those who work in an environment that is easier to adapt to the virus's realities have been more shielded from these effects. This month's article focuses on the different impacts of the pandemic for teleworkers and non-teleworkers.

Unemployment Claimants by Ability to Telework

Businesses in every industry have adapted their operations to meet public health guidelines to slow the virus's spread. For many workers and businesses, this has meant transitioning to telework. Based on definitions of telework-capable occupations from Dingel and Neiman (2020), approximately 36% of the state's workforce have jobs that can be accomplished remotely.¹ According to research from the National Bureau of Economic Research, roughly

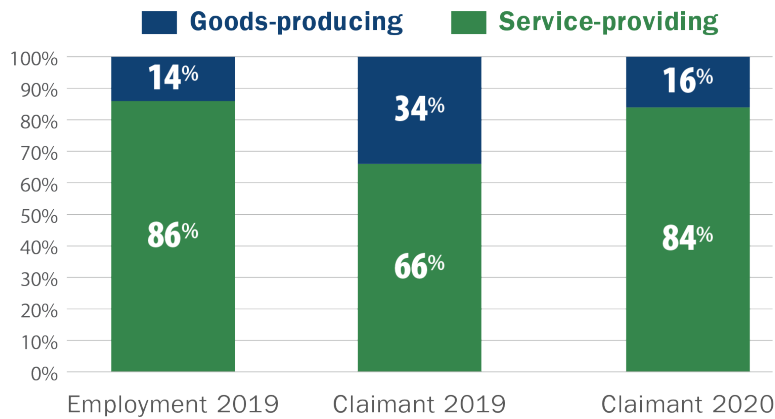
30% of Montana's workforce worked remotely during the peak months of April and May 2020.²

The majority of jobs in the state require some in-person component and cannot easily transition to remote work. Workers in these in-person jobs have been more likely to face unemployment than those who can easily transition to remote work. Further, workers in in-person jobs who have remained employed have faced additional stresses associated with greater exposure to the virus and extra work involved in creating a COVID-19 safe environment.

¹ Analysis uses data provided by Dingel & Neiman (2020). How Many Jobs Can be Done at Home? *Journal of Public Economics*. <https://www.sciencedirect.com/science/article/pii/S0047272720300992?via%3Dihub>

² Brynjolfsson, E., Horton, J. J., Ozimek, A., Rock, D., Sharma, G., & TuYe, H. (2020). COVID-19 and Remote Work: An Early Look at US Data. *National Bureau of Economic Research*. https://www.nber.org/system/files/working_papers/w27344/w27344.pdf

FIGURE 1:
Share of Claimants by Supersector



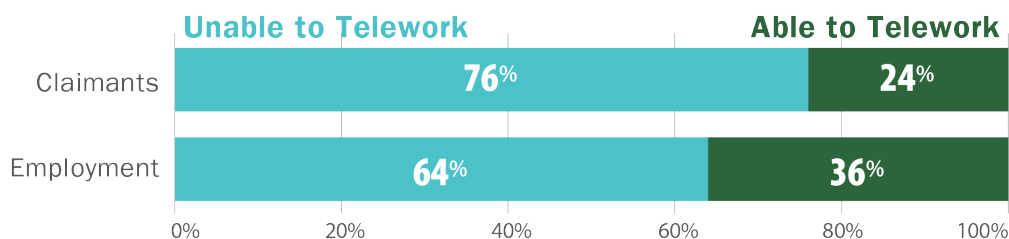
Source: MT DLI regular UI claimants. 2020 data includes January 1, 2020 to December 19, 2020 and excludes PUA Claimants. The utilities industry belongs in service-providing supersector, but is included in the goods-producing sectors for this analysis. Employment data from QCEW 2019.

Many workers who have been unable to work remotely are in service-providing industries, such as healthcare, retail trade, and accommodations and food service. Service workers made up a larger share of UI claimants than in past years and were more likely to face COVID-19 related layoffs than workers in goods-producing industries. **Figure 1** shows the share of claimants in 2019 and 2020 by goods-producing and service-providing industries compared to the 2019 payroll employment share. Compared to previous years, the percentage of claimants from service-providing industries increased from 66% to 84%, closer to its share of total employment of 86% in 2019.

The ability to telework plays a crucial role in whether workers experienced layoffs. **Figure 2** shows that jobs less conducive to telework were more likely to have layoffs. Of Montana's total employment, approximately 64% of workers are not able to telework. By comparison, approximately 76% of regular unemployment claimants were in occupations unable to telework, which suggests workers that cannot work remotely were more likely to be laid off.

