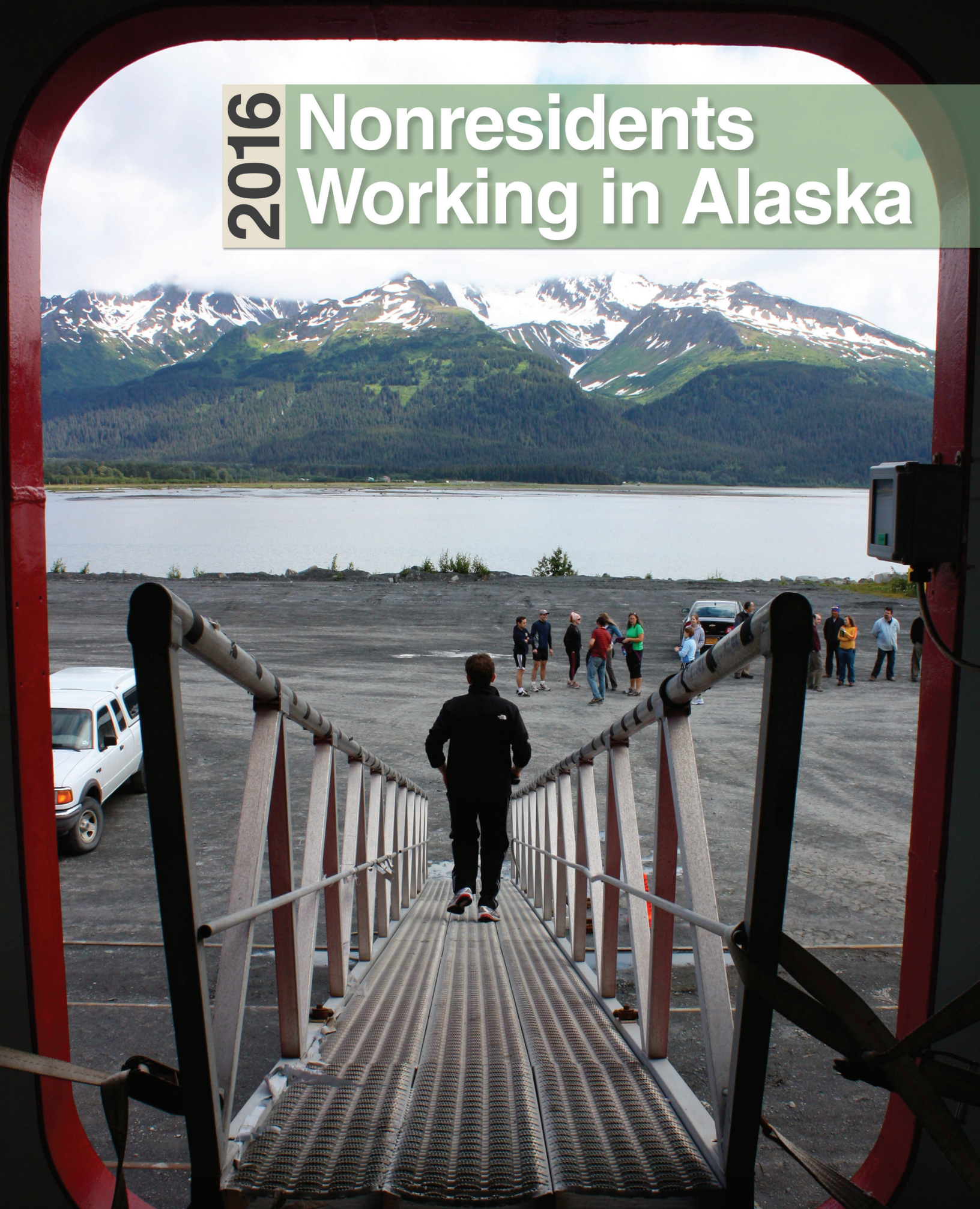


2016 Nonresidents Working in Alaska





THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of Labor and
Workforce Development**

Office of the Commissioner
Post Office Box 111149
Juneau, Alaska 99811
Main: 907.465.2700
Fax: 907.465.2784

February 1, 2018

The Honorable Bill Walker
Governor of Alaska
P.O. Box 110001
Juneau, Alaska 99811-0001

Dear Governor Walker,

The Alaska Department of Labor and Workforce Development is submitting the 2016 Nonresidents Working in Alaska Report, as required by AS 36.10.130. The report contains information about the number of nonresident workers in Alaska and the major Alaska industries in which they work. It also provides detail about wages earned by nonresidents and which occupations have the largest percentage of nonresident workers. Finally, the report examines the geographic distribution of nonresident workers throughout the state.

Since 2015, the Walker Administration has taken action to increase Alaska resident hire, including the reinstatement of Alaska Hire provisions, initiatives to expand Registered Apprenticeship opportunities, and an administrative order requiring apprenticeship utilization on publicly funded construction projects. Despite job losses that affected nearly every major industry, 2016 was the first time the overall nonresident hire rate decreased since 2009.

With your leadership, the Alaska Department of Labor and Workforce Development will continue working to increase Alaska resident hire and expand employment opportunities for all Alaskans.

Sincerely,

A handwritten signature in black ink that reads "Greg Cashen".

Greg Cashen
Acting Commissioner

Enclosure

Nonresidents Working in Alaska: 2016

Alaska Department of Labor and Workforce Development
Research and Analysis Section

Heidi Drygas, Commissioner

Dan Robinson, Chief, Research and Analysis

Prepared by:

Rob Kreiger, Economist

Sara Whitney, Editor

Sam Dapcevich, Cover Artist

Published January 2018

For more information, contact Rob Kreiger at (907) 465-6031 or rob.kreiger@alaska.gov.
Research and Analysis Online: laborstats.alaska.gov

On the cover: Disembarking in Seward, photo by Kathryn Hansen, NASA

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Highlights

- **Nonresidents made up 21.5 percent of Alaska workers in 2016**, down one-tenth of a percentage point from the prior year.
- **The total number of wage and salary workers in Alaska fell** to 416,459 in 2016, which was a decline of nearly 2 percent from 2015, or 8,269. The drop in total workers was only the second in the last decade, and easily the largest.
- **Resident and nonresident worker counts both declined in 2016.** Total resident workers were down by 5,732, or 1.7 percent, to 327,048. The number of nonresidents dropped by 2.8 percent (-2,537) to 89,411.
- **Residents' annual wages were higher on average than nonresidents' wages.** Residents earned an average of \$41,995 in 2016 while nonresidents earned \$28,244.
- **Total wages fell 4.3 percent, to \$16.3 billion.** Nonresidents earned 15.5 percent of that total, down from 16.1 percent in 2015.
- **Total wages fell for both residents and nonresidents.** Total resident wages fell by \$514 million (-3.6 percent) to \$13.7 billion while total nonresident wages fell \$217 million (-7.9 percent) to \$2.5 billion.
- **The seafood processing industry employs the most nonresidents.** Alaska's seafood processing industry employed 18,767 nonresidents in 2016, representing 75.5 percent of the processing workforce and 21 percent of all nonresident workers.
- **The percentage of nonresidents working in oil and gas rose** from 36 percent to 37.1 percent.
- **The number of oil industry workers fell substantially** in 2016, down by 3,070 workers, or 16 percent. Of the total decline, 930 were nonresidents, or just

Job counts vs. worker counts

The worker counts in this analysis differ from employment estimates — that is, job counts. Job counts are the number of filled positions at a point in time or averaged over a period of time, and worker counts are the cumulative number of people who worked in an occupation over the course of a year.

Because a single position can be filled by more than one person over a period of time due to turnover, worker counts are almost always higher than job counts. Worker counts are less useful for identifying trends in the broad economy than the job counts published by the Alaska Department of Labor and Workforce Development, but useful for other purposes such as this report.

This analysis also makes no distinction between part-time and full-time workers. For more information on the methods used to create this report, see the appendix on page 21.

Employers provide quarterly occupation information to the Department of Labor and Workforce Development, and for this report, we assigned workers a code based on the occupation in which they earned the most money in 2016.

over 30 percent.

- **The number of construction workers fell** to 24,444 in 2016, a decrease of 2,091 workers, or 8 percent.
- **The nonresident share of construction workers was down** to 19.9 percent in 2016 from 22.2 percent the prior year.
- **The number of metal mining workers declined** by 1.7 percent in 2016. The number of nonresidents rose by 4.5 percent, from 1,104 to 1,154, while the number of residents fell by 4.8 percent, from 2,161 to 2,057.

Nonresidents Working in Alaska: 2016

Introduction

This report, produced as required by AS 36.10.130, details nonresident employment in the state. It also helps the state meet its constitutional obligation to use, develop, and conserve its natural resources “for the maximum benefit of its people.”

Knowing the industries and occupations in which nonresidents are working can guide policymakers in promoting resident hire, whether through creating or expanding certain types of training programs, helping companies find qualified local workers, or requiring that publicly funded projects hire Alaskans to the extent the law allows.

This report has two main findings:

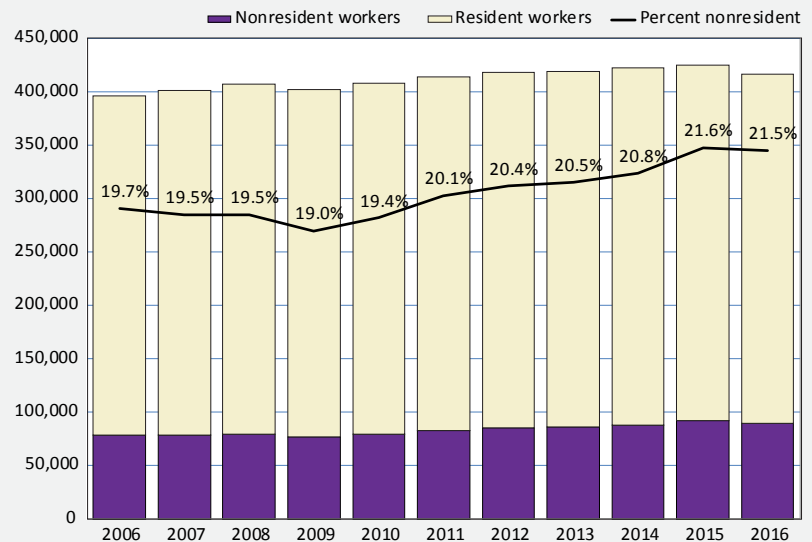
- A large percentage of Alaska’s nonresident workforce is employed in the state’s most seasonal industries, with seafood processing at the top of that list.
- High-paying, year-round jobs with high percentages of nonresidents are most heavily concentrated in the oil and gas industry, where remote work sites are a major factor. It’s easier for North Slope oil workers, who usually work schedules such as two weeks on and two weeks off, to live elsewhere than it is for those with a typical Monday-through-Friday schedule and a daily commute.

A person is considered a resident for this report if he or she applied for a Permanent Fund Dividend in either of the two most recent years. Because a person must live in the state for a full calendar year before becoming eligible for a PFD, those who move to Alaska and consider it their new principal residence will be initially identified as nonresidents. The appendix provides more detail.

Fewer Workers in 2016

- The total number of wage and salary¹ workers

1 Resident and Nonresident Workers Alaska, 2006 to 2016



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

in Alaska fell to 416,459 in 2016 — a decline of 8,269, or nearly 2 percent, from 2015.

- Nonresidents² made up 21.5 percent of workers in 2016, down one-tenth of a percentage point from the prior year. (See Exhibit 1.)
- The numbers of resident and nonresident workers both fell in 2016. The number of total resident workers fell by 5,732, or 1.7 percent, to 327,048. The number of nonresident workers also fell but at a higher rate — down 2,537, or 2.8 percent, to 89,411.
- Total wages fell 4.3 percent to \$16.3 billion. Nonresidents earned 15.5 percent of that total, down from 16.1 percent in 2015. (See Exhibit 2.)
- Total resident wages fell by \$514 million (-3.6 percent) to \$13.7 billion while total nonresident wages fell \$217 million (-7.9 percent) to \$2.5 billion.
- Nonresidents typically didn’t work all four quarters of the year. (See exhibits 3 and 28.) Many non-

residents worked short-term or seasonal jobs, including those in seafood processing and tourism.

- Residents earned an average of \$41,995, while nonresidents earned \$28,244.
- Average annual wages fell by \$820 (-1.9 percent) for residents and \$1,576 (-5.3 percent) for nonresidents.
- The average wage per quarter worked for nonresidents was \$11,849, while residents earned \$12,185.

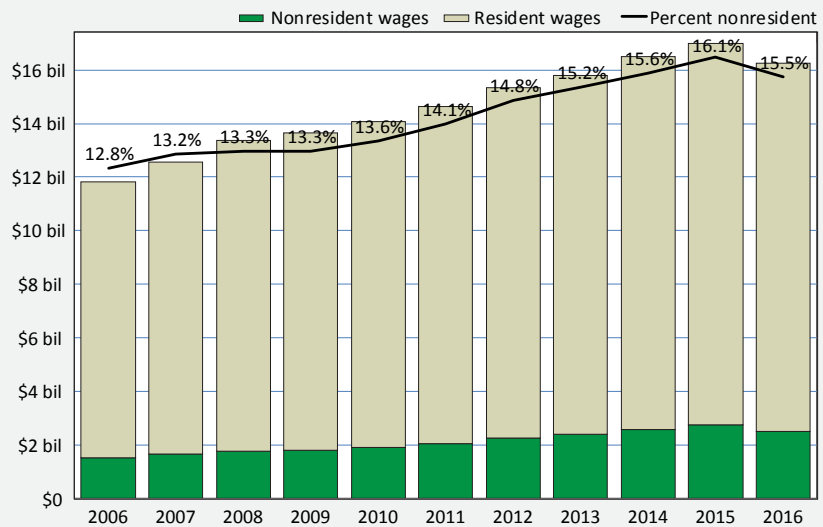
Nonresidents by Industry

Nonresident worker percentages are highest in the private sector. In 2016, 24.7 percent of private sector workers were not residents, but it varied significantly by industry.

The seafood processing industry is the largest employer of nonresidents, employing one in five (21 percent). (See Exhibit 4.) Nonresident numbers were also high in the leisure and hospitality industry and in the trade, transportation, and utilities industries. The nonresident workforce for these three industries combined represented more than half of all nonresident workers in 2016.

