

# Job Turnover

## Measuring employers' entry and exit rates

By MALI ABRAHAMSON

One way to describe job turnover is the flow of workers in and out of a business. One of the reasons this matters is that it creates costs, both in lost sales or productivity while a position is vacant and also in recruitment and training of new workers. Another reason is it tends to create disruptions in the delivery of an employer's goods or services.

Understanding and measuring turnover can help employers assess not just its costs but the consequences of changes to working conditions, wage and benefit packages, or new management. With several important caveats, an increase in turnover can show that an employer has become less appealing to workers relative to their other options.

Not all turnover is bad, though. Workers and employers both benefit when people leave a job that isn't a good match for their skills and are replaced by someone who's a better fit. So employers may not want to reduce their turnover to zero, but they likely want to monitor and constrain it.

### Turnover isn't routinely measured

As relevant as turnover is to employers who want to reduce costs and maximize productivity, it's not one of the standard labor market measures produced by state or federal statistical agencies. Unlike jobs or wages, turnover is surprisingly complicated to measure and there are a variety of ways to do it.

Metropolitan Life Insurance Company initiated the first wide-scale effort in the U.S. to measure turnover, using a 1926 survey. Met Life saw a need to provide person-

### About the data

The turnover data produced for this article come from quarterly employment and wage reports that nearly all Alaska employers are required to file under state unemployment insurance laws.

A worker is identified as an entrant if he or she shows up on an employer's quarterly payroll but wasn't there in the prior quarter. Workers are identified as exiters when they are no longer on the payroll of an employer for whom they showed up in the previous quarter.

nel managers in manufacturing plants with national benchmark turnover rates, presumably so managers could compare their own rates and adjust wages or working conditions, for example, to minimize turnover.

The U.S. Bureau of Labor Statistics took over the survey in 1930, and while BLS still produces national and regional turnover estimates with its Job Openings and Labor Turnover Survey, or JOLTS, it stopped producing data at the state level in 1981. Just one

state, Wyoming, regularly produces its own turnover estimates.

*Turnover has two components: the entry rate and the exit rate.*

### Ways to define turnover

Depending on the objective, turnover can be measured at the occupational, industry, location, or employer level. An example of measuring turnover at the occupational level is assessing how many nurses or school teachers are coming from and going into those occupations. Turnover at the industry level would ex-

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## Turnover Rates by Industry

AVERAGE AND QUARTERLY, AS PERCENT OF TOTAL WORKFORCE, 2016

	Average entry rate	Average exit rate	Quarterly entry rate				Quarterly exit rate			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Total, all industries</b>	<b>17%</b>	<b>18%</b>	<b>15%</b>	<b>22%</b>	<b>18%</b>	<b>14%</b>	<b>14%</b>	<b>16%</b>	<b>23%</b>	<b>19%</b>
Agriculture, Forestry, Fishing, and Hunting	37%	37%	27%	51%	40%	22%	18%	27%	53%	41%
Mining	8%	12%	6%	10%	8%	7%	11%	14%	11%	12%
Utilities	7%	7%	6%	11%	6%	6%	6%	6%	8%	9%
Construction	25%	27%	20%	36%	25%	16%	21%	21%	29%	36%
Manufacturing	32%	32%	36%	36%	37%	10%	14%	17%	56%	24%
Wholesale Trade	11%	12%	11%	11%	14%	9%	9%	13%	14%	14%
Retail trade	18%	19%	15%	22%	19%	18%	17%	18%	22%	20%
Transportation and Warehousing	16%	16%	12%	28%	14%	10%	10%	11%	22%	21%
Information	9%	10%	10%	11%	8%	9%	10%	9%	10%	9%
Real Estate, Rentals and Leasing	9%	9%	7%	8%	11%	9%	8%	8%	12%	10%
Financial Services	19%	20%	14%	25%	23%	13%	13%	16%	30%	18%
Professional and Business Services	18%	19%	17%	23%	17%	16%	16%	19%	22%	21%
Education and Health Services	13%	13%	12%	13%	14%	14%	11%	12%	14%	16%
Health Care	12%	12%	11%	11%	12%	13%	11%	10%	12%	16%
Leisure and Hospitality	30%	30%	24%	43%	28%	23%	25%	23%	39%	32%
Other Services	20%	20%	18%	23%	18%	20%	16%	19%	24%	20%
Local Government	14%	13%	11%	13%	15%	17%	11%	18%	13%	12%
State Government	7%	8%	4%	11%	6%	5%	4%	7%	12%	7%