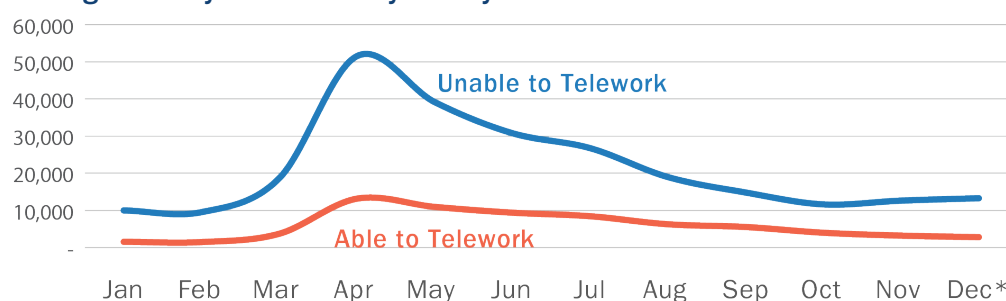
Over the year, the level of UI claimants for non-telework occupations has remained high and has increased during the winter months due to layoffs

FIGURE 2:
2020 Claimants by Ability to Telework Compared to Total Employment



Source: 2019 OES employment data and MT DLI regular UI claimants from January 1, 2020 to December 19, 2020 matched with Dingle and Neiman (2020) data on occupations that can telework. OES telework-capable employment percentages are multiplied by QCEW employment by industry. Claimant data excludes claimants that had no occupation available.

FIGURE 3:
Average Weekly Claimants by Ability to Telework



Source: MT DLI regular UI claimants data from January 1, 2020 to December 19, 2020. Data are matched to Dingel and Neiman (2020) data on occupations that can telework. *December includes only weeks ending December 5th through December 19th. Data excludes claimants that had no occupation available.

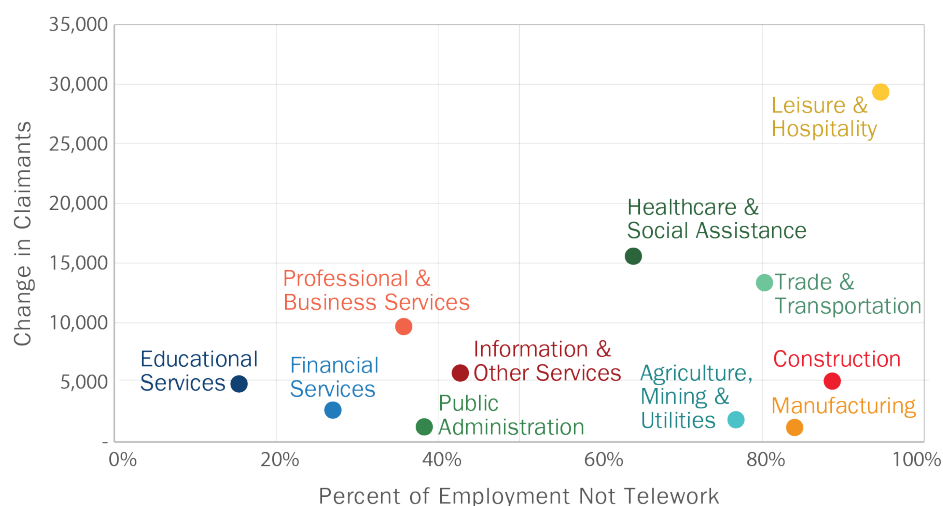
of seasonal workers. **Figure 3** shows that people in non-telework professions peaked at approximately 51,500 claimants in April and remained as high as 13,300 in the first three weeks of December. By comparison, claimants in occupations able to telework peaked at only 13,100 and has continued to decrease in the winter, with only 2,800 claimants on average in the first three weeks of December.

All industries had an increase in claimants from 2019 to 2020. However, the extent of the increase was a factor of multiple characteristics, including

whether the industry adapted to public health measures, was already distanced from the public, if workers could telework, and how much of employment was deemed essential. **Figure 4** shows the percent of employment able to telework compared to the change in total claimants from 2019 to 2020.

Industries in the service-providing sector, such as leisure and hospitality, healthcare and social assistance, and trade and transportation, had the largest increases in claimants and have a majority of

FIGURE 4:
Employment in Non-Telework Occupations by Change in Claimants 2019 to 2020



Source: OES 2019 data matched to Dingel and Neimann (2020) occupations that can telework. Regular UI claimants data from 2019 and 2020.

workers in occupations unable to telework. Leisure and hospitality had roughly 29,300 more claimants this year and has 95% of workers in occupations that cannot telework. Healthcare and social assistance had the second-highest increase in claimants with 15,600 more claimants than last year, and 64% of workers unable to telework. Trade and transportation had the third-highest increase with 13,400 more claimants and 80% of employment unable to telework.

