2015-18 recession hit men harder

Men, women weathered statewide downturn differently

By KARINNE WIEBOLD

laska lost about 18,000 workers over the course of the 2015-2018 recession, 10,500 of whom were residents.

Men represent about 51 percent of resident workers, and women have held steady at 49 percent since the early 2000s. Both lost work during the recession, but it hit men harder — they lost twice as many jobs as women and \$329 million in total wages. While the number of women working also declined, total wages paid to women over that period grew by \$214 million.

The big movers behind these numbers were the oil and gas industry and health care. Essentially, the deep job losses in oil and gas were the biggest drag on wages for both genders, but men were more vulnerable because they make up about 85 percent of that industry's workforce.

Similarly, health care growth provided the biggest boost for men's and women's total wages alike, but women benefitted more because they represent just over three-quarters of health care workers.

Change in workers, wages by gender from 2015 to 2018



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

One big loser and one big winner among Alaska industries

Oil and gas was the big loss factor for men

Oil prices were high and stable for several years in the early 2010s, averaging around \$100 a barrel, but in

Article continues on page 6



Men's total wages dropped during the recent statewide recession

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

So far, the pandemic's downturn has affected women more

The 2015 to 2018 recession might feel like old news, fading in the rearview mirror as the pandemic wreaks havoc on our economy right *now*. But the details and outcomes of the last recession matter. They provide context on how men and women entered this period of pandemic-related job losses and on what we might see as more detailed data become available.

We entered the pandemic in a weakened state after a slight recovery in 2019

Alaska's economy was far from recovered when the pandemic hit in early 2020. The 2,300 jobs we'd added in 2019 were only about 20 percent of what we'd lost.

Growth briefly resumed for the most-hobbled industries in 2019: construction regained 600 jobs, oil and gas added 500, and professional and business services added 400.

Health care kept growing in 2019, adding 500 jobs, while state government continued to decline, losing another 350.

The employment losses caused by COVID-19 were fast and much larger

Pandemic-related job losses have diverged from the recent recession in several ways.

The shock was quick, with all major industries shedding jobs in April 2020, unlike the mix of growth and contraction during the recession. Alaska lost 27,900 jobs over the course of the year, while the net loss for all three years of the previous recession was 11,400.

So far, estimates show substantial pandemic-related losses from industries that are majority women. Leisure and hospitality, which is 54 percent women, lost 9,900 jobs in 2020. Local government, which is 58 percent women, lost 2,400, mainly from public education. Health care, which is 77 percent women and was responsible for women's total wage gains during the previous recession, lost 700 jobs last year.

Oil and gas employment losses, totaling 2,000 in 2020, will continue to affect men more, as will additional losses from professional and business services (-1,800) and transportation. The transportation, warehousing, and utilities sector is Alaska's second-largest, after leisure

Industry makeup of 2020 job losses



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

and hospitality, and it's 77 percent men. The 3,600 jobs it lost last year were nearly all in transportation.

Unemployment claims and national numbers tell a similar story so far

National data from the U.S. Department of Labor show unemployment rates have been higher among women during the pandemic than men.

Women are also leaving the workforce at a higher rate than men, and once they're no longer looking for work, they aren't counted as unemployed. While labor force participation dropped for both genders initially, more women have remained out of the workforce, likely dealing with family health, child care, or education needs.

We will have to wait for most Alaska-specific data, especially by gender. However, the data from unemployment insurance claims also suggest the current economic downturn has been disproportionately hard on women.

Alaska's typical pattern is that two men file for unemployment benefits for every woman who does, but the number of women filing claims during the pandemic grew faster. Women filed 4.6 times more claims in 2020 than in 2019, and for men it was 3.6.

Unemployment claims hit record highs for both genders in 2020 and remained elevated in early 2021.

Recession brought men's and women's total wages, worker counts closer



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

Recession narrowed Alaska's gender gap in average wages

The gender gap commonly refers to the difference in average wages between men and women. In past studies, we've found that men earn more than women in nearly every major industry, age group, and geographic area. Men also make more in 85 percent of occupations and at every level of education. (See the March 2017 issue of *Trends*.)

The recession narrowed the gender wage gap because men took such a massive hit in oil and gas and at the same time, the recession slowed but didn't stop women's wage growth, which was buoyed by health care.