2 Resident and Nonresident Wages

Alaska, 2006 to 2016



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

Other industries with high percentages of nonresidents included oil and gas, construction, metal mining, and other visitor-related industries. These industries have at least one of the following: high seasonality, a need for specialized skills, or remote work sites.

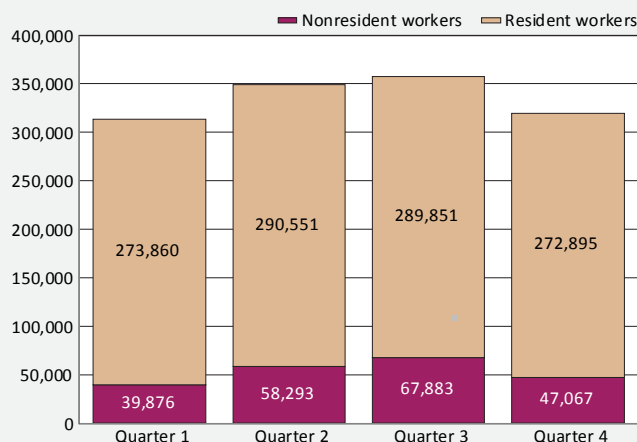
Oil and Gas Industry

The oil and gas industry employs less than 4 percent of Alaska workers but has a substantial effect on Alaska's economy. Oil and gas wages are 2.6 times higher than the statewide average. The percentage of nonresident workers in the oil and gas industry has also historically been higher than the statewide average.

- The percentage of nonresidents working in oil and gas rose from 36 percent to 37.1 percent. (See Exhibit 6.)
- The number of total workers in the oil industry fell 16 percent from 2015 to 2016: a substantial drop of 3,070 workers. Although residents represented just under 63 percent of oil and gas workers, they were 70 percent of the total decline (2,140).
- Oil industry wages fell by 24 percent, to \$1.6 billion. Total resident wages fell 22 percent to \$1.1 billion, while nonresident wages fell 26 percent to \$526 million.

3 Alaska Workers by Quarter

Resident and nonresident, 2016



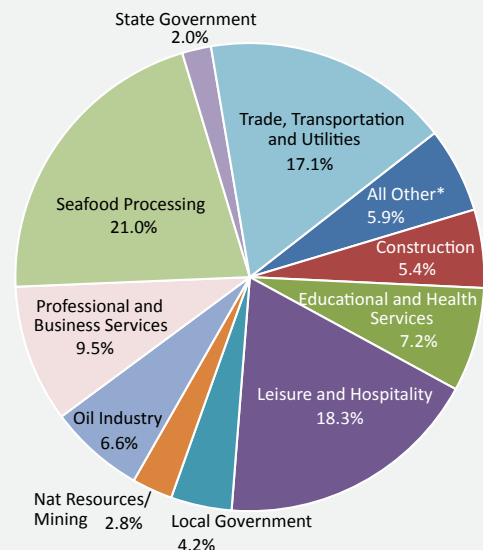
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

- Nonresidents earned 32.4 percent of total wages, down from 33.5 percent in 2015.

The oil industry is made up of oil and gas extraction and oilfield services. Extraction includes firms that primarily operate and develop oil and gas fields, and most are in remote sites on the North Slope.

- Oil and gas extraction workers made up 27 percent of the industry but earned nearly half of its wages in 2016.
- Of the 4,253 total extraction workers, 28.3 were nonresidents, down from 29.4 percent the prior year.
- The number of extraction workers was down by 448. The decline was proportionally higher for nonresidents, who represented 40 percent of that loss.
- The percentage of total extraction wages paid to nonresidents also fell, from 27.7 percent in 2015 to 27.5 percent in 2016. (See Exhibit 5.)
- Extraction was a high-wage industry for both resi-

4 Nonresident Workers by Industry Alaska, 2016



Note: Percentages may not add to 100 due to rounding.

*"All other" includes nonseafood manufacturing, information, financial activities, public administration, other services, and unclassified industries.

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

5 Workers and Wages, Major and Selected Industry Categories Alaska, 2016

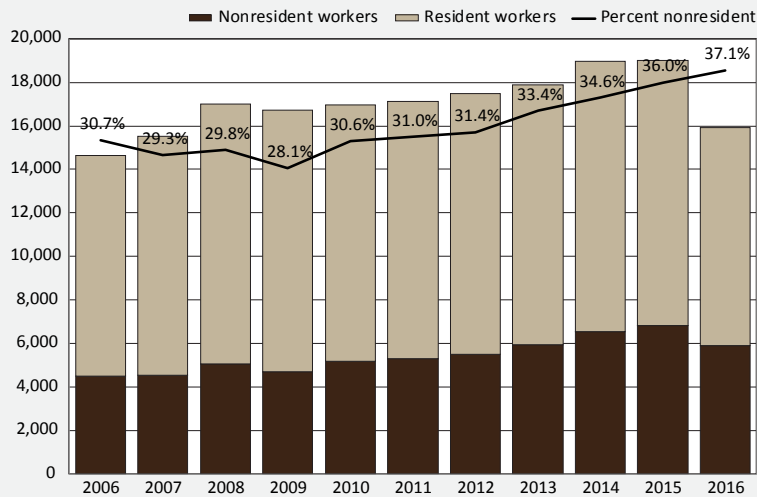
Industry	Total		Nonresident			
	Workers	Wages (mil)	Workers	Percent	Wages (mil)	Percent
Agriculture, Forestry, Fishing and Hunting	2,370	\$52.6	1,242	52.4%	\$25.9	49.1%
Mining	19,863	\$1,956.4	7,218	36.3%	\$633.6	32.4%
Oil and Gas Extraction	4,253	\$767.7	1,205	28.3%	\$211.3	27.5%
Oilfield Services*	11,664	\$856.7	4,693	40.2%	\$315.1	36.8%
Utilities	2,563	\$194.6	127	5.0%	\$6.5	3.3%
Construction	24,444	\$1,165.5	4,860	19.9%	\$172.5	14.8%
Manufacturing	29,757	\$656.9	19,608	65.9%	\$320.1	48.7%
Seafood Processing	24,849	\$446.2	18,767	75.5%	\$301.1	67.5%
Wholesale Trade	7,280	\$353.8	728	10.0%	\$24.9	7.0%
Retail Trade	48,564	\$1,147.9	7,926	16.3%	\$100.9	8.8%
Transportation and Warehousing	25,285	\$1,227.6	6,527	25.8%	\$300.7	24.5%
Air Transportation	7,609	\$344.4	1,915	25.2%	\$65.4	19.0%
Information	7,449	\$406.5	750	10.1%	\$27.9	6.9%
Finance and Insurance	8,375	\$464.8	823	9.8%	\$19.8	4.3%
Real Estate and Rental and Leasing	6,982	\$223.9	759	10.9%	\$18.3	8.2%
Professional, Scientific, and Technical Services	16,726	\$898.3	3,883	23.2%	\$182.9	20.4%
Management of Companies and Enterprises	2,296	\$172.5	166	7.2%	\$8.6	5.0%
Administrative Support/Waste Management and Remediation	17,499	\$546.4	4,451	25.4%	\$108.6	19.9%
Educational Services	2,919	\$70.3	651	22.3%	\$7.9	11.2%
Health Care and Social Assistance	52,606	\$2,345.2	5,822	11.1%	\$210.4	9.0%
Arts, Entertainment, and Recreation	7,282	\$94.7	2,329	32.0%	\$22.4	23.6%
Accommodation and Food Services	43,998	\$691.9	14,016	31.9%	\$158.0	22.8%
Accommodation	13,152	\$218.8	6,419	48.8%	\$76.2	34.8%
Food Services and Drinking Places	29,961	\$462.9	7,249	24.2%	\$78.5	17.0%
Other Services	12,593	\$370.5	1,819	14.4%	\$35.5	9.6%
Other/Unknown	634	\$16.3	197	31.1%	\$3.6	22.2%
Local Government	50,602	\$1,897.9	3,734	7.4%	\$88.9	4.7%
State Government	26,372	\$1,305.4	1,775	6.7%	\$47.6	3.6%
Total	416,459	\$16,259.7	89,411	21.5%	\$2,525.3	15.5%

Notes: Data exclude the self-employed, fishermen and other agricultural workers, and private household workers. For estimates of fish harvesting employment, go to labor.alaska.gov/research/seafood/seafood.htm.

*This industry category includes support activities for oil and gas drilling and related occupations.

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

6 Oil Industry Workers Alaska, 2006 to 2016



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

dents and nonresidents in 2016, but nonresidents earned 9.1 percent more per quarter at \$52,770 versus \$48,374 for residents. It is important to note that average quarterly wages for both residents and nonresidents declined from 2015 by 6 and 5.5 percent, respectively.

- Because residents in oil and gas extraction tend to work more quarters, their average annual wage is higher. In 2016, residents earned an average of \$182,545 and nonresidents earned \$175,345.

Oilfield services differs from extraction in that firms provide support services including drilling oil and gas wells, excavation, and well services.³ The oilfield services sector made up 73 percent of total oil and gas workers in 2016.

7 Oil Industry, 20 Largest Occupations Alaska, 2016

Occupation title	Total workers	Percent nonres
Service Unit Operators, Oil and Gas	1,501	43.4%
Operating Engineers and Other Const Equip Operators	1,101	38.8%
Roustabouts, Oil and Gas	856	34.1%
Production Workers, All Other	781	39.1%
Petroleum Engineers	592	29.2%
Electricians	506	48.6%
Engineers, All Other	474	28.5%
Construction Laborers	448	16.7%
Plumbers, Pipefitters, and Steamfitters	447	42.5%
Heavy and Tractor-Trailer Truck Drivers	437	34.1%
Welders, Cutters, Solderers, and Brazers	429	31.0%
First-Line Supervisors of Const Trades/Extraction Workers	379	42.0%
Installation, Maint, and Repair Workers, All Other	377	96.3%
Geological Technicians, Except Hydrologic Technicians	353	43.6%
Rotary Drill Operators, Oil and Gas	311	41.5%
Petroleum Pump Sys Oper, Refinery Oper, and Gaugers	307	32.6%
Managers, All Other	300	46.3%
Mobile Heavy Equipment Mechanics, Except Engines	298	43.3%
Construction Managers	261	39.8%
Maintenance and Repair Workers, General	250	38.0%

Note: Includes occupations in oil and gas extraction and related oilfield services. Occupation totals include only workers in this industry. Additional workers in these occupations may be found in other industries.

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

- The number of oilfield services workers fell by 2,622, or 18 percent, to 11,664. Of that loss, 28.6 percent were nonresidents.
- The nonresident percentage in oilfield services rose from 38 percent to 40 percent.
- Workers in oilfield services earned \$857 million, or 53 percent of oil industry wages. Nonresidents made \$315 million, or 37 percent. (See Exhibit 5.)
- In 2016, nonresidents in oilfield services earned an average of \$22,798 per quarter — 5.7 percent more than residents, who earned \$21,577 per quarter.
- Although nonresidents earn more per quarter, residents earn more annually — \$77,688 versus \$67,145 — primarily because residents work more quarters.

Construction Industry

The construction industry employed 6

percent of workers in the state in 2016. Though not to the same degree as oil and gas, wages in construction are higher than the state average.

- The number of construction workers fell to 24,444 in 2016, a drop of 2,091, or 8 percent from the prior year.
- Nonresidents accounted for 19.9 percent of all construction workers, down 2.3 percentage points from 2015. (See Exhibit 8.)
- The construction industry paid 8.9 percent of all private sector wages in 2016. Total construction wages fell by 11.2 percent to \$1.2 billion. The nonresident share fell from 16.3 percent to 14.8 percent.
- Construction wages for residents fell 9.5 percent from 2015 while nonresident wages fell by 19.5 percent. Like the oil industry, residents in construction work more quarters than nonresidents.

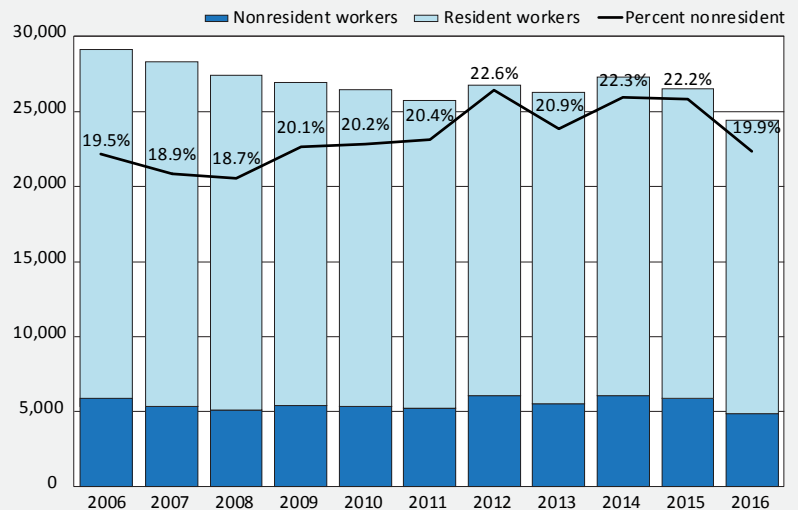
Within the construction industry, specialty trade contractors accounted for most of the workers and wages. (See Appendix A2.) The number of residents in the specialty trade contractors sector decreased 3.9 percent, a loss of 400 workers, while the number of nonresidents fell by 22.5 percent, or 598 workers.

Heavy and civil engineering had the lowest number of workers but the highest quarterly wages. The number of nonresidents in this sector decreased by 26.4 percent to 1,209, while the number of residents decreased 8.4 percent to 4,051.