By contrast, other service-providing industries had a majority of workers who could telework and had smaller increases in claims. These include educational services (4,900 more claimants), financial services (2,700), public administration (1,300), and information and other services (5,800).

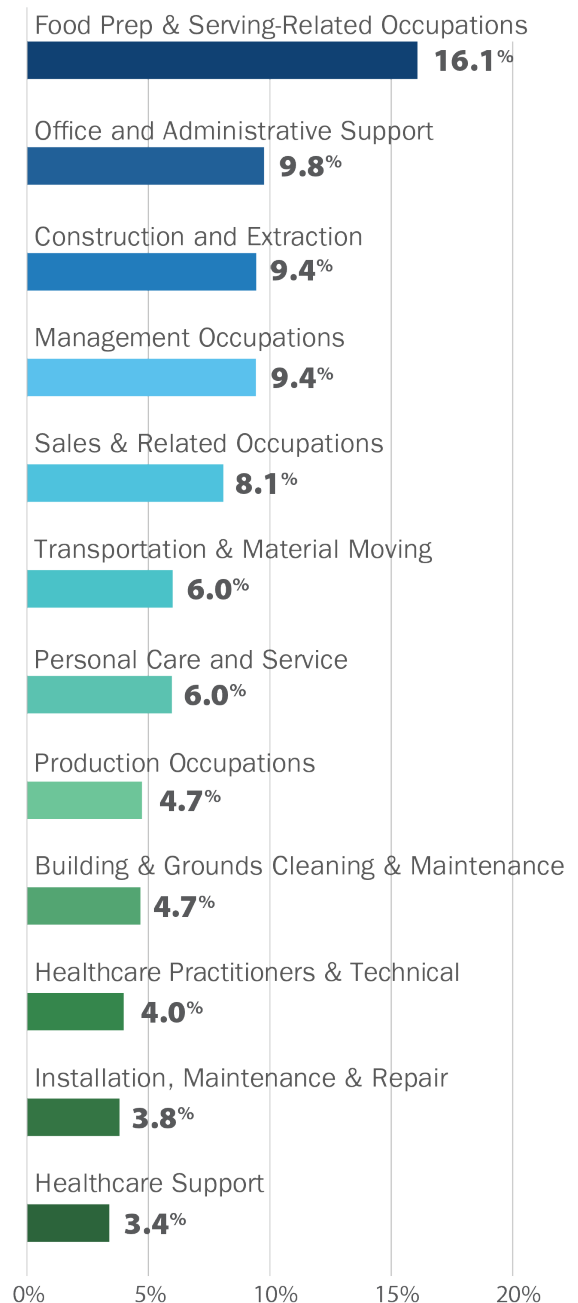
In goods-producing industries, most employment is in occupations that are not able to telework. However, the context of the work also plays a role. In the agriculture, mining, utilities, and construction sectors, the workplace is more shielded from the public, allowing workers to social distance more easily. These industries had higher layoffs than normal, but the difference was not as substantial compared to many service-providing sectors. Construction has approximately 89% of workers unable to telework and had 5,100 more claimants than last year. Agriculture, mining, and utilities had 77% of employment unable to telework and 1,900 more claimants. Manufacturing had 84% of workers unable to telework and had 1,200 more claimants.

Unemployment Claimants by Occupation

Occupations that work face-to-face with the public, such as healthcare occupations, food preparation and serving occupations, and other service occupations had the most unemployment claimants this year. **Figure 5** shows selected occupation groups with the most unemployment claimants, and claimant levels for specific occupations.

The largest occupation group by share of total claimants is food preparation and serving-related occupations, which made up 16% of total claimants in 2020. Within this group, occupations that had the highest level of claimants include waiters and waitresses (4,700 claimants), cooks (4,400 claimants), and bartenders (4,100 claimants).

FIGURE 5:
Top Major Occupation Groups
by Percent of Total Claimants



Source: MT DLI regular UI claimants from January 1, 2020 to December 26, 2020

Other occupation groups that had large shares of claimants include those in the office and administrative support occupations (10% of total claimants), sales and related occupations (8%), and personal care and service occupations (6%). These groups include workers that span both essential and non-essential industries. Occupations with the largest levels of claimants include customer service representatives (2,700 claimants), sales floor stock clerks (2,100), retail salespersons (4,700 claimants), cashiers (3,300 claimants), hairdressers (2,500 claimants), and childcare workers (1,600 claimants).