Over the three-year recession, the average annual wage increased 5.9 percent for women and about half a percent for men. This pulled the earnings ratio — the average pay for a woman compared to a man — up from 68 percent (where it had been for years) to 72 percent. This is the closest men's and women's average earnings have ever been.



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

2015 the price suddenly plunged by half and stayed low. (See the June 2020 issue of *Trends*.) The industry began losing jobs midway through 2015, with the bulk of the losses following in 2016 and 2017.

During the recession, the numbers of men and women working in the oil industry both fell by about 40 percent, but more men lost their jobs because few women work in oil and gas. The oil industry lost 712 women and 3,867 men.

About the data

Alaska lost 11,400 total jobs on a year-over-year basis in 2016, 2017, and 2018. This article refers to that period as the recession, and it mostly compares 2015, the last year before job losses, to 2018, the last year before job gains.

However, this article focuses on workers rather than jobs. Those numbers differ because a single job can be held by more than one worker over a period of time, and one worker can hold multiple jobs.

We matched worker data the Department of Labor and Workforce Development collects through the state's unemployment insurance program with demographic data from Permanent Fund Dividend applications. Because we included only those who were eligible for unemployment insurance and applied for a dividend, this analysis doesn't capture nonresidents, who make up about 20 percent of the state's workforce. It also excludes those who didn't specify a gender, the self-employed, and federal civilian and military workers. Workers with multiple jobs were assigned to the industry where they earned the most money.

Details on workers and wages by industry for men and women, 2015 and 2018

	2015				2018				Change			
	Women	Women's wages (mils)	Men	Men's wages (mils)	Women	Women's wages (mils)	Men	Men's wages (mil)	Women	Women's wages (mils)	Men	Men's wages (mils)
Ag, Forestry, Fishing, Hunting	361	\$5.6	794	\$22.8	522	\$8.9	966	\$28.2	161	\$3.4	172	\$5.5
Mining	2,120	\$208.6	12,750	\$1,434.1	1,420	\$158.1	8,865	\$1,045.7	-700	-\$50.5	-3,885	-\$388.4
Oil and Gas	1,763	\$185.1	10,392	\$1,230.2	1,051	\$132.4	6,525	\$829.9	-712	-\$52.8	-3,867	-\$400.3
Construction	2,820	\$107.0	17,847	\$992.6	2,713	\$108.7	16,807	\$940.7	-107	\$1.7	-1,040	-\$51.9
Manufacturing	3,173	\$74.9	7,091	\$267.4	3,279	\$79.0	6,986	\$272.3	106	\$4.1	-105	\$4.9
Trade, Transportation, Utilities	27,895	\$705.3	41,342	\$1,818.2	26,354	\$729.6	40,699	\$1,870.2	-1,541	\$24.2	-643	\$52.0
Information	2,801	\$137.4	3,988	\$253.0	2,309	\$117.6	3,657	\$234.0	-492	-\$19.8	-331	-\$19.0
Financial Activities	8,100	\$337.0	5,686	302.5	7,863	\$355.1	5,592	\$316.3	-237	\$18.1	-94	\$13.8
Professional and Business Svcs	12,817	\$512.4	16,671	\$909.3	11,684	\$484.3	15,176	\$836.9	-1,133	-\$28.1	-1,495	-\$72.5
Private Ed, Health Care/Social	36,871	\$1,499.1	11,217	\$625.6	38,789	\$1,717.6	12,171	\$727.8	1,918	\$218.4	954	\$102.2
Health Care	27,195	\$1,231.7	7,812	\$506.1	29,187	\$1,430.6	8,744	\$605.4	1,992	\$198.9	932	\$99.3
Leisure and Hospitality	18,697	\$291.2	16,242	\$311.7	18,431	\$315.7	16,198	\$320.2	-266	\$24.6	-44	\$8.6
Other Services/Unknown	6,126	\$164.2	5,113	\$184.8	6,241	\$177.1	5,212	\$191.5	115	\$13.0	99	\$6.6
Local Government	27,175	\$982.4	19,455	\$819.8	27,375	\$1,024.3	19,567	\$868.2	200	\$42.0	112	\$48.4
State Government	13,220	\$595.9	12,491	\$697.8	12,006	\$558.7	11,427	\$658.7	-1,214	-\$37.3	-1,064	-\$39.1
Total	162,176	\$5,621.0	170,687	\$8,639.6	158,986	\$5,834.7	163,323	\$8,310.6	-3,190	\$213.8	-7,364	-\$329.0

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

The losses took an outsized bite from men's wages because the industry pays about two-and-a-half times the statewide average wage. Both genders lost more wages in oil and gas than they did anywhere else, but women lost \$50 million while men lost eight times that.