Seafood Processing Industry

Fishing is a critical component of Alaska's economy, but because fish harvesters are self-employed and exempt from reporting employment and wages, most harvesters and crew aren't part of this report. Seafood processors, on the other

8 Construction Industry Workers Alaska, 2006 to 2016



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

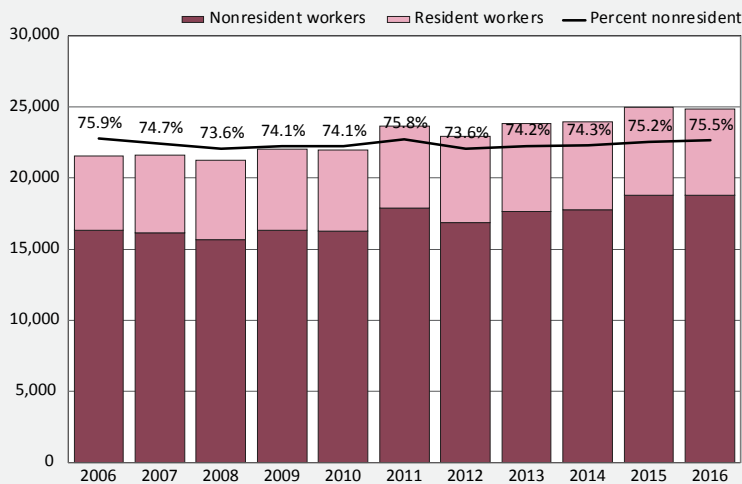
9 Construction Industry, 20 Largest Occupations Alaska, 2016

Occupation title	Total workers	Percent nonresident
Construction Laborers	4,114	20.7%
Carpenters	2,673	21.5%
Operating Engineers and Other Construction Equip Operators	1,784	21.5%
Electricians	1,527	11.6%
Plumbers, Pipefitters, and Steamfitters	1,058	15.6%
Construction and Related Workers, All Other	759	32.9%
Painters, Construction and Maintenance	613	24.6%
Heavy and Tractor-Trailer Truck Drivers	598	16.9%
Construction Managers	569	13.4%
Helpers, Construction Trades, All Other	517	16.2%
Roofers	409	20.0%
First-Line Supervisors of Const Trades and Extraction Workers	401	30.9%
Sheet Metal Workers	395	9.1%
Bookkeeping, Accounting, and Auditing Clerks	375	5.6%
Helpers: Carpenters	366	25.7%
Office Clerks, General	356	9.0%
Office and Administrative Support Workers, All Other	348	12.1%
Cement Masons and Concrete Finishers	322	30.4%
Heating, Air Conditioning, and Refrig Mechanics and Installers	230	10.9%
Helpers: Pipelayers, Plumbers, Pipefitters, and Steamfitters	210	19.5%

Note: Occupation totals include only workers in this industry. Additional workers in these occupations may be found in other industries.

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

10 Seafood Processing Workers Alaska, 2006 to 2016



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

wages in 2016 were nearly the same as the year before at \$446 million. Of that, nonresidents earned 67.5 percent.

Although self-employed fish harvesters aren't part of the worker totals or the total nonresident hire rate, the department estimates their numbers each year from other data sources. In 2016, nonresidents were an estimated 44.7 percent of the harvesting workforce, which includes permit holders and their crew. Nonresidents took in 67.9 percent of gross earnings.⁴

Metal Mining Industry

Metal mining is of both historical and contemporary importance to Alaska's economy. The extraction of gold, silver, copper, lead, and rare earth elements employed 3,211 people in 2016 and contributed \$289 million in wages.

hand, are included in wage record data and can be described here.

- Since statistics on worker residency in Alaska have been produced, the seafood processing industry has had the highest number and percentage of nonresident workers every year.

- Alaska's seafood processing industry employed 18,767 nonresidents in 2016, representing 75.5 percent of the processing workforce. (See Exhibit 10.)

- The numbers of both residents and nonresidents in seafood processing dropped from 2015. The decline in residents outpaced that of nonresidents, driving an increase in the nonresident rate: up from 75.2 percent to 75.5 percent.

- Total seafood processing

- From 2015 to 2016, the number of metal mining⁵ workers declined by 1.7 percent (54 workers).

- The number of nonresidents in metal mining rose

11 Seafood Processing, 20 Largest Occupations Alaska, 2016

Occupation title	Total workers	Percent nonresident
Seafood Processing Workers, Except Surimi and Fish Roe	14,267	77.7%
Meat, Poultry, and Fish Cutters and Trimmers	4,439	86.1%
Fishers and Related Fishing Workers	476	71.2%
First-Line Supervisors of Production/Oper Workers for Fish, Shellfish or other Seafood Products	434	79.5%
Office Clerks, General	364	47.8%
Laborers and Freight, Stock, and Material Movers, Hand	352	40.9%
Material Moving Workers, All Other	336	79.2%
Food Batchmakers	220	83.6%
Fish Roe Technicians	199	73.9%
Maintenance and Repair Workers, General	191	51.8%
Maids and Housekeeping Cleaners	183	59.0%
First-Line Supervisors of Production and Operating Workers	178	69.1%
Cooks, Institution and Cafeteria	151	74.2%
Machinists	139	92.1%
Production Workers, All Other	135	44.4%
Sailors and Marine Oilers	129	70.5%
Ship Engineers	128	86.7%
Captains, Mates, and Pilots of Water Vessels	116	78.4%
Office and Administrative Support Workers, All Other	100	28.0%
Electricians	90	74.4%

Note: Occupation totals include only workers in this industry. Additional workers in these occupations may be found in other industries.

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

12 Seafood Processing, Workers and Wages

Private sector, by area, 2016

Borough or Census Area	Total		Nonresident			
	Workers	Wages	Workers	Percent	Wages	Percent
Aleutians East	3,347	\$85,011,257	2,895	86.5%	\$69,052,782	81.2%
Aleutians West	2,843	\$71,075,420	1,888	66.4%	\$38,841,328	54.6%
Anchorage	378	\$9,760,634	91	24.1%	\$1,163,673	11.9%
Bethel	0	\$0	0	0%	\$0	0%
Bristol Bay	3,271	\$29,247,511	3,072	93.9%	\$27,016,851	92.4%
Denali	0	\$0	0	0%	\$0	0%
Dillingham	1,117	\$10,912,860	991	88.7%	\$9,789,626	89.7%
Fairbanks North Star	17	\$156,677	ND	ND	ND	ND
Haines	285	\$2,612,860	258	90.5%	\$2,164,784	82.9%
Hoonah-Angoon	46	\$564,764	15	32.6%	\$118,849	21.0%
Juneau	418	\$6,299,008	291	69.6%	\$3,748,901	59.5%
Kenai Peninsula	1,526	\$16,864,562	1,022	67.0%	\$8,923,078	52.9%
Ketchikan	874	\$11,408,898	681	77.9%	\$7,194,252	63.1%
Kodiak Island	2,538	\$50,423,743	1,114	43.9%	\$16,009,765	31.8%
Kusilvak	542	\$4,814,521	34	6.3%	\$824,628	17.1%
Lake and Peninsula	459	\$5,249,625	446	97.2%	\$4,938,245	94.1%
Marine/Offshore	3,083	\$85,650,233	3,007	97.5%	\$82,740,062	96.6%
Matanuska-Susitna	21	\$212,109	8	38.1%	\$45,950	21.7%
Nome	260	\$4,843,730	21	8.1%	\$304,695	6.3%
North Slope	ND	ND	ND	ND	ND	ND
Northwest Arctic	31	\$198,279	9	29.0%	\$106,907	53.9%
Outside Alaska	12	\$208,126	11	91.7%	\$173,626	83.4%
Petersburg	787	\$10,370,444	633	80.4%	\$5,824,006	56.2%
Prince of Wales-Hyder	287	\$4,197,264	171	59.6%	\$2,298,773	54.8%
Sitka	822	\$14,500,314	592	72.0%	\$7,431,144	51.2%
Skagway	7	\$98,404	ND	ND	ND	ND
Southeast Fairbanks	0	\$0	0	0%	\$0	0%
Valdez-Cordova	1,567	\$16,615,084	1,335	85.2%	\$10,159,639	61.1%
Wrangell	207	\$2,963,252	137	66.2%	\$1,386,101	46.8%
Yakutat	62	\$1,483,006	23	37.1%	\$388,369	26.2%
Yukon-Koyukuk	32	\$125,659	8	25.0%	\$99,033	78.8%

Note: ND = Not disclosable to protect individual employers' data

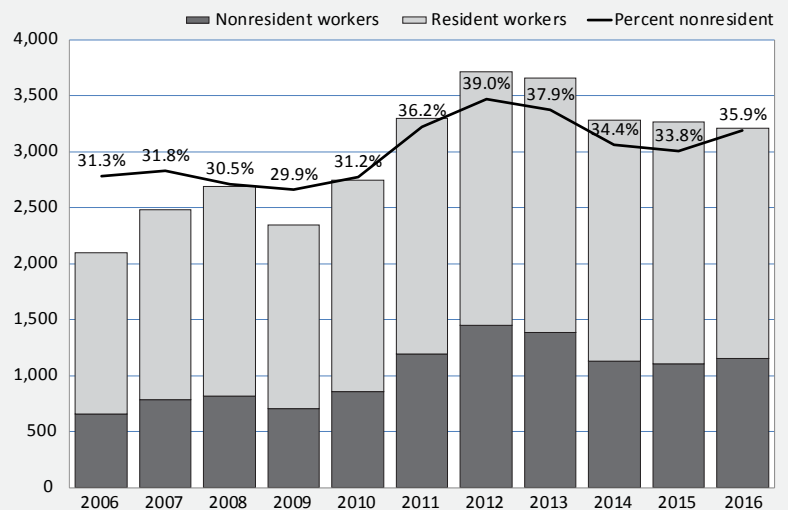
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

4.5 percent, from 1,104 to 1,154, while residents decreased by 4.8 percent, from 2,161 to 2,057.

- As a result, the percentage of nonresident workers in metal mining rose from 33.8 percent to 35.9 percent. (See Exhibit 13.)
- Total wages for nonresidents increased in 2016 while resident wages decreased. The share of wages paid to nonresidents was 35.1 percent, up from 32.7 percent. Nonresidents earned \$101 million, 7.8 percent more than the year before.
- Resident wages fell 3 percent to \$187 million.
- Residents in metal mining made

13 Metal Mining Workers

Alaska, 2006 to 2016



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

more on average than nonresidents, at \$91,030 versus \$87,747. Average annual wages increased 3.1 percent for nonresidents and 1.9 percent for residents.

Visitor-Related Industries

Although visitor expenditures play a major part in several Alaska sectors, there is no “visitor industry” isolated in the data. However, several industries can be considered visitor-related: accommodation, air transportation, scenic and sightseeing transportation,⁶ and food service and drinking establishments. (See Exhibit 15.)

- Nonresidents in visitor-related industries accounted for 22.4 percent of the state’s nonresident workers but made just 11.2 percent of nonresident wages.
- Visitor-related industries employed 63,945 workers, down slightly from 64,175 in 2015. The number of residents and nonresidents each fell by less than one percent. Nonresidents typically account for nearly one-third of all visitor-related workers
- Nonresidents earned \$283 million, while residents earned \$1.0 billion.

Food services and drinking places is the largest of the visitor-related industries, with 29,961 workers in

14 Metal Mining Industry, 20 Largest Occupations Alaska, 2016

Occupation title	Total workers	Percent nonres
Underground Mining Machine Operators, All Other	733	29.6%
Extraction Workers, All Other	306	54.6%
Mobile Heavy Equipment Mechanics, Except Engines	162	58.0%
Miners, Except Drillers and Machine Operators	136	32.4%
Plant and System Operators, All Other	111	9.9%
Millwrights	106	39.6%
First-Line Supervisors of Mechanics, Installers, and Repairers	81	35.8%
Mining and Geological Engineers, Incl Mining Safety Engineers	78	44.9%
Earth Drillers, Except Oil and Gas	72	84.7%
Electricians	67	65.7%
Crushing, Grinding, and Polishing Machine Setters, Oper, Tenders	63	22.2%
Construction Laborers	62	12.9%
First-Line Supervisors of Production and Operating Workers	55	43.6%
Operating Engineers and Other Construction Equip Operators	51	47.1%
Production Workers, All Other	44	43.2%
Water and Wastewater Treatment Plant and System Operators	39	25.6%
Geological Technicians, Except Hydrologic Technicians	37	29.7%
Chemical Technicians	35	14.3%
Geoscientists, Except Hydrologists and Geographers	35	42.9%
Mine Cutting and Channeling Machine Operators	32	28.1%

Note: Occupation totals include only workers in this industry. Additional workers in these occupations may be found in other industries.

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

2016, down 2 percent. In this industry, nonresidents accounted for 24.2 percent of total workers, relatively unchanged from 2015. (See Exhibit 16.)

Air transportation has the highest average wages among visitor-related industries due to high-paying occupations such as pilots.

- Air transportation fell by 92 workers (-1.2 percent).

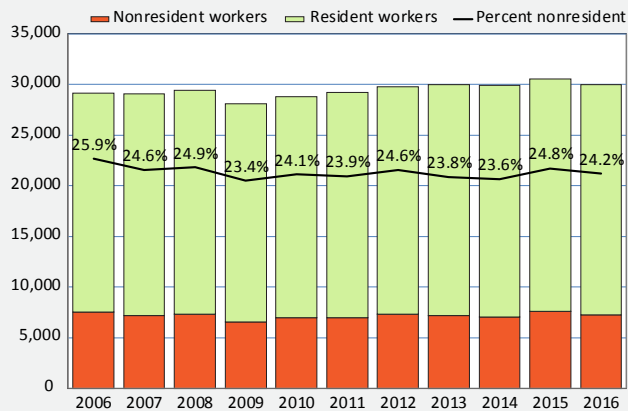
15 Visitor-Related Industries, Workers and Wages Alaska, 2016

Industry	Total		Nonresident			
	Workers	Wages (mil)	Workers	Percent	Wages (mil)	Percent
Accommodation	13,152	\$218.8	6,419	48.8%	\$76.2	34.8%
Air Transportation	7,609	\$344.4	1,915	25.2%	\$65.4	19.0%
Amusement, Gambling, and Recreation Industries	5,296	\$65.3	1,747	33.0%	\$16.5	25.2%
Food Services and Drinking Places	29,961	\$462.9	7,249	24.2%	\$78.5	17.0%
Performing Arts, Spectator Sports, and Related Industries	1,299	\$15.1	369	28.4%	\$3.4	22.6%
Scenic and Sightseeing Transportation	3,518	\$65.2	1,833	52.1%	\$27.4	42.0%
Support Activities for Transportation	3,110	\$120.4	507	16.3%	\$15.8	13.1%
Leisure and Hospitality*	51,280	\$786.6	16,345	31.9%	\$180.3	22.9%

*Leisure and hospitality is a NAICS designation that combines the recreation, accommodations, and food services industry sectors.

