

# Where Does Wage Growth Come From?

## Finding Better Pay in Montana *By Christopher Bradley, Senior Economist*

Wage growth in Montana has been strong over the past ten years. Averaging 2.9% annually between 2006 and 2016, wage growth outpaced the nation and provided real wage increases in most years following the recession.<sup>1</sup> Not only were wages growing, but wage gains were distributed across all income levels. In fact, workers earning wages under the median saw the fastest wage growth compared to other wage-levels.<sup>2</sup> All this begs the question, how exactly did people go about increasing wages? Were people getting raises from their employers, switching jobs to get a raise, or are new jobs just paying more these days? While it might not be possible to figure out exactly how every single pay change in Montana came about, wage data can provide a lot of contextual information about what workers are doing to get higher pay.

### Net Wage Growth from Worker Churn and Wage Gains

At a high level, wage growth (or contraction) can stem from two sources. First, the existing workforce can experience wage growth from one year to the next. Second, the wages of new workers entering the labor market can outweigh the wages of workers who exit the labor market. Wage growth from the second of the two does not necessarily imply that Montanan's paychecks have grown. To explore how this played out in Montana, wage workers are divided into three groups for comparison: entering workers, exiting workers, and continuing workers.

Most Montana workers are continuing workers, 85% in 2017, and have jobs in Montana year after year. The remainder leaves a sizable portion of workers who enter and exit each year. In 2017, 15% of workers were new entering workers (nearly 84,000 workers), while about 79,000 workers who had jobs in 2016 exited. Wages are fairly low for entering workers and exiting workers because these groups rarely start or leave their jobs right at the beginning or end of the year. Entrants in 2017 had an average wage of \$10,000, compared to \$11,000 for exiting workers. Exiting workers tend to have slightly higher wages than entering workers, in 2015, exiting workers averaged wages of about \$26,800 in their last full year of working compared to \$23,100 dollars for entering workers in their first full year

<sup>1</sup> <http://lmi.mt.gov/Portals/193/Publications/LMI-Pubs/Articles/2018/0518-WageGrowth.pdf>

<sup>2</sup> <http://lmi.mt.gov/Portals/193/Publications/LMI-Pubs/Articles/2018/0618-WhoExperiencedWageGrowth.pdf>

### Entering Workers



New workers that weren't working in the previous year. Includes recent graduates, people returning to the workforce after an absence, or people who move to Montana from other states.

### Continuing Workers



Workers who were working in the previous year and still are. Includes workers who stay in the same job, switch to a new job, or pick up a second job.

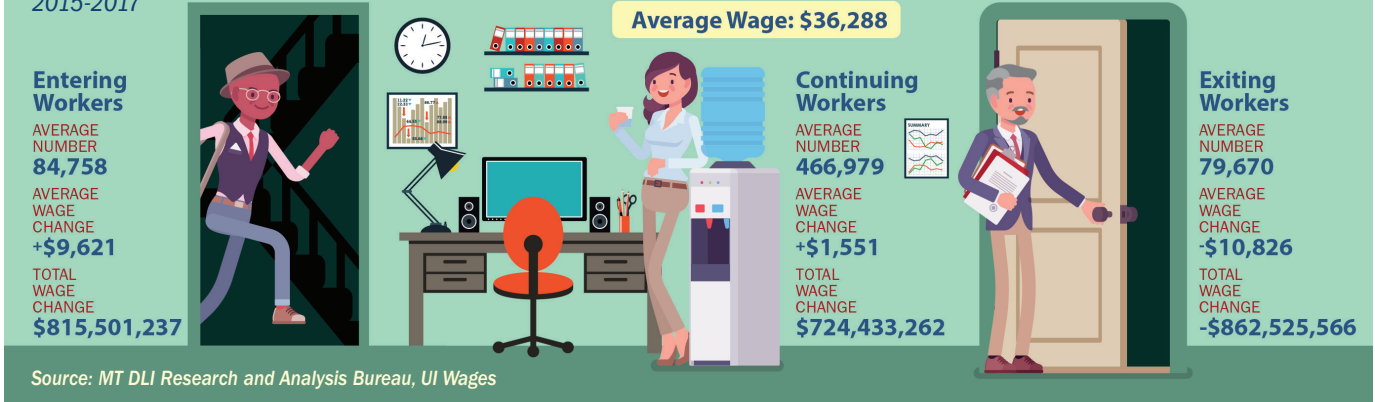
### Exiting Workers



Workers who were working in the previous year, but are not currently. Includes retirees, people starting school, workers who move out of Montana, or workforce drop outs.

**FIGURE 1**  
**Wage Growth in Montana by Worker Type**

2015-2017



working. Entering workers include more workers at entry level jobs while exiting workers include high wage retirees, which contributes to the difference in wages. Regardless, the overall wages gained from entering workers and lost from exiting workers tend to mostly cancel each other out (seen in figure 1), with exiting worker wage losses slightly outweighing entering worker wage gains. As a result, wage growth among continuing workers accounts for most of the annual net wage change.