Men's \$400 million loss was by far their largest in any industry and was the primary reason their statewide earnings fell \$329 million during the recession.

Professional and business services and construction were tied to oil's woes

Professional and business services and construction are tied to the oil industry, so they took a parallel hit. Of the 2,628 workers professional and business services lost, 43 percent were women. However, men in that industry lost \$72 million in wages and women lost \$28 million. More of the jobs men lost were highwage positions in professional, scientific, and technical services.

Job losses in construction equaled about 10 men for every woman, roughly in line with their representation in that industry. The number of male workers fell by 1,040 and their total earnings decreased by \$52 million.

Construction cut just 107 women, but women's total earnings increased, suggesting the small number of women who lost construction work had been in lowpaying positions.

We're talking about residents, but nonresidents were hit too

This article focuses on Alaska residents, but it's important to recognize that Alaska's large nonresident workforce also suffered during the recession – disproportionately so.

The nonresident workforce shrunk by 8 percent between 2015 and 2018 while the resident workforce declined 4 percent. Of the 18,000 people who lost a job during that period, about 7,700 were nonresidents.

Nonresidents are consistently about a fifth of Alaska's total workers, and because they're likely to work in jobs that are seasonal and/or remote, they make up even larger shares of the industries that declined most during the recession.

About a third of oil and gas workers and those who work in tourism-related jobs are nonresidents, for example. Roughly three-quarters of seafood processing workers are nonresidents, which is the highest among industries. Construction and retail also lost large numbers of nonresidents between 2015 and 2018.

State government was a mostly equal blow

State government cuts affected men and women about the same. State government employment has been falling for most of the last decade, and pressure from dwindling oil revenue hastened the decline.

By 2018, state government employed 1,214 fewer women, representing \$37 million in lost wages. State government cut fewer men (-1,064), but they lost slightly more total wages (-\$39 million).

Retail losses followed an unexpected pattern

Men and women weathered retail losses in opposite ways. Both lost work (-958 for men and -1,604 for women) but men's wages decreased by \$11 million while women's total wages went up by \$3 million.

Retail accounted for about half of

the lost female workers, but it didn't reduce their earnings. The combination of fewer women working in that industry and higher earnings among those who remained drove women's *average* wages up during that period. (See the sidebar on page 6 for more on the average wage.)

Women's gains were due to health care

Health care grew more than any other industry during the recession and was one of just three to add jobs. Women make up about three-quarters of the health care industry, so they gained more of the additional jobs and wages. This drove their statewide totals up considerably.

By the end of the recession, health care employed an additional 1,992 women and 932 more men. Women's total wages grew by \$199 million and men's increased \$99 million.

The shakeout by gender and what happened next

In the end, aside from health care, the ups and

A few Alaska industries are over half women



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

downs in wages paid to women in all other industries evened each other out. (See the table on the previous page for more industry detail.) Health care adding nearly \$200 million to the equation was the reason women netted \$214 million more in 2018 than they did three years before, despite losing nearly 3,200 workers over that period.

Men took a bigger hit in lost jobs and wages, with nearly 7,400 fewer men working in 2018 than in 2015. While they lost wages in professional and business services, construction, information, and state government, gains in other industries such as health care and local government came close to canceling out the losses. This left oil and gas as the primary driver.

After the recession, we recovered a small number of the lost jobs before a public health crisis in early 2020 brought on its own economic downturn. See page 5 for more on what we know so far about how men and women have fared during the pandemic and how those losses compare to the 2015-2018 recession.

Karinne Wiebold is an economist in Juneau. Reach her at (907) 465-6039 or karinne.wiebold@alaska.gov.