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

amine similar coming and going from any oil and gas employer, regardless of the job or employer. Measuring turnover by location would assess the coming and going of workers within a geographic area — the Matanuska-Susitna Borough, for example — without regard to their specific employer, industry, or job.

For this article, turnover is measured at the employer level. It is divided into two parts: workers who started working for an employer — entrants — and those who stopped working for that employer — exiters. The entry and exit rates are calculated separately by dividing the number of entrants and exiters by the total number of workers on the employer's quarterly payroll.

So if an employer has 10 new workers in a quarter and 100 total workers on its payroll, its entry rate for that quarter is 10 percent. And if out of that 100, 20 who work in that quarter are absent in the next, its exit rate is 20 percent.

This method has a few important limitations. Using the employer to measure turnover excludes internal hires, promotions, or lateral transfers within a business, which can greatly understate job churn for large employers such as the State of Alaska or a large hospital. A hospital manager who loses a worker to a different unit or hires from elsewhere in the hospital incurs many of the same turnover costs as a manager who loses a worker to or hires someone from a different hospital, but those internal movements aren't

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## Decrease in Overall Rates

4-QTR MOVING AVERAGE, 2000 TO 2016



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

captured here.

This method also can't distinguish re-hires from new hires, both of which are counted here as entrants. Finally, this method doesn't differentiate between workers who quit and those who are laid off or fired.

## What entry and exit rates can show

Exhibit 1 on the previous page shows entry and exit rates for employers sorted by major industry sectors. At the low end are sectors like utilities; state government; real estate, rentals and leasing; and education and health services.

Within the education and health services sector, health care employers' average entry and exit rates are 12 percent. There's a lot happening behind those rates, including entry rates that are pushed higher by broad and sustained growth — something many employers wouldn't consider turnover.

Health care exit rates, though low compared to other sectors, may be similar to entry rates because of everything from strong demand for workers, which makes changing employers easier, to burnout associated with the ever-growing demand for health care services.

State government technically has the lowest turnover at 8 percent for entry and 7 percent for exit, but as mentioned earlier, those rates are understated because workers who switch jobs within state government are not counted as entrants or exiters.

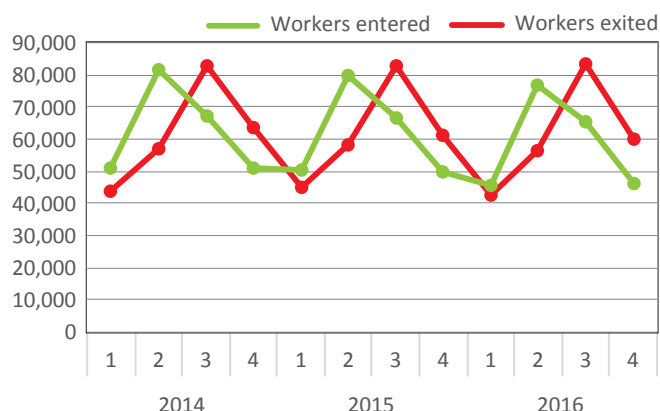
At the other end of the spectrum, entry and exit rates are especially high in sectors such as leisure and hospitality and agriculture, forestry, fishing, and hunting. Those sectors have strong seasonal patterns, which create significantly more churn than in more stable, year-round employers.

Manufacturing employers, which in Alaska are predominantly seafood processors, have especially dynamic turnover rates. In peak quarters, some seafood processors have entry rates as high as 70 percent, as they hold job fairs all over the U.S. and transport workers to remote processing plants. At the end of the season, the bulk of the year's workers become exiters. In 2016, more than 23,500 people worked in seafood processing. Of that number, more than 15,000 were counted as exiters in the third quarter when most of the fishing seasons wrapped up.