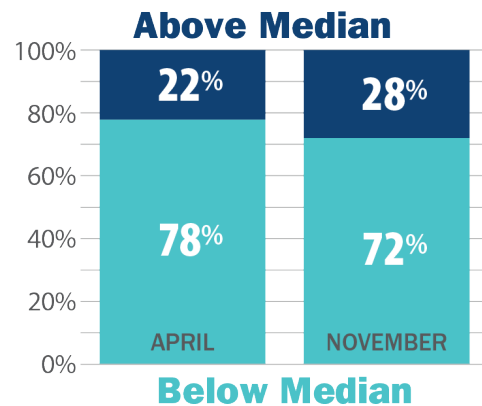
Although the healthcare industry has been deemed essential, many healthcare workers have filed for unemployment. Healthcare occupations made up 7% of total claimants. Among healthcare workers, registered nurses (1,400 claimants), nursing assistants (1,200 claimants), dental hygienists (590 claimants), and dental assistants (1,000 claimants) had the most claims.

Unemployment Claimants by Gender and Income

The types of occupations and industries hardest hit by the pandemic have been lower-wage and female-dominated. **Figure 6** shows that 78% of regular UI claimants had previous wages below the median income.

Although lower-wage workers make up a large portion of UI claimants, their claim duration has been shorter than average. Since the pandemic's peak in April, the share of claimants with previous wages below the median has fallen from 78% to 72%. Lower-wage workers tend to return to work more quickly than higher-wage workers because there are more job openings at lower wages. Workers who

FIGURE 6:
Percent of Claimants Above & Below Median Income

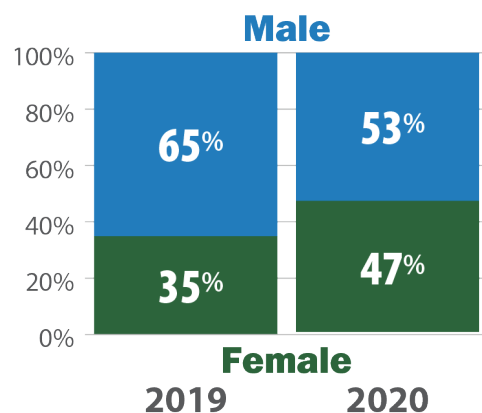


Source: MTDLI regular UI claimants by previous income above and below OES median income of \$37,193.

have higher wages tend to be more educated and have more specialized skill sets, which leads them to stay on unemployment longer while seeking the right position.

The pandemic has disproportionately impacted the female workforce, with more women filing UI claims compared to previous years. **Figure 7** shows the breakdown of claimants by gender. In 2020, the percent of claimants who were women increased to 47% from 35% in the prior year. Typically, men make up a larger portion of UI claims due to seasonal increases in claimants from the construction industry, which is 91% male.³ Female-dominated

FIGURE 7:
Percent of Claimants By Gender



Source: MT DLI regular UI claimants 2019 and 2020.

³ American Community Survey 2019 5-Year estimate

industries, such as retail trade, and leisure and hospitality, have suffered the most significant job losses during the pandemic. School and daycare closures have also disproportionately impacted mothers' labor force participation rates compared to fathers, causing more women to claim unemployment benefits. In August and September, the prime-age labor participation rate for women fell by one percentage point, while male labor force participation rate ticked up slightly. The timing of this drop suggests the added responsibility of monitoring remote learning and caring for children in the absence of daycare has largely fallen to mothers, causing many to exit the labor force.⁴ Since the summer, Montana's labor force has regained its pre-recession peak, suggesting that parents were able to return to the labor market at least part-time once the school year started.

COVID-19 Related Work Comp Claims

Many workers who have kept their jobs or have been able to return to work have been at increased risk of contracting the virus. **Figure 8** shows the share of COVID-19 related work comp claims in 2020 for workers in selected industries. Healthcare and social assistance make up the largest share, with approximately 42% of COVID-19 related work comp claims in 2020. Other industries also had large shares, such as public administration (25%) and transportation and warehousing (12%). These claims highlight the pandemic's cost from a health and safety perspective and reaffirm the importance of public health measures in mitigating the costs of the virus.

Conclusion

The pandemic has hurt the employment and health of many workers. Workers in industries that are better suited for telework or do not interact with the public have been more shielded from the pandemic's economic impacts. Workers in service-providing industries, especially frontline workers, have had more difficulty staying employed and staying healthy. Although outside the scope of this article, the types of industries and occupations most affected by the COVID-19 virus also tend to be lower-wage occupations, setting up some serious concerns about the ability of these workers to weather long-duration unemployment or pay for any health complications arising from COVID-19 exposure. Adapting the work environment and ensuring worker safety continues to play an important role in helping workers recover and get back to work.

FIGURE 8:
2020 Industry Share of COVID-Related Work Comp Claims



Source: MT DLI data on COVID-related work comp claims in 2020 as of December 22nd.

⁴ Federal Reserve Bank of Dallas <https://www.dallasfed.org/research/economics/2020/1110>