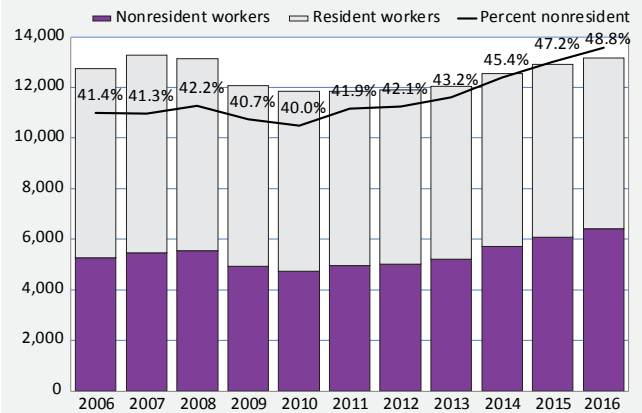
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

16 Workers in Eating and Drinking Alaska, 2006 to 2016



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

17 Accommodation Workers Alaska, 2006 to 2016



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

Of that loss, 82 were nonresidents.⁷

- Nonresidents made up a quarter of air transportation workers and earned 19 percent of wages.
- The number of nonresidents in air transportation fell 4.1 percent, to 1,915. Resident workers fell less than 1 percent, to 5,694.

Accommodation typically has one of the highest nonresident percentages among all industries as well as in the visitor-related industries.

- Total accommodation workers were up by 1.9 percent in 2016, to 13,152. Nonresidents made up 48.8 percent and earned 34.8 percent of wages. (See Exhibit 17.)

Health Care Industry

The health care industry remained one of Alaska's largest in 2016, and it has grown considerably over the last decade. Unlike many rapidly expanding industries, health care hasn't significantly increased its non-

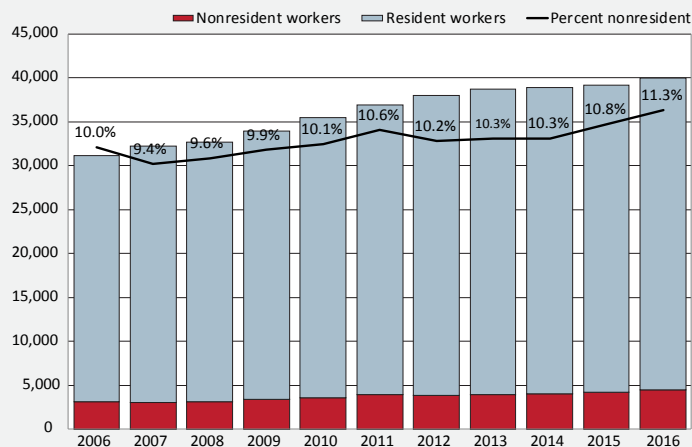
18 Visitor-Related Industries, 20 Largest Occupations Alaska, 2016

Occupation title	Total workers	Percent nonres
Waiters and Waitresses	5,648	30.6%
Combined Food Preparation and Serving Workers, Including Fast Food	5,365	23.0%
Food Preparation Workers	4,398	19.1%
Maids and Housekeeping Cleaners	3,503	43.2%
Cooks, Restaurant	3,473	40.2%
Dishwashers	1,987	37.8%
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,816	18.4%
Airline Pilots, Copilots, and Flight Engineers	1,597	47.9%
Food Preparation and Serving Related Workers, All Other	1,407	28.4%
Bartenders	1,393	26.3%
Hotel, Motel, and Resort Desk Clerks	1,240	36.6%
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	1,214	21.7%
Tour Guides and Escorts	1,138	69.5%
Aircraft Mechanics and Service Technicians	994	19.0%
Reservation and Transportation Ticket Agents and Travel Clerks	958	12.1%
Dining Room and Cafeteria Attendants and Bartender Helpers	952	26.2%
Material Moving Workers, All Other	912	10.0%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	756	37.0%
Cashiers	706	27.2%
Maintenance and Repair Workers, General	703	37.6%

Note: Occupation totals include only workers in this industry. Additional workers in these occupations may be found in other industries.

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

19 Health Care Workers Alaska, 2006 to 2016



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

resident hire rate. However, the percentage of nonresidents and the percentage of total wages paid to nonresidents increased in 2016.

- Health care was one of the few major industries in Alaska to grow in 2016, increasing 2 percent to just under 40,000 total workers.
- Despite a 28 percent increase in the number of health care workers in Alaska over the last 10 years, the nonresident percentage has remained significantly lower than that of all industries combined at 11.3 percent. (See Exhibit 19.)
- In 2016, 4,513 nonresidents made up 11.3 percent of all health care workers and earned 9.5 percent of the industry's nearly \$2 billion in wages.
- Average quarterly wages for health care workers rose by just over 1 percent, to \$13,875. Residents earned less per quarter, at \$13,677 versus \$16,109 for nonresidents.

The health care industry comprises ambulatory health care services, hospitals, and nursing and residential care facilities.

- Ambulatory health care service companies, which do not provide inpatient care, employed 20,530 workers, or 51.3 percent of all health care workers. Of that total, 11.4 percent were nonresidents.
- Hospitals employed an additional 35.8 percent of health care workers, or 14,320, at 11.1 percent nonresident.
- Nursing and residential care facilities had the smallest share of health care workers at 12.9 percent, or 5,142 total workers. The nonresident share was 11.5 percent.

20 Health Care, 20 Largest Occupations Alaska, 2016

Occupation title	Total workers	Percent nonres
Registered Nurses	4,911	14.8%
Personal Care Aides	3,936	8.3%
Nursing Assistants	1,633	7.2%
Medical Assistants	1,593	8.3%
Receptionists and Information Clerks	1,447	10.6%
Office and Administrative Support Workers, All Other	1,369	8.3%
Dental Assistants	1,193	9.5%
Healthcare Support Workers, All Other	1,044	11.4%
Medical and Health Services Managers	726	9.9%
Billing and Posting Clerks	672	6.7%
Medical Secretaries and Administrative Assistants	656	5.2%
Home Health Aides	613	13.1%
First-Line Supervisors of Ofc and Admin Supt Workers	540	6.5%
Dental Hygienists	505	9.5%
Physicians and Surgeons, All Other	476	31.3%
Janitors and Cleaners, Exc Maids/Housekeeping	441	6.8%
Physical Therapists	438	16.9%
Medical Registrar and Records Specialists	434	7.4%
Office Clerks, General	433	9.9%
Massage Therapists	419	10.3%

Note: Occupation totals include only workers in this industry. Additional workers in these occupations may be found in other industries.

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

Other Industries

Exhibit A2 in the appendix gives detailed resident data by industry. Private sector industries with a low percentage of nonresidents are primarily in the utilities, health care, and financial/insurance industries. State and local government both continue to employ a low percentage

21 Occupations With the Largest Numbers of Nonresident Workers

Alaska private sector, 2016

Occupation title	Nonresident workers	Resident workers	Percent nonresident	Nonresident wages (mil)	Resident wages (mil)	Percent nonresident
Seafood Processing Workers, Except Surimi and Fish Roe	11,174	3,249	77.5%	\$115.2	\$47.0	71.0%
Meat, Poultry, and Fish Cutters and Trimmers	3,903	732	84.2%	\$42.1	\$9.5	81.6%
Retail Salespersons (Non-Commissioned Sales)	3,380	14,701	18.7%	\$31.5	\$274.0	10.3%
Waiters and Waitresses	1,909	4,169	31.4%	\$20.2	\$70.7	22.2%
Maids and Housekeeping Cleaners	1,858	3,369	35.5%	\$16.4	\$53.6	23.5%
Cashiers	1,738	7,504	18.8%	\$13.3	\$109.9	10.8%
Cooks, Restaurant	1,482	2,188	40.4%	\$15.3	\$38.3	28.5%
Combined Food Prep and Serving Workers, Incl Fast Food	1,369	4,721	22.5%	\$9.9	\$52.2	15.9%
Construction Laborers	1,253	4,802	20.7%	\$29.5	\$144.6	16.9%
Fishers and Related Fishing Workers	1,216	518	70.1%	\$22.8	\$8.0	74.1%
Airline Pilots, Copilots, and Flight Engineers	1,137	1,047	52.1%	\$126.1	\$109.2	53.6%
Registered Nurses	1,073	4,438	19.5%	\$35.3	\$282.6	11.1%
Laborers and Freight, Stock, and Material Movers, Hand	1,059	3,352	24.0%	\$16.4	\$83.5	16.4%
Food Preparation Workers	1,052	4,268	19.8%	\$7.8	\$46.1	14.4%
Tour Guides and Escorts	983	551	64.1%	\$8.9	\$6.0	59.9%
Operating Engineers and Other Const Equipment Operators	936	2,433	27.8%	\$49.2	\$140.0	26.0%
Janitors and Cleaners, Exc Maids/Housekeeping Cleaners	892	3,460	20.5%	\$9.3	\$56.3	14.1%
Dishwashers	829	1,425	36.8%	\$5.8	\$14.6	28.4%
Office Clerks, General	757	3,983	16.0%	\$14.5	\$110.7	11.6%
Maintenance and Repair Workers, General	733	2,092	25.9%	\$24.2	\$83.0	22.6%
Carpenters	727	2,601	21.8%	\$21.4	\$102.7	17.3%
Service Unit Operators, Oil and Gas	720	917	44.0%	\$46.8	\$81.1	36.6%
Installation, Maintenance, and Repair Workers, All Other	678	1,023	39.9%	\$19.0	\$61.2	23.7%
Heavy and Tractor-Trailer Truck Drivers	667	2,935	18.5%	\$25.9	\$143.6	15.3%
Electricians	654	1,824	26.4%	\$41.8	\$115.9	26.5%
Sailors and Marine Oilers	637	475	57.3%	\$16.6	\$13.7	54.9%
Captains, Mates, and Pilots of Water Vessels	620	338	64.7%	\$31.2	\$16.7	65.1%
Office and Administrative Support Workers, All Other	605	5,328	10.2%	\$14.7	\$154.3	8.7%
General and Operations Managers	537	3,406	13.6%	\$39.2	\$284.9	12.1%
Personal Care Aides	521	5,350	8.9%	\$5.6	\$96.3	5.5%
Material Moving Workers, All Other	504	1,502	25.1%	\$12.7	\$58.3	17.9%
Food Preparation and Serving Related Workers, All Other	500	1,574	24.1%	\$5.2	\$24.7	17.3%
Hotel, Motel, and Resort Desk Clerks	496	932	34.7%	\$4.5	\$13.7	24.5%
Counter Attendants, Cafeteria, Food Concession, Coffee Shop	493	2,236	18.1%	\$3.1	\$21.5	12.6%
Sales and Related Workers, All Other	492	2,245	18.0%	\$5.7	\$60.4	8.5%
Bartenders	473	1,303	26.6%	\$5.2	\$20.9	20.0%
Production Workers, All Other	465	981	32.2%	\$54.5	\$93.3	36.9%
Stock Clerks and Order Fillers	461	2,715	14.5%	\$4.9	\$53.9	8.4%
Customer Service Representatives	460	2,570	15.2%	\$5.6	\$75.1	6.9%
Managers, All Other	441	1,903	18.8%	\$39.9	\$156.6	20.3%
Plumbers, Pipefitters, and Steamfitters	430	1,370	23.9%	\$21.7	\$85.0	20.3%
Security Guards	399	1,860	17.7%	\$8.3	\$57.2	12.7%
Receptionists and Information Clerks	385	2,738	12.3%	\$5.2	\$64.2	7.5%
First-Line Supervisors of Const Trades and Extract Workers	366	663	35.6%	\$33.2	\$61.6	35.0%
Cooks, All Other	362	666	35.2%	\$6.6	\$15.1	30.5%
Roustabouts, Oil and Gas	356	648	35.5%	\$14.3	\$30.0	32.4%
First-Line Supervisors of Prod/Oper Workers for Fish, Shellfish or other Seafood Products	353	91	79.5%	\$5.5	\$2.9	65.0%
Landscaping and Groundskeeping Workers	346	1,074	24.4%	\$3.3	\$14.1	19.2%
Commercial Pilots	344	458	42.9%	\$12.3	\$28.2	30.4%
Bus Drivers, School or Special Client	342	873	28.1%	\$3.6	\$16.6	17.8%