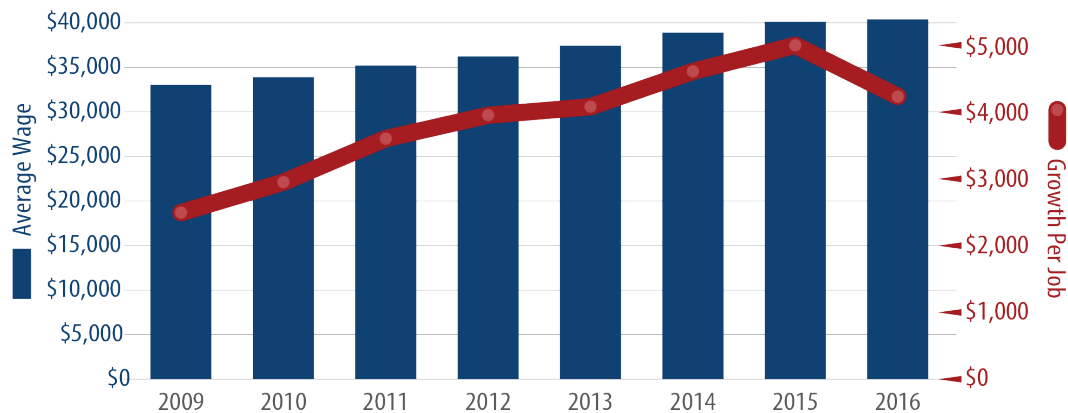
Wage growth for continuing workers was positive for all years other than during the recession in 2009. Both entering workers and exiting workers, along with their respective wages, increased from 2010-2013. As the economy improved, opportunities allowed new workers to find jobs while workers who postponed retirement during the recession were able to retire. In the ten years from 2008-2017, the average continued worker wage grew from \$29,100 to 37,200, a 28% increase. Understanding how workers who remained in the workforce achieved wage growth is useful information because continuing workers are the primary drivers of total wage growth. So how exactly did continuing workers achieve these wage increases? Workers can get more wages through promotions and pay increases with their current employer, switching employers to get a higher paying job, or keeping their current job while adding a second or third on top.

### Sticking with the Same Employer

One group of continued wage-earning workers are those who are in persistent jobs, which are people who worked with the same employer in three consecutive years. In 2016, about 68% of continuing workers had a persistent job, down slightly from 70% in 2010, reflecting greater worker confidence in the labor market. Workers with persistent jobs saw their wages in their jobs increase significantly year over year. Average wage growth per persistent job was \$4,300, or 10%, in 2016 and was over \$4,000 in both 2015 and 2015. The average wage of a persistent job was \$40,400, greater than that for all other continuing workers. **Figure 2** shows changes in the average wage of persistent jobs and the average wage of persistent jobs from 2009-2015. These workers have stayed with the same employer for an extended period and increased their wages either through promotions, better performance, or cost of living raises.

Over the past several years, workers did well sticking with their employers. Worker exits from the labor market, especially retirements, provide opportunities for continuing workers to fill jobs at higher pay rates and can partially explain the strong wage growth among persistent jobs. Referring back to **Figure 1**, there were increasing exiting worker wage losses that coincided with increasing growth in wages of persistent jobs, observed in **Figure 2**, which could be from workers filling vacated high-wage positions. Workers may also have simply negotiated for better pay; Montana's unemployment rates have decreased, and workers have gained a stronger negotiating position as a result.

**FIGURE 2**  
**Persistent Job Wages and Per-Person Growth**



Source: MT DLI Research and Analysis Bureau, UI Wages

### Switching Jobs

For workers unable to get a pay bump with their current employer, one option is to look for greener pastures elsewhere. Options are expanded for workers who switch jobs because they can look for better pay in the same line of work or seek opportunities in higher paying industries or occupations. From 2009 to 2016, the share of continuing workers who had one job and switched to a new one increased from about 7% per year to over 9% per year. As the labor market improved and job opportunities increased, so did worker confidence in switching to a new job. In every year except 2012, workers who switched jobs increased their wages, seen in **Figure 3**. In 2016, the average wage increase of a job switcher was about \$900, while in 2015 it was nearly \$2,000. By percentage, wage growth from job switchers was nearly as high as that for that seen among persistent job holders, at 7% in 2016.