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## Job Turnover is Seasonal

QUARTERLY PATTERNS, ALASKA, 2014 TO 2016



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

## State's turnover rates have dropped slightly overall

The state's total number of workers has grown by about 20 percent over the last 15 years, and while turnover has varied by industry and seasonality, aggregate turnover has trended downward. (See Exhibit 2.)

In 2000, entry and exit rates were both slightly above 23 percent. By 2016, those rates had steadily declined to about 18 percent.

This is largely because the bulk of the growth in workers was in lower-turnover industries such as health care. An aging workforce — a powerful trend for Alaska and the nation as a whole — probably also played a role, as older workers are less likely to job hop than their younger counterparts.

Whether declining turnover rates for an economy are a positive or a negative depends on what's driving the change. Higher exit rates can indicate a hot

market for workers who feel secure enough to leave their jobs voluntarily because they believe they can find a more desirable job quickly. In a weak economy, workers are less likely to quit, although they're more likely to be laid off.

When an economy is growing, entry rates tend to exceed exit rates. That relationship is visible during most of the 2000 to 2016 period, when the state was adding jobs at a modest but consistent rate.

The relationship flipped in 2016, reflecting Alaska's

*In a growing economy, the job entrant rate often exceeds the exit rate. In a weak economy, the exit rate is higher than the entry rate.*

current recession. Although the aggregate exit rate has remained about the same, it now slightly exceeds the entry rate.

Employers may have grown more reluctant to hire because of the state's economic uncertainty and because industries that are project-based, such as construction and oil and gas, have seen more projects end than begin in the last few years.

## Seasonal patterns have remained steady

While Alaska's overall exit and entry rates have declined, the seasonal patterns have been remarkably consistent, and dramatic, year after year. (See Exhibit 3.)

In the last three years, more than 80,000 people have been identified as either entrants or exiters in the peak second and third quarters of each year. In 2016, a whopping 22 percent of all workers were either entering or exiting workers. For further context, 80,000 workers equates to more than 10 percent of Alaska's total population and about 15 percent of the state's population over age 16.

## Oil and gas troubles create higher exit rates

A look at exit and entry rates for the mining sector, which includes Alaska's large and important oil and gas employers, shows revealing changes over the last few years. (See Exhibit 4.)

Following a fairly consistent pattern of seasonal entries and exits from 2012 to 2015, exit rates spiked in 2016 and entry rates dropped, a large gap that coincides with big reductions in the oil and gas workforce.

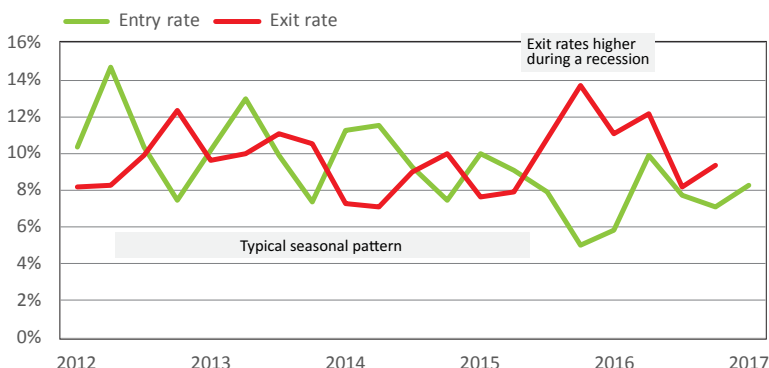
For the sector as a whole, which is a combination of oil and gas employers and other mining activity, 2,594 workers exited in the fourth quarter of 2015 and only 960 entered. Even in the midst of large-scale layoffs, a certain number of workers were still being added to those employers' payrolls. This highlights the fact that turnover is a constant regardless of whether an economy is expanding or contracting, though the flows can change significantly under different economic conditions.

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## Mining Pattern Shows Recent Losses

ALASKA, 2012 TO 2017



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section