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

22 Occupations With High Percentages of Nonresident Workers

Alaska private sector, 2016

Occupation title	Percent nonres	Nonres workers	Resident workers	% nonres wages	Nonres wages	Resident wages
Meat, Poultry, and Fish Cutters and Trimmers	84.2%	3,903	732	81.6%	\$42,106,991	\$9,519,200
First-Line Supervisors of Production and Operating Workers for Fish, Shellfish or other Seafood Products	79.5%	353	91	65.0%	\$5,451,940	\$2,930,939
Seafood Processing Workers, Except Surimi and Fish Roe	77.5%	11,174	3,252	71.0%	\$115,212,700	\$47,041,965
Entertainers and Performers, Sports and Related Workers, All Other	76.7%	171	52	69.1%	\$1,576,122	\$705,277
Fish Roe Technicians	73.6%	148	53	71.6%	\$2,308,845	\$914,242
Travel Guides	72.5%	287	109	69.5%	\$2,864,667	\$1,257,235
Food Batchmakers	69.8%	196	85	63.3%	\$3,983,600	\$2,306,217
Fishers and Related Fishing Workers	68.4%	1,218	563	72.7%	\$22,847,542	\$8,574,378
Ship Engineers	62.5%	270	162	54.4%	\$14,976,817	\$12,564,989
Tour Guides and Escorts	62.4%	984	592	58.3%	\$8,904,842	\$6,373,761
Machinists	60.5%	185	121	55.6%	\$7,690,658	\$6,144,993
Captains, Mates, and Pilots of Water Vessels	59.1%	650	450	56.2%	\$33,569,668	\$26,189,858
Earth Drillers, Except Oil and Gas	58.4%	149	106	47.9%	\$5,992,297	\$6,522,672
Extraction Workers, All Other	52.7%	187	168	57.3%	\$20,109,901	\$14,999,245
Airline Pilots, Copilots, and Flight Engineers	51.9%	1,141	1,056	53.4%	\$126,533,420	\$110,394,376
Sailors and Marine Oilers	48.8%	651	682	40.6%	\$17,128,847	\$25,108,067
Rotary Drill Operators, Oil and Gas	47.4%	175	194	38.7%	\$8,910,318	\$14,124,158
Agricultural Workers, All Other	46.0%	138	162	33.1%	\$1,453,996	\$2,942,025
Chefs and Head Cooks	45.0%	326	399	35.8%	\$7,424,921	\$13,338,023
Service Unit Operators, Oil and Gas	44.0%	721	919	36.6%	\$46,784,244	\$81,125,917
Inspectors, Testers, Sorters, Samplers, and Weighers	43.0%	154	204	42.0%	\$9,574,603	\$13,248,218
Actors	43.0%	102	135	35.3%	\$505,693	\$927,074
Commercial Pilots	42.3%	345	471	29.8%	\$12,410,992	\$29,204,572
Cooks, Restaurant	40.4%	1,482	2,188	28.5%	\$15,251,014	\$38,260,317
Zoologists and Wildlife Biologists	39.9%	344	519	16.5%	\$5,894,832	\$29,822,619
Industrial Machinery Mechanics	39.1%	184	286	32.6%	\$11,357,703	\$23,495,517
Dancers	39.1%	102	159	29.0%	\$475,429	\$1,161,799
Geological Technicians, Except Hydrologic Technicians	37.9%	203	333	36.7%	\$15,682,304	\$27,089,715
Installation, Maintenance, and Repair Workers, All Other	37.4%	686	1,150	22.2%	\$19,124,596	\$66,909,545
Dishwashers	36.6%	829	1,434	28.3%	\$5,806,639	\$14,700,927
Roustabouts, Oil and Gas	35.5%	356	648	32.4%	\$14,339,697	\$29,969,195
Mobile Heavy Equipment Mechanics, Except Engines	35.2%	339	623	34.0%	\$23,903,776	\$46,350,007
First-Line Supervisors of Production and Operating Workers	35.2%	238	438	25.4%	\$13,898,509	\$40,848,349
Maids and Housekeeping Cleaners	35.1%	1,863	3,441	22.9%	\$16,468,813	\$55,353,546
Hotel, Motel, and Resort Desk Clerks	34.7%	496	932	24.5%	\$4,454,983	\$13,742,510
First-Line Supervisors of Construction Trades and Extraction Workers	34.6%	376	711	34.3%	\$33,651,594	\$64,469,829
Underground Mining Machine Operators, All Other	34.0%	286	555	25.4%	\$14,238,241	\$41,710,673
Baggage Porters and Bellhops	33.8%	91	178	17.4%	\$979,425	\$4,641,429
Mining and Geological Engineers, Including Mining Safety Engineers	33.3%	86	172	29.7%	\$5,865,880	\$13,863,508

Note: Occupations with 200 or more total employees

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

23 High Paying Private Occupations With Large Numbers of Nonresidents

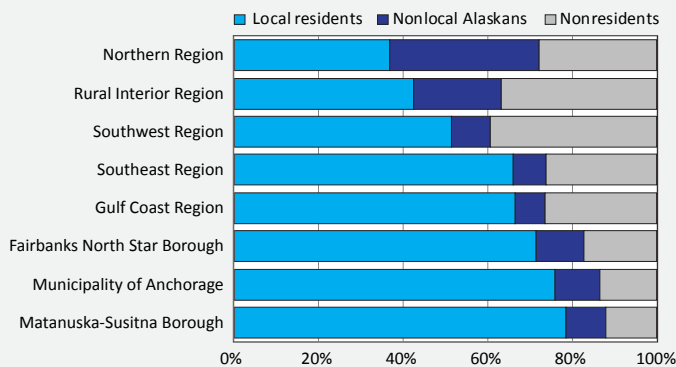
Greater than Alaska median earnings (\$7,416 per quarter), 2016

Occupation title	Nonresident workers	Total workers	Percent nonresident	Avg quarterly wages
Construction Laborers	1,253	6,055	20.7%	\$9,971
Fishers and Related Fishing Workers	1,216	1,734	70.1%	\$8,791
Airline Pilots, Copilots, and Flight Engineers	1,137	2,184	52.1%	\$31,968
Registered Nurses	1,073	5,511	19.5%	\$16,492
Laborers and Freight, Stock, and Material Movers, Hand	1,059	4,411	24.0%	\$7,583
Operating Engineers and Other Construction Equipment Operators	936	3,369	27.8%	\$17,401
Office Clerks, General	757	4,740	16.0%	\$8,086
Maintenance and Repair Workers, General	733	2,825	25.9%	\$11,574
Carpenters	727	3,328	21.8%	\$12,315
Service Unit Operators, Oil and Gas	720	1,637	44.0%	\$22,803
Installation, Maintenance, and Repair Workers, All Other	678	1,701	39.9%	\$16,350
Heavy and Tractor-Trailer Truck Drivers	667	3,602	18.5%	\$13,879
Electricians	654	2,478	26.4%	\$18,801
Sailors and Marine Oilers	637	1,112	57.3%	\$10,516
Captains, Mates, and Pilots of Water Vessels	620	958	64.7%	\$17,724
Office and Administrative Support Workers, All Other	605	5,933	10.2%	\$8,836
General and Operations Managers	537	3,943	13.6%	\$23,020
Material Moving Workers, All Other	504	2,006	25.1%	\$10,728
Sales and Related Workers, All Other	492	2,737	18.0%	\$7,683
Production Workers, All Other	465	1,446	32.2%	\$28,948
Customer Service Representatives	460	3,030	15.2%	\$8,045
Managers, All Other	441	2,344	18.8%	\$23,966
Plumbers, Pipefitters, and Steamfitters	430	1,800	23.9%	\$17,762
Security Guards	399	2,259	17.7%	\$8,963
First-Line Supervisors of Const Trades and Extraction Workers	366	1,029	35.6%	\$26,892
Roustabouts, Oil and Gas	356	1,004	35.5%	\$14,367
First-Line Supervisors of Production and Operating Workers for Fish, Shellfish or other Seafood Products	353	444	79.5%	\$8,642
Commercial Pilots	344	802	42.9%	\$16,090
Mobile Heavy Equipment Mechanics, Except Engines	335	910	36.8%	\$20,911
Zoologists and Wildlife Biologists	332	415	80.0%	\$9,032
Welders, Cutters, Solderers, and Brazers	326	1,016	32.1%	\$15,963
Chefs and Head Cooks	325	697	46.6%	\$9,363
Transportation Workers, All Other	312	1,805	17.3%	\$18,160
Bookkeeping, Accounting, and Auditing Clerks	306	3,606	8.5%	\$9,448
Construction and Related Workers, All Other	292	1,040	28.1%	\$14,103
Underground Mining Machine Operators, All Other	286	841	34.0%	\$19,939
First-Line Supervisors of Retail Sales Workers	274	2,453	11.2%	\$9,500
Engineers, All Other	270	1,183	22.8%	\$32,867
Helpers: Installation, Maintenance, and Repair Workers	266	1,011	26.3%	\$10,035
Automotive Service Technicians and Mechanics	263	1,815	14.5%	\$10,440
Construction Managers	259	1,202	21.5%	\$27,739
Light Truck Drivers	259	1,687	15.4%	\$9,695
Aircraft Mechanics and Service Technicians	248	1,249	19.9%	\$14,809
Sales Representatives, Services, All Other	240	1,626	14.8%	\$12,957
First-Line Supervisors of Production and Operating Workers	235	647	36.3%	\$23,426
Secretaries and Admin Assistants, Exc Legal, Medical, and Exec	208	1,959	10.6%	\$7,884
Geological Technicians, Except Hydrologic Technicians	203	536	37.9%	\$23,501
Ship Engineers	203	262	77.5%	\$19,739
Helpers, Construction Trades, All Other	202	908	22.2%	\$11,311
Engineering Technologists and Technicians, Exc Drafters, All Other	199	628	31.7%	\$23,897

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

24 Worker Residency by Region

Alaska, 2016



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

of nonresidents, at 6.7 percent and 7.4 percent respectively.

Nonresidents by Occupation

There were large numbers of nonresidents in a variety of occupations. The largest were seafood processing workers, retail salespeople, waiters and waitresses, and maids and housekeeping cleaners. (See exhibits 21 and 22.)

Some occupations with large numbers of nonresidents are relatively high paying, and though they may require significant training or education, this suggests an opportunity for unemployed Alaskans with the necessary credentials.

Exhibit 23 lists high paying occupations with the

25 Worker Residency by Borough or Census Area

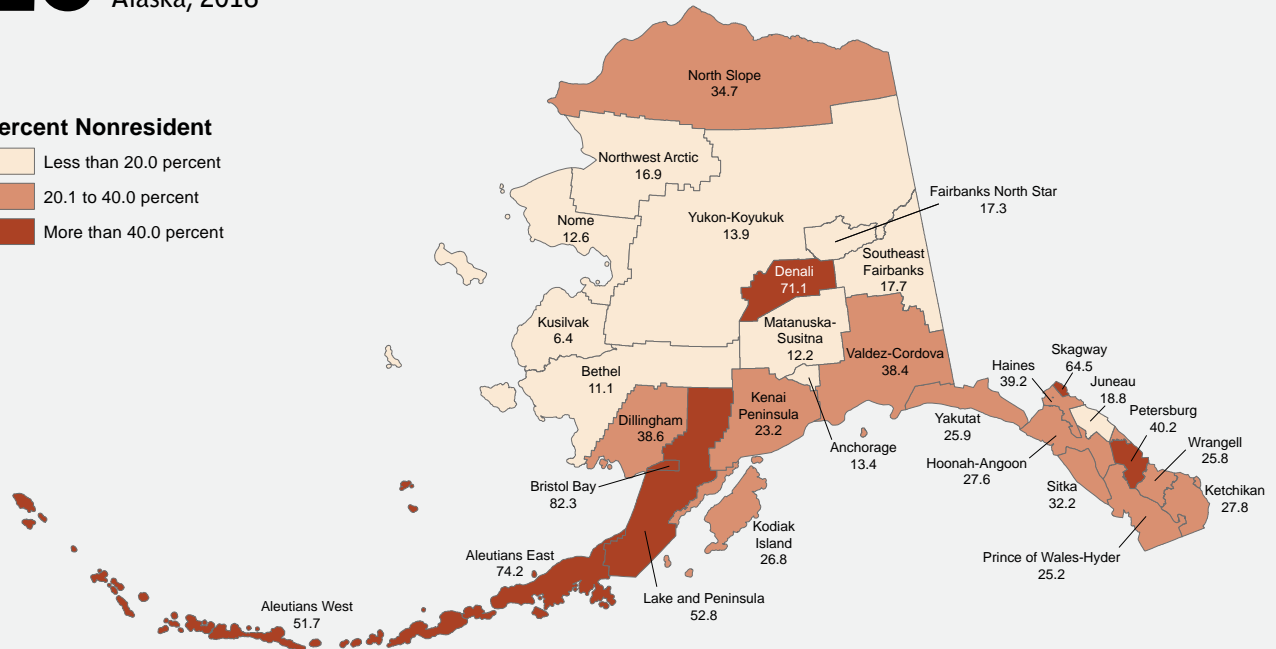
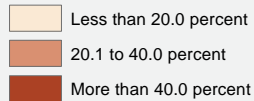
Alaska, 2016

Borough or Census Area	Local residents	Nonlocal residents	Nonresidents	Total workers	Percent local
Kusilvak Census Area	3,162	277	234	3,673	86.1%
Matanuska-Susitna Borough	23,589	2,782	3,651	30,022	78.6%
Bethel Census Area	7,983	1,086	1,135	10,204	78.2%
Nome Census Area	4,373	527	706	5,606	78.0%
Anchorage Municipality	125,397	17,885	22,086	165,368	75.8%
Juneau, City and Borough	15,410	1,626	3,941	20,977	73.5%
Fairbanks North Star Borough	34,150	5,352	8,289	47,791	71.5%
Kenai Peninsula Borough	20,394	1,856	6,713	28,963	70.4%
Prince of Wales-Hyder Census Area	2,259	201	830	3,290	68.7%
Kodiak Island Borough	5,706	379	2,232	8,317	68.6%
Northwest Arctic Borough	3,030	687	754	4,471	67.8%
Yukon-Koyukuk Census Area	2,149	665	455	3,269	65.7%
Wrangell, City and Borough	781	126	316	1,223	63.9%
Ketchikan Gateway Borough	6,019	834	2,633	9,486	63.5%
Yakutat, City and Borough	265	47	109	421	62.9%
Sitka, City and Borough	3,681	297	1,888	5,866	62.8%
Hoonah-Angoon Census Area	727	119	322	1,168	62.2%
Haines Borough	815	108	595	1,518	53.7%
Petersburg Borough	1,102	144	839	2,085	52.9%
Southeast Fairbanks Census Area	1,807	1,002	605	3,414	52.9%
Dillingham Census Area	2,052	387	1,533	3,972	51.7%
Valdez-Cordova Census Area	3,764	921	2,918	7,603	49.5%
Aleutians West Census Area	2,083	361	2,613	5,057	41.2%
Lake and Peninsula Borough	680	204	987	1,871	36.3%
Skagway Municipality	497	105	1,095	1,697	29.3%
Aleutians East Borough	762	334	3,145	4,241	18.0%
North Slope Borough	3,483	9,297	6,804	19,584	17.8%
Denali Borough	621	558	2,895	4,074	15.2%
Bristol Bay Borough	385	364	3,493	4,242	9.1%

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

26 Nonresident Workers by Place of Work Alaska, 2016

Percent Nonresident



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

largest numbers of nonresidents. Some of the highest paying include engineers, airline pilots, production workers, and construction managers.