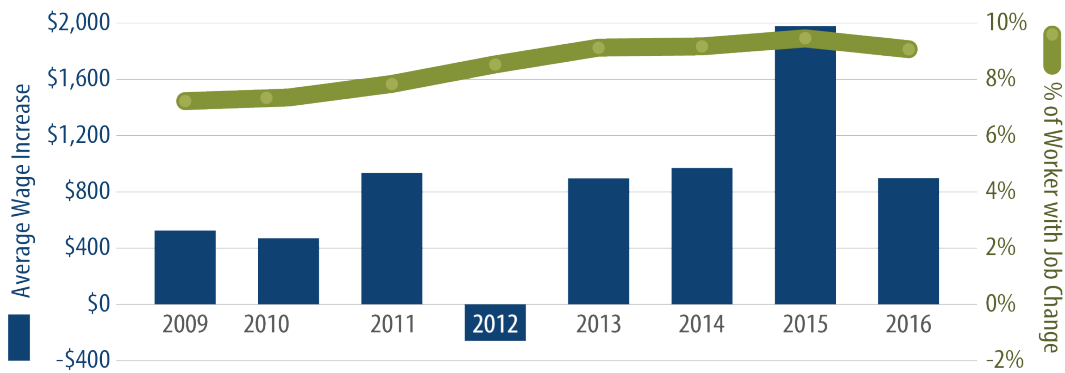
The data do not make it possible to know whether workers switched jobs voluntarily or not; therefore, some of the workers showing job switches may have been laid off or fired. This leads to the wage gains from job switching being lower than if only voluntary job switches were counted. However, the observed wage increases following a job switch despite including involuntary turnover suggests that a significant share of workers did switch jobs voluntarily or were able to minimize wage losses after a layoff.

### Picking Up a Second Job

Amid low unemployment rates, employers around Montana have had to raise entry level wages to attract and retain workers. Jobs that may have paid at or near minimum wage in the past now often pay higher hourly rates. As a result, some workers who already have a job may have decided a second job is worthwhile, despite the cost of giving up their free time. Nationally, 5% of workers in 2016 held multiple jobs, a statistic that tends to increase when the labor market is good because workers gain access to better paying part-time jobs. Multiple job holding was even more common among Montana’s continuing workers in 2016, 6.7% of persistent job holders added a second job, a slight increase from 6.2% in 2009. About half of the jobs that persistent job holders added last less than a full year, with the remainder carrying over into the next year. In total, workers earned over \$193.5 million in 2016 by adding second jobs, which equated to about \$6,200 per worker in added wages.

Between 2009 and 2016 the average wage earned from second jobs increased by \$1,700 (38%) from \$4,500 to \$6,200 at the same time the share of workers picking up a second job slowly increased. Increasing rates of pay enticed some people to add second jobs, while workers whose schedule was reduced to part-time during the recession were able to add second jobs as well. Persistent job wages for workers that added a second job were lower than the average, at only \$22,000 in 2016 compared to \$40,400 for persistent jobs overall.

**FIGURE 3**  
**Percent of Workers with Job Change and Average Wage Increase**



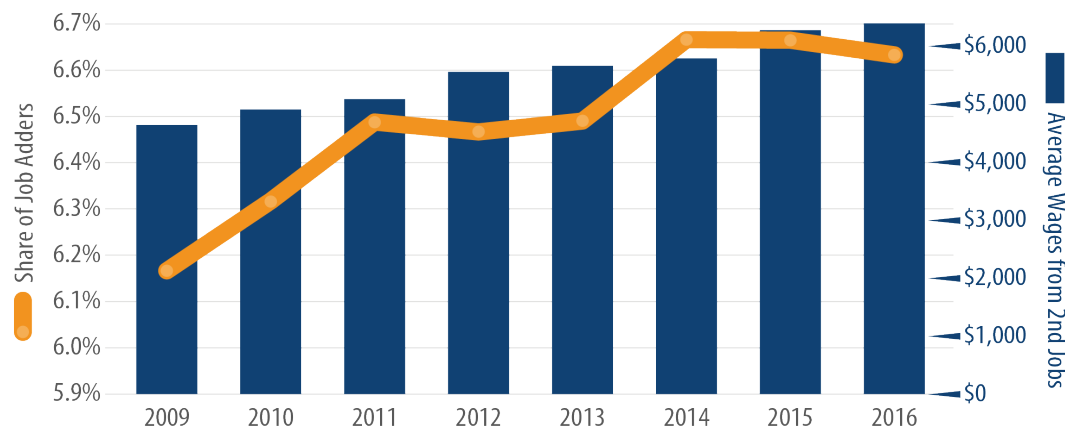
Source: MT DLI Research and Analysis Bureau, UI Wages

The difference suggests that job adders tended to be workers who were at low-hours or in low-paying jobs and a second job significantly increased their wages. The per worker added wages from a second job were larger than wage gains that workers received from persistent jobs, but this doesn't necessarily mean adding a second job is a better way to achieve wage growth. Adding a second job implies increasing hours worked, which may not happen through a job switch or promotion in a persistent job.

### Getting Better Pay

Over the past several years, workers have achieved wage increases through a variety of means, including sticking with the same employer, switching jobs, and adding a second job. Tight labor markets are helping workers entering the workforce earn higher entry wages year after year. Meanwhile the large wave of worker exits due to baby boomer retirements helps workers down the line get promotions and pay bumps to fill vacated positions. The largest per person wage increases are occurring among workers who added a second job, which significantly benefits people earning below-average wages in their persistent jobs, either due to . People who stuck with their employers also saw large wage gains, and people that switched jobs obtained higher wages too. Overall, it is a good time to be a worker in Montana, and current projections suggest that the observed trends should only continue in the coming years.

**FIGURE 4**  
**Share of Second Job Adders and Average Added Wages**



Source: MT DLI Research and Analysis Bureau, UI Wages