Geographic Distribution

We determine whether residents live in the same borough and census area where they work by matching employment records that show place of work with Permanent Fund Dividend applicant addresses.⁸ Overall, 67.7 percent lived and worked in the same area in 2016, and 11.9 percent of resident workers lived somewhere else in Alaska. (See exhibits 24 through 27 for regional and resident data.)

Municipality of Anchorage

Anchorage is Alaska's most populous city and had 165,368 workers in 2016, or 39.7 percent of all Alaska workers.

Because of its size, Anchorage has a diverse economy with no dominant industry. Service industries such as health care and social assistance, retail trade, and accommodation and food services are among the city's largest. Anchorage also hosts the headquarters of firms

that do business elsewhere, has a large city government and school district, and is a major air transportation hub. The Port of Anchorage, Ted Stevens Anchorage International Airport, the Alaska Railroad, and the highway system all make the city Alaska's primary distributor of goods.

Anchorage is also home to Alaska's largest military base, Joint Base Elmendorf-Richardson, which also creates civilian jobs.

Although Anchorage has the most nonresident workers in the state, that is because it has the most workers overall. Nonresidents were 13.4 percent of the Anchorage workforce in 2016, toward the low end compared to other parts of the state.

The 22,086 nonresidents who worked in Anchorage were mostly concentrated in the accommodation and food services and retail trade industries, which were 21.6 percent and 14.1 percent nonresident respectively.

Seventy-six percent of Anchorage workers were locals (75.8 percent) and 10.8 percent were residents of other places in Alaska, mainly the Matanuska-Susitna Borough, Anchorage's northern neighbor. For most Mat-Su residents, Anchorage is about an hour-and-a-

27 Resident and Nonresident Workers and Wages

By place of work and Alaska place of residence, 2016

		Resident Workers		Nonresident Workers		Wages			
Borough or Census Area	Ownership	Local resident	Other AK resident	Number	Percent nonresident	Local resident	Other AK resident	Nonresident	Percent nonresident
Anchorage/Mat-Su									
Anchorage	State Government	8,539	1,352	427	4.1%	\$444,194,392	\$71,096,559	\$11,607,273	2.2%
Anchorage	Local Government	10,560	764	538	4.5%	\$523,902,386	\$50,634,505	\$11,071,960	1.9%
Anchorage	Private Sector	106,298	15,769	21,121	14.8%	\$4,770,001,163	\$761,147,294	\$694,398,377	11.2%
Mat-Su	State Government	1,359	164	49	3.1%	\$64,289,663	\$8,195,088	\$1,393,196	1.9%
Mat-Su	Local Government	3,913	131	143	3.4%	\$154,070,158	\$5,645,513	\$2,095,487	1.3%
Mat-Su	Private Sector	18,317	2,487	3,459	14.3%	\$549,434,363	\$87,063,091	\$53,570,195	7.8%
Gulf Coast Region									
Kenai	State Government	1,133	136	111	8.0%	\$55,758,799	\$6,842,612	\$4,354,754	6.5%
Kenai	Local Government	3,593	74	236	6.0%	\$164,369,008	\$2,544,918	\$7,484,666	4.3%
Kenai	Private Sector	15,668	1,646	6,366	26.9%	\$551,793,546	\$58,446,666	\$114,295,604	15.8%
Kodiak Island	State Government	240	17	26	9.2%	\$12,342,742	\$415,517	\$651,178	4.9%
Kodiak Island	Local Government	898	27	156	14.4%	\$34,139,762	\$641,613	\$3,297,730	8.7%
Kodiak Island	Private Sector	4,568	335	2,050	29.5%	\$147,547,850	\$11,442,550	\$36,325,834	18.6%
Valdez-Cordova	State Government	231	63	26	8.1%	\$10,859,005	\$3,701,225	\$1,135,695	7.2%
Valdez-Cordova	Local Government	729	50	104	11.8%	\$26,052,131	\$1,477,398	\$2,095,430	7.1%
Valdez-Cordova	Private Sector	2,804	808	2,788	43.6%	\$118,305,790	\$36,312,437	\$36,459,136	19.1%
Interior Region									
Denali	State Government	25	8	ND	ND	\$1,314,482	\$282,691	ND	ND
Denali	Local Government	115	6	17	12.3%	\$3,747,497	\$206,666	\$408,436	9.4%
Fairbanks North Star	Private Sector	481	544	2,877	73.7%	\$22,917,094	\$18,841,737	\$35,950,804	46.3%
Fairbanks North Star	State Government	4,555	252	499	9.4%	\$227,456,285	\$5,683,190	\$9,938,591	4.1%
Fairbanks North Star	Local Government	3,308	91	271	7.4%	\$148,568,261	\$1,840,752	\$4,851,869	3.1%
Southeast Fairbanks	Private Sector	26,287	5,009	7,519	19.4%	\$1,015,017,412	\$146,889,214	\$152,799,020	11.6%
Southeast Fairbanks	State Government	115	17	13	9.0%	\$5,494,887	\$761,359	\$251,717	3.9%
Southeast Fairbanks	Local Government	413	46	44	8.7%	\$12,068,029	\$833,077	\$593,502	4.4%
Yukon-Koyukuk	Private Sector	1,279	939	548	19.8%	\$42,639,793	\$62,846,094	\$31,750,183	23.1%
Yukon-Koyukuk	State Government	50	65	ND	ND	\$2,120,692	\$3,297,373	ND	ND
Yukon-Koyukuk	Local Government	1,549	244	168	8.6%	\$27,103,568	\$4,153,655	\$2,499,793	7.4%
Yukon-Koyukuk	Private Sector	550	356	283	23.8%	\$14,109,785	\$14,900,864	\$8,331,995	22.3%
Northern Region									
Nome	State Government	220	29	14	5.3%	\$13,628,736	\$1,166,627	\$413,928	2.7%
Nome	Local Government	1,971	110	222	9.6%	\$43,806,980	\$1,964,589	\$4,758,714	9.4%
Nome	Private Sector	2,182	388	470	15.5%	\$83,261,960	\$15,241,187	\$15,495,521	13.6%
North Slope	State Government	14	24	ND	ND	\$779,976	\$1,698,461	ND	ND
North Slope	Local Government	2,163	216	282	10.6%	\$93,349,778	\$12,885,781	\$10,879,593	9.3%
North Slope	Private Sector	1,306	9,057	6,519	38.6%	\$60,882,026	\$756,619,580	\$534,213,088	39.5%
Northwest Arctic	State Government	64	7	ND	ND	\$3,890,991	\$658,327	ND	ND
Northwest Arctic	Local Government	1,231	83	180	12.0%	\$30,998,604	\$2,448,681	\$4,936,530	12.9%
Northwest Arctic	Private Sector	1,735	597	572	19.7%	\$67,985,464	\$44,178,045	\$36,370,740	24.5%
Southeast Region									
Haines	State Government	39	10	7	12.5%	\$1,544,796	\$242,414	\$126,038	6.6%
Haines	Local Government	145	10	17	9.9%	\$4,750,792	\$145,563	\$299,701	5.8%
Haines	Private Sector	631	88	571	44.3%	\$15,287,575	\$2,034,694	\$5,678,515	24.7%
Hoonah-Angoon	State Government	12	ND	ND	ND	\$396,036	ND	ND	ND
Hoonah-Angoon	Local Government	288	33	38	10.6%	\$6,792,230	\$941,557	\$667,627	7.9%
Hoonah-Angoon	Private Sector	427	85	282	35.5%	\$7,785,810	\$1,768,649	\$3,752,488	28.2%
Juneau	State Government	3,705	336	199	4.7%	\$202,009,562	\$17,963,535	\$6,527,178	2.9%
Juneau	Local Government	2,287	67	172	6.8%	\$107,546,177	\$1,637,839	\$6,279,981	5.4%
Juneau	Private Sector	9,418	1,223	3,570	25.1%	\$343,011,696	\$51,707,665	\$92,957,734	19.1%
Ketchikan Gateway	State Government	526	107	86	12.0%	\$26,791,008	\$5,877,253	\$3,102,319	8.7%
Ketchikan Gateway	Local Government	1,126	222	118	8.0%	\$52,707,031	\$8,593,452	\$2,494,908	3.9%
Ketchikan Gateway	Private Sector	4,367	505	2,429	33.3%	\$146,147,337	\$13,897,501	\$40,327,001	20.1%
Petersburg	State Government	42	6	ND	ND	\$1,991,264	\$128,143	ND	ND
Petersburg	Local Government	364	9	34	8.4%	\$15,589,545	\$224,995	\$780,449	4.7%
Petersburg	Private Sector	696	129	804	49.4%	\$17,962,597	\$3,826,844	\$9,100,144	29.5%
Prince of Wales-Hyder	State Government	41	5	ND	ND	\$1,655,565	\$218,483	ND	ND
Prince of Wales-Hyder	Local Government	1,044	33	97	8.3%	\$32,980,046	\$992,644	\$1,823,671	5.1%
Prince of Wales-Hyder	Private Sector	1,174	163	731	35.3%	\$33,209,175	\$6,171,743	\$14,109,248	26.4%
Sitka	State Government	309	26	23	6.4%	\$14,305,588	\$948,592	\$320,148	2.1%
Sitka	Local Government	763	20	88	10.1%	\$34,750,067	\$609,071	\$1,446,413	3.9%
Sitka	Private Sector	2,609	251	1,777	38.3%	\$85,558,439	\$6,935,154	\$27,035,732	22.6%
Skagway	State Government	11	ND	ND	ND	\$525,161	ND	ND	ND
Skagway	Local Government	115	ND	21	15.2%	\$4,902,587	ND	\$587,379	10.6%
Skagway	Private Sector	371	102	1,072	69.4%	\$11,406,378	\$3,103,877	\$15,181,386	51.1%

27 Resident and Nonresident Workers and Wages, continued

By place of work and Alaska place of residence, 2016

Borough or Census Area	Ownership	Resident Workers		Nonresident Workers		Wages			
		Local resident	Other AK resident	Number	Percent nonresident	Local resident	Other AK resident	Nonresident	Percent nonresident
Southeast (cont.)									
Wrangell	State Government	21	ND	NA	NA	\$819,587	ND	NA	NA
Wrangell	Local Government	280	ND	29	ND	\$9,717,210	ND	\$696,906	ND
Wrangell	Private Sector	480	120	287	32.4%	\$13,088,042	\$2,796,527	\$3,638,032	18.6%
Yakutat	State Government	10	ND	ND	ND	\$432,039	ND	ND	ND
Yakutat	Local Government	117	6	11	8.2%	\$3,720,522	\$116,032	\$258,765	6.3%
Yakutat	Private Sector	138	38	93	34.6%	\$3,847,664	\$1,016,584	\$1,590,485	24.6%
Southwest Region									
Aleutians East	State Government	9	9	6	25.0%	\$345,228	\$189,281	\$82,670	13.4%
Aleutians East	Local Government	247	40	31	9.7%	\$7,609,040	\$1,098,249	\$739,611	7.8%
Aleutians East	Private Sector	506	285	3,108	79.7%	\$17,589,557	\$10,336,994	\$75,002,620	72.9%
Aleutians West	State Government	25	ND	ND	ND	\$1,615,246	ND	ND	ND
Aleutians West	Local Government	412	23	64	12.8%	\$18,937,750	\$789,265	\$1,748,427	8.1%
Aleutians West	Private Sector	1,646	333	2,544	56.2%	\$72,681,215	\$15,466,757	\$70,666,157	44.5%
Bethel	State Government	316	55	25	6.3%	\$19,471,839	\$3,486,128	\$637,963	2.7%
Bethel	Local Government	3,586	140	346	8.5%	\$75,454,898	\$3,841,501	\$9,298,169	10.5%
Bethel	Private Sector	4,081	891	764	13.3%	\$110,537,618	\$33,775,224	\$25,995,562	15.3%
Bristol Bay	State Government	17	17	9	20.9%	\$1,376,653	\$319,782	\$200,454	10.6%
Bristol Bay	Local Government	115	29	35	19.6%	\$4,563,950	\$614,413	\$825,646	13.8%
Bristol Bay	Private Sector	253	318	3,449	85.8%	\$9,028,973	\$6,098,291	\$34,451,907	69.5%
Dillingham	State Government	90	18	20	15.6%	\$4,151,279	\$316,635	\$332,303	6.9%
Dillingham	Local Government	698	37	89	10.8%	\$16,641,046	\$1,069,190	\$1,742,476	9.0%
Dillingham	Private Sector	1,264	332	1,424	47.2%	\$44,395,573	\$8,442,677	\$20,847,079	28.3%
Kusilvak	State Government	88	18	ND	ND	\$1,620,495	\$1,179,316	ND	ND
Kusilvak	Local Government	1,649	85	116	6.3%	\$30,523,599	\$2,011,166	\$3,319,166	9.3%
Kusilvak	Private Sector	1,425	174	114	6.7%	\$16,931,186	\$5,665,213	\$3,371,256	13.0%
Lake and Peninsula	State Government	ND	ND	ND	ND	ND	ND	ND	ND
Lake and Peninsula	Local Government	511	73	66	10.2%	\$9,392,655	\$2,092,397	\$921,558	7.4%
Lake and Peninsula	Private Sector	166	128	919	75.8%	\$5,055,167	\$4,255,819	\$11,791,384	55.9%

Notes: ND = Not disclosable. NA = Not applicable. Local residents live in the reported borough/census area as determined by the ZIP code of the most recent Permanent Fund Dividend mailing address. Worker employment records showing place of work information are matched with Permanent Fund Dividend applicant address information to determine the number of local residents, Alaska residents and nonresidents working in each borough/census area. Place of work was based upon employer reported place of work information. Workers were assigned to a geographic area based on the place of work where they earned the most money in 2016. If employers did not provide specific place of work information for the worker, the borough/census area of the primary business location was used to determine the place of work.

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

half commute round trip. Cheaper housing in Mat-Su and higher average wages in Anchorage make the drive worth it for some.

Nonlocal Anchorage workers were concentrated in the construction industry, which was 23.2 percent nonlocal Alaskan, and the utilities industry, which was 16.3 percent nonlocal.

Matanuska-Susitna Borough

The Matanuska-Susitna Borough is Alaska's fastest growing and second most populated area. Although most of the Mat-Su population lives in the greater Palmer-Wasilla area, smaller communities dot the Parks and Glenn highways.

In some ways, Mat-Su is a suburb of Anchorage, and many Mat-Su residents work and shop there. Still,

retail trade is Mat-Su's biggest industry, spurred by the recent construction of several new big box stores in the borough.

In 2016, 30,022 people worked in the Mat-Su Borough and just 12.2 percent were nonresidents. The borough doesn't have as much employment in the industries that tend to employ high percentages of nonresidents, such as seafood processing and tourism.

Local government and health care were other large employers in Mat-Su, with 93.5 and 82.6 percent local workers, respectively.

The largest employer of nonresidents in Mat-Su was the accommodation and food services industry, where 20 percent of its 3,525 workers were not residents. Transportation and warehousing employed 1,248 workers at 24.1 percent nonresident, and the educational services industry (which provides training or instruc-

tion but excludes public schools) employed 623 workers at 36 percent nonresident.

While 78.6 percent of Mat-Su workers were locals in 2016, many Mat-Su residents worked elsewhere. Estimates of commuter patterns from 2016 suggest nearly a third worked in Anchorage and 6.7 percent worked in the North Slope Borough.

The loss of oil industry jobs had a significant effect on Mat-Su's workers. The number of workers who lived in Mat-Su and worked on the North Slope fell by 578 workers, or 17 percent, from 2015.

Fairbanks North Star Borough

The Fairbanks North Star Borough is the third most populated area in the state. Fairbanks is at the heart of Alaska's interior and is the northern terminus of the Parks and Richardson highways and the southern terminus of the Dalton Highway to the North Slope.

In addition to serving as the Interior's transportation hub, Fairbanks is its economic, medical, educational, and cultural center. The University of Alaska Fairbanks is the borough's largest employer. Eielson Air Force Base and Fort Wainwright also generate civilian jobs in the borough.

Fairbanks had 47,791 workers in 2016, or 11.5 percent of the state's workforce. Those who live and work in Fairbanks made up a majority at 71.5 percent. Alaska residents who lived outside of Fairbanks represented 11.2 percent. The remaining 8,289 were nonresidents, at 17.3 percent.

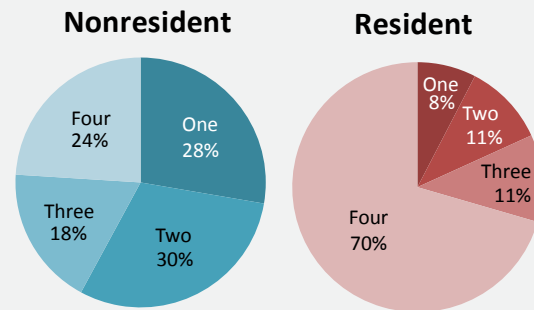
Fairbanks is another mostly urban center with workers spanning all industries. Nonresidents were concentrated in accommodation and food services, retail trade, health care, and construction, with the largest share in accommodation and food services at 31.5 percent.

Fairbanks is home to Fort Knox Gold Mine, a major mining employer. Nonresidents made up 22.5 percent of all mining workers in Fairbanks in 2016. Nonlocal Alaskans made up another 16.6 percent, making locals the remaining 60.9 percent.

Rural Interior Region

The Rural Interior Region is the largest geographically but the least populous in Alaska. This doughnut-shaped region includes the vast Yukon-Koyukuk

28 Quarters Worked by Residency Alaska, 2016



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

Census Area, the Denali Borough, and the Southeast Fairbanks Census Area (but it excludes the Fairbanks North Star Borough). The region is so large and diverse that it can't be characterized as a single economy, but a few key industries keep parts of the region flourishing.

The region had 10,757 workers in 2016, with 42.5 percent local residents. The percentage of nonresident workers in the region was 36.8 percent, the second highest of all eight regions. Nearly three-quarters of Denali Borough workers are nonresidents.

Accommodation and food service is the region's largest industry, followed by local government, which is one of the few to offer year-round employment across the entire area. Even the smallest communities along the Yukon River or on the tundra have a school or local government. Of the area's 2,602 local government workers in 2016, 79.8 percent were locals.

The major employers of nonresidents in the region were the accommodation and food services industry and mining, which are concentrated in Denali National Park, Usibelli Coal Mine, and the Pogo Gold Mine.

In 2016, 78.4 percent of the region's accommodation and food service workers were nonresidents and another 9 percent were nonlocal Alaskans, meaning just 12.6 percent were locals. Nearly all of these tourism-related jobs are seasonal, and locals and nonlocals both earn more than nonresidents.

Mining employed 745 workers in the Rural Interior, 17.9 percent of whom were locals. The largest share were nonresidents — 45.9 percent — and the remaining 36.2 percent were nonlocal residents. Many other indus-

tries in the region had high percentages of nonresidents, typical of highly seasonal or remote work.

Northern Region

Alaska's Northern Region includes the North Slope and Northwest Arctic boroughs and the Nome Census Area. Most communities in the Northern Region are on the Arctic coast and are home to primarily Inupiat populations.

The Northern Region has two economies. One is village-based, with local government and service jobs augmented by subsistence production, and the other is industrialized resource extraction at North Slope oil fields and the Red Dog Mine.

In 2016, 27.9 percent of the Northern Region's 29,661 workers were nonresidents and another 35.4 percent were nonlocal Alaskans. The Northern Region has the state's lowest percentage of local workers at 36.7 percent.

The mining industry, which includes workers at Red Dog Mine in the Northwest Arctic Borough as well as North Slope oil employment, is the region's largest with 9,866 workers in 2016. Just 2.4 percent of workers in the Northern Region mining industry were local, and 54.9 percent were nonlocal Alaskans. Nonresidents made up 42.7 percent.

Local government, which includes schools, is the region's second-largest industry with 6,458 workers, 83.1 percent of whom were local.

Construction is another major industry, serving communities and the extractive industries. Of the 1,998 construction workers in the Northern Region in 2016, 19.3 percent were local, 51 percent were nonlocal, and 29.7 percent were nonresident.

Southwest Region

The Southwest Region includes the Kusilvak, Bethel, Dillingham, and Aleutians West census areas and the Bristol Bay, Lake and Peninsula, and Aleutians East boroughs. Fishing and fish processing are the region's dominant industries, but because of data limitations, this report can't capture most fish harvesters.

The Southwest Region had 33,260 workers in 2016, excluding fish harvesters, with manufacturing as its largest employer (mainly seafood processing). The Southwest manufacturing industry employed 11,664 workers, or

just over a third of the area's wage and salary workers.

Seafood processing has historically employed a high percentage of nonresidents because the work is seasonal, remote, and relatively low paying. In most communities with seafood processing plants, the local population can't satisfy the peak demand for workers.

Of all manufacturing workers in Southwest, 80.1 percent were nonresidents and just 5.1 were nonlocal Alaskans. Locals made up 14.8 percent, and they earned more on average than nonlocals and nonresidents. Local workers tend to hold higher-paying jobs and work more months of the year.

Southwest's seafood processing industry holds a significant portion of Alaska's total nonresident workforce. Nonresidents in Southwest manufacturing represented 47.7 percent of all nonresidents working in that industry and 10.5 percent of all nonresident workers in Alaska.

As is typical for rural areas, local government is the largest employer in the Southwest Region. The industry employed 8,392 workers, 86 percent of whom were local. Other large industries in Southwest with a majority of local workers included health care and social services and retail.

Not all of Southwest is tied to the commercial fishing industry. Lake and Peninsula Borough and the Bethel and Kusilvak census areas have much smaller numbers of seafood processors. Kusilvak had the highest percentage of local workers in 2016 at 86.1 percent. The Bristol Bay Borough had the lowest percentage at 9.1 percent. (See Exhibit 25.)

Gulf Coast Region

The economically and geographically diverse Gulf Coast Region includes the Kodiak Island and Kenai Peninsula boroughs and the Valdez-Cordova Census Area.

Much of the Kenai Peninsula is a few hours' drive from Anchorage and shares many of the same urban characteristics. Tourism plays a significant role on the peninsula, and both sport and commercial fishing are economic drivers. The borough also has considerable oil and gas extraction.

The Kodiak Island Borough is home to part of Alaska's fishing fleet as well as one of the largest Coast Guard bases in the U.S.

The Valdez-Cordova Census Area includes the coastal communities of Valdez and Cordova as well as inland communities in the Copper River Basin.

The Gulf Coast Region had 44,883 workers in 2016, and nearly two-thirds worked in the Kenai Peninsula Borough. Manufacturing — mostly seafood processing but including oil refining — employed 6,359. Among manufacturing workers, 39.8 percent were local and 56.5 percent were nonresident.

Local government was another large employer in the Gulf Coast with 5,867 workers, 89 percent of whom were local.

Visitor-related industries have high percentages of nonresidents in the Gulf Coast. The agriculture, forestry, fishing, and hunting industry had a nonresident percentage of 51.3. The arts, entertainment, and recreation industry was at 45.4 percent, and the accommodation and food services industry was 38.3 percent. The area mining industry, which is mostly Cook Inlet oil and gas extraction, had a nonresident percentage of 35.6.

Southeast Region

The Southeast panhandle is home to 10 boroughs and census areas, the largest of which is the City and Borough of Juneau, the state's capital.

Of the 47,731 workers in Southeast in 2016, 26.3 percent were nonresident and 7.6 percent were nonlocal Alaskans.

The largest industry in Southeast is local government, which employed 7,560 people, 86.4 percent of whom were local.

Retail trade was next with 5,558 workers, two-thirds of whom were local. Nonresidents made up 24.5 percent.

State government was the third-largest industry at 5,540 workers. It had a lower percentage of nonresidents than local government at 5.9 percent versus 8.3 percent.

Other large industries in the region included manufacturing — its 4,561 workers were 66.9 percent nonresidents — and accommodation and food services, which had 4,750 workers, of whom 40.6 percent were nonresidents. Arts, entertainment, and recreation also had a high percentage of nonresidents, at 51 percent of its 1,528 workers.

Mining employed 1,045 workers, 46.9 percent of whom were nonresidents. The mining industry had one of the highest nonlocal resident shares of all industries in Southeast at 16.8 percent.

Notes

¹The Alaska Department of Labor and Workforce Development unemployment insurance wage file only includes workers covered by Alaska unemployment insurance. Therefore, all references to resident and nonresident workers exclude self-employed and federal workers, who are covered by federal unemployment insurance.

²Nonresident workers are those who didn't apply for a Permanent Fund Dividend in 2016 or 2017. The methodology in the appendix on the next page provides complete information on workers identified as nonresidents.

³Oilfield services support oil and gas companies. This subsector is a combination of the 213111 and 213112 NAICS codes.

⁴Alaska Seafood Industry Research Project, November 2017.

⁵The metal mining industry incorporates the metal ore mining and sup-

port activities for metal mining subsectors, NAICS 2122 and 213114, respectively. For more information on industry coding, see the NAICS 2012 manual.

⁶Scenic and sightseeing transportation refers to the 487 NAICS subsector.

⁷This includes two Standard Occupational Code groups: "airline pilots, co-pilots, and flight engineers" and "commercial airline pilots." Not all pilots are counted as employed in the air transportation industry. Industry classification is based on the employer's activities, not the specific tasks of an employee.

⁸Workers were assigned to a geographic area based on where they earned the most money in 2016. If employers did not provide a specific place of work for a worker, we used the borough or census area of the primary business location to determine the place of work. We derived place of residence for Alaskans from the ZIP code of the most recent PFD mailing address.

Appendix

About the Data

To calculate residency, the Department of Labor and Workforce Development matches quarterly Alaska unemployment insurance records (which contain industry, occupation, wages, and place of work information) for each worker with Alaska Permanent Fund Dividend applications. Wage records are not available for federal employees, the military, or the self-employed, so those workers are not part of this report.

People were considered residents for this report if they applied for a PFD in one of the two most recent years. Of the 327,048 workers identified as residents in the 2016 report, 289,188 (or 88.4 percent) appeared in both the 2016 and 2017 PFD applicant files. Of the remaining 37,860 resident workers, 18,541 appeared in only the 2016 file, suggesting they lived in Alaska for all of 2015 (the qualifying period) but left the state in 2016.

Another 19,329 workers appeared in only the 2017 PFD file. These workers most likely moved to Alaska during 2015 but weren't here for the entire calendar year so weren't eligible for a 2016 PFD.

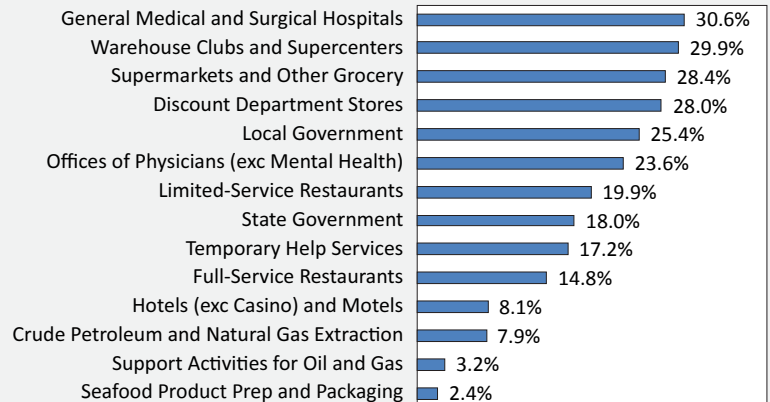
Data Limitations

One of the obvious limitations of using PFD applications to determine residency is the lag due to the strict requirement that a person live in Alaska a full calendar year to become eligible. Knowing that a certain percentage initially identified as nonresidents will become residents is key to understanding this report.

All industries hire people who are new to the state and at least occasionally hire people from outside the state. That has different policy implications than industries that hire seasonal nonresidents or workers who keep their principal residence outside of Alaska.

An analysis of 2015 worker information showed that 10.4 percent of nonresident workers ultimately applied for a PFD and were considered residents for this report. The likelihood that someone new to Alaska will stay and

A1 Nonresidents Who Became Residents Select industries, Alaska, 2016



Note: Graph covers those who were nonresidents in 2015 and became residents in 2016.
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

become eligible for a PFD varies significantly by industry. (See Exhibit A1.)

For example, nonresident oil and seafood processing workers are much less likely to become residents than state and local government workers and health care workers. This again highlights the difference between workers who would be considered new residents by other measures and those who are nonresidents by any measure.

Alaska has especially large migration flows both in and out — 40,000 to 50,000 people move to Alaska and another 40,000 to 50,000 leave each year — and a certain number of workers live here and would be considered residents by other measures but do not stay long enough for PFD eligibility.

Other Measures of Residency

Despite these limitations, the PFD data provide the most comprehensive, reliable, and consistent way to measure residency. Other options such as voter registration, motor vehicle registration, driver's licenses, or fishing and hunting licenses capture a much smaller fraction of the Alaska workforce. The monetary incentive the PFD provides and the strict penalties for providing false information make it the clear choice for this report.

A2 Resident and Nonresident Workers and Wages

Private, state, and local government in Alaska, 2016

Industry	Resident workers	Nonresident workers	Percent nonresident workers	Resident wages	Nonresident wages	Percent nonresident wages	Avg resident wages/qtr	Avg nonresident wages/qtr
Agriculture, Forestry, Fishing, and Hunting								
Animal Production and Aquaculture	290	248	46.1%	\$9,762,438	\$3,607,911	27.0%	\$10,763	\$6,136
Crop Production	354	97	21.5%	\$3,754,597	\$872,424	18.9%	\$4,144	\$4,020
Fishing, Hunting and Trapping	185	557	75.1%	\$3,530,711	\$11,577,804	76.6%	\$8,783	\$12,048
Forestry and Logging	210	286	57.7%	\$7,857,285	\$8,876,327	53.0%	\$11,996	\$12,883
Support Activities for Agriculture and Forestry	63	33	34.4%	\$1,299,920	\$686,693	34.6%	\$7,303	\$10,098
Mining								
Mining (except Oil and Gas)	2,492	1,191	32.3%	\$213,832,954	\$102,812,584	32.5%	\$23,372	\$27,113
Oil and Gas Extraction	3,048	1,205	28.3%	\$556,397,990	\$211,290,462	27.5%	\$48,374	\$52,770
Support Activities for Mining	7,049	4,765	40.3%	\$545,364,560	\$317,828,104	36.8%	\$21,506	\$22,689
Utilities								
Utilities	2,429	125	4.9%	\$187,883,024	\$6,432,782	3.3%	\$20,656	\$18,976
Construction								
Construction of Buildings	5,445	1,315	19.5%	\$247,440,133	\$39,761,998	13.8%	\$14,253	\$13,383
Heavy and Civil Engineering Construction	4,051	1,209	23.0%	\$259,529,291	\$64,374,006	19.9%	\$19,372	\$21,141
Specialty Trade Contractors	9,862	2,054	17.2%	\$479,283,149	\$60,765,309	11.3%	\$14,495	\$12,752
Manufacturing								
Apparel Manufacturing	10	ND	ND	117,993	ND	ND	4,069	ND
Beverage and Tobacco Product Manufacturing	362	98	21.3	8,383,394	1,297,220	13.4	7,553	5,451
Food Manufacturing	6,592	17,138	72.2	157,270,745	268,632,083	63.1	7,689	7,464
Leather and Allied Product Manufacturing	11	6	35.3	213,275	62,592	22.7	6,273	5,690
Textile Mills	10	0	0	197,455	0	0	5,808	0
Textile Product Mills	83	12	12.6	2,786,168	152,819	5.2	9,413	5,660
Chemical Manufacturing	56	16	22.2	2,354,999	550,963	19.0	12,940	16,205
Nonmetallic Mineral Product Manufacturing	201	36	15.2	9,103,889	729,381	7.4	12,895	7,678
Paper Manufacturing	7	0	0	228,620	0	0	8,467	0
Petroleum and Coal Products Manufacturing	620	33	5.1	59,438,309	2,133,873	3.5	25,820	20,131
Plastics and Rubber Products Manufacturing	105	8	7.1	4,223,218	267,438	6.0	11,292	11,143
Printing and Related Support Activities	319	33	9.4	11,182,017	455,059	3.9	9,541	5,910
Wood Product Manufacturing	541	121	18.3	25,033,078	5,549,981	18.1	14,127	17,675
Computer and Electronic Product Manufacturing	95	ND	ND	7,355,558	ND	ND	ND	12,498
Electrical Equipment, Appliance, and Component Manufacturing	14	0	0	731,887	0	0	13,553	0
Fabricated Metal Product Manufacturing	501	94	15.8	24,584,931	2,740,417	10.0	13,781	11,050
Furniture and Related Product Manufacturing	145	28	16.2	5,536,910	543,263	8.9	11,008	9,054
Machinery Manufacturing	94	20	17.5	5,296,749	1,618,799	23.4	15,353	23,806
Miscellaneous Manufacturing	177	24	11.9	6,564,402	555,442	7.8	10,225	9,745
Primary Metal Manufacturing	15	ND	ND	565,179	ND	ND	ND	11,924
Transportation Equipment Manufacturing	488	241	33.1	19,022,325	4,441,260	18.9	11,157	8,574
Wholesale Trade								
Merchant Wholesalers, Durable Goods	2,850	282	9.0%	\$155,859,158	\$12,759,229	7.6%	\$14,629	\$15,850
Merchant Wholesalers, Nondurable Goods	3,222	360	10.1%	\$144,299,769	\$9,900,317	6.4%	\$12,309	\$11,472
Wholesale Electronic Markets and Brokers	466	83	15.1%	\$28,296,066	\$2,055,235	6.8%	\$17,005	\$12,090
Retail Trade								
Building Material and Garden Equipment and Supplies Dealers	4,088	691	14.5%	\$131,610,439	\$10,493,431	7.4%	\$9,172	\$6,329
Clothing and Clothing Accessories Stores	1,959	907	31.6%	\$30,035,517	\$9,836,372	24.7%	\$5,106	\$4,968
Electronics and Appliance Stores	733	138	15.8%	\$20,164,300	\$1,961,902	8.9%	\$8,220	\$6,209
Food and Beverage Stores	7,088	1,209	14.6%	\$159,684,659	\$13,627,350	7.9%	\$6,712	\$4,945
Furniture and Home Furnishings Stores	1,001	157	13.6%	\$28,917,798	\$1,818,357	5.9%	\$8,606	\$5,477
Gasoline Stations	1,977	384	16.3%	\$35,307,705	\$3,771,792	9.7%	\$5,530	\$4,335
Health and Personal Care Stores	1,321	301	18.6%	\$42,233,942	\$4,605,885	9.8%	\$9,317	\$6,813
Motor Vehicle and Parts Dealers	4,633	628	11.9%	\$184,105,387	\$10,975,868	5.6%	\$11,288	\$7,456
General Merchandise Stores	11,662	2,160	15.6%	\$253,218,629	\$23,045,015	8.3%	\$6,555	\$4,955

A2 Resident and Nonresident Workers and Wages, continued

Private, state, and local government in Alaska, 2016

Industry	Resident workers	Nonresident workers	Percent nonresident workers	Resident wages	Nonresident wages	Percent nonresident wages	Avg resident wages/qtr	Avg nonresident wages/qtr
Miscellaneous Store Retailers	2,861	723	20.2%	\$54,920,334	\$7,053,961	11.4%	\$6,040	\$4,333
Nonstore Retailers	1,396	188	11.9%	\$70,084,072	\$8,178,542	10.5%	\$13,933	\$16,068
Sporting Goods, Hobby, Musical Instrument, and Book Stores	2,448	637	20.6%	\$40,029,221	\$5,326,244	11.7%	\$5,150	\$3,846
Transportation and Warehousing								
Air Transportation	5,694	1,915	25.2%	\$278,963,959	\$65,390,282	19.0%	\$13,369	\$13,044
Pipeline Transportation	802	80	9.1%	\$108,067,700	\$9,947,622	8.4%	\$35,178	\$37,968
Scenic and Sightseeing Transportation	1,685	1,833	52.1%	\$37,799,099	\$27,375,843	42.0%	\$7,293	\$6,002
Support Activities for Transportation	2,603	507	16.3%	\$104,626,078	\$15,755,290	13.1%	\$11,530	\$11,568
Transit and Ground Passenger Transportation	1,661	184	10.0%	\$38,425,203	\$2,305,664	5.7%	\$6,555	\$5,583
Truck Transportation	2,951	492	14.3%	\$135,158,072	\$13,771,735	9.2%	\$12,658	\$10,643
Water Transportation	948	750	44.2%	\$61,746,845	\$37,811,849	38.0%	\$19,332	\$19,136
Couriers and Messengers	1,997	670	25.1%	\$145,228,975	\$123,974,541	46.1%	\$19,889	\$55,519
Postal Service	100	18	15.3%	\$1,788,682	\$252,958	12.4%	\$5,678	\$6,170
Warehousing and Storage	215	42	16.3%	\$12,331,029	\$2,843,279	18.7%	\$15,356	\$19,342
Information								
Broadcasting (except Internet)	782	114	12.7%	\$35,654,494	\$2,793,299	7.3%	\$12,427	\$9,188
Data Processing, Hosting, and Related Services	227	45	16.5%	\$9,434,493	\$1,370,905	12.7%	\$11,852	\$12,132
Motion Picture and Sound Recording Industries	651	120	15.6%	\$5,943,890	\$546,885	8.4%	\$3,132	\$2,298
Other Information Services	103	16	13.4%	\$4,139,836	\$392,187	8.7%	\$11,342	\$10,056
Publishing Industries (except Internet)	638	71	10.0%	\$21,971,889	\$1,890,110	7.9%	\$9,791	\$9,948
Telecommunications	4,284	369	7.9%	\$300,896,493	\$20,230,380	6.3%	\$18,399	\$19,176
Finance and Insurance								
Credit Intermediation and Related Activities	5,134	349	6.4%	\$277,372,359	\$8,206,266	2.9%	\$14,316	\$9,712
Funds, Trusts, and Other Financial Vehicles	98	20	16.9%	\$6,051,330	\$244,786	3.9%	\$18,449	\$6,994
Insurance Carriers and Related Activities	1,718	199	10.4%	\$97,439,013	\$6,222,816	6.0%	\$15,275	\$12,726
Securities, Commodity Contracts, and Other Financial Investments and Related Activities	580	60	9.4%	\$63,514,793	\$4,944,547	7.2%	\$29,514	\$29,608
Real Estate and Rental and Leasing								
Lessors of Nonfinancial Intangible Assets (exc Copyrighted Works)	775	19	2.4%	\$6,939,421	\$158,149	2.2%	\$4,832	\$5,272
Real Estate	3,668	368	9.1%	\$134,576,880	\$8,211,010	5.8%	\$10,703	\$8,680
Rental and Leasing Services	1,709	364	17.6%	\$62,413,310	\$9,805,387	13.6%	\$10,724	\$10,681
Professional, Scientific, and Technical Services								
Professional, Scientific, and Technical Services	12,599	3,792	23.1%	\$704,249,230	\$179,691,814	20.3%	\$15,894	\$18,546
Management of Companies and Enterprises	2,098	154	6.8%	\$162,463,305	\$8,440,468	4.9%	\$21,691	\$21,866
Administrative Support/Waste Management and Remediation								
Administrative and Support Services	10,897	3,964	26.7%	\$326,581,068	\$88,937,321	21.4%	\$9,204	\$9,102
Waste Management and Remediation Services	1,868	413	18.1%	\$104,163,240	\$19,321,867	15.6%	\$15,749	\$16,700
Educational Services								
Educational Services	2,264	647	22.2%	\$62,386,743	\$7,723,399	11.0%	\$8,427	\$5,996
Health Care and Social Assistance								
Ambulatory Health Care Services	18,195	2,335	11.4%	\$863,102,719	\$94,391,877	9.9%	\$13,131	\$15,680
Hospitals	12,731	1,589	11.1%	\$781,765,832	\$81,429,216	9.4%	\$16,301	\$19,988
Nursing and Residential Care Facilities	4,553	589	11.5%	\$131,095,674	\$9,944,396	7.1%	\$8,110	\$6,915
Social Assistance	10,513	1,150	9.9%	\$305,709,969	\$18,280,625	5.6%	\$8,358	\$6,786
Arts, Entertainment, and Recreation								
Amusement, Gambling, and Recreation Industries	3,549	1,747	33.0%	\$48,797,260	\$16,479,919	25.2%	\$4,757	\$4,372
Museums, Historical Sites, and Similar Institutions	423	184	30.3%	\$11,463,719	\$2,181,301	16.0%	\$8,380	\$4,869
Performing Arts, Spectator Sports, and Related Industries	930	369	28.4%	\$11,714,977	\$3,413,333	22.6%	\$5,218	\$4,897
Accommodation and Food Services								
Accommodation	6,733	6,419	48.8%	\$142,642,828	\$76,155,394	34.8%	\$6,633	\$5,410
Food Services and Drinking Places	22,712	7,249	24.2%	\$384,402,874	\$78,536,637	17.0%	\$5,354	\$4,779

A2 Resident and Nonresident Workers and Wages, continued

Private, state, and local government in Alaska, 2016

Industry	Resident workers	Nonresident workers	Percent nonresident workers	Resident wages	Nonresident wages	Percent nonresident wages	Avg resident wages/qtr	Avg nonresident wages/qtr
Other Services								
Personal and Laundry Services	2,348	397	14.5%	\$48,831,632	\$4,284,357	8.1%	\$6,299	\$4,713
Private Households	210	43	17.0%	\$4,283,845	\$458,310	9.7%	\$6,309	\$4,725
Religious, Grantmaking, Civic, Professional, and Similar Organizations	5,202	742	12.5%	\$174,130,957	\$12,154,378	6.5%	\$9,966	\$7,466
Repair and Maintenance	2,827	605	17.6%	\$100,436,223	\$18,142,586	15.3%	\$10,417	\$12,234
State and Local Government								
State Government	24,597	1,775	6.7%	\$1,257,848,372	\$47,592,038	3.6%	\$13,918	\$10,353
Local Government	46,868	3,734	7.4%	\$1,809,013,064	\$88,904,976	4.7%	\$11,203	\$9,987

ND = Not disclosable

Note: Numbers do not necessarily sum to larger category totals shown elsewhere in the report because not all workers can be categorized into the detailed sectors shown here.

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