



ALASKA ECONOMIC
TRENDS

MAY 2018

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**ALASKA DEPARTMENT
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DEVELOPMENT**

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ON THE COVER: Cannabis plants at Top Hat Cannabis Alaska in Juneau, photo by Sam Dapceвич
ON PAGE 4: Tetrahydrocannabinol (THC) molecule by Ben Mills

Alaska Economic Trends is a monthly publication meant to objectively inform the public about a variety of economic issues in the state. *Trends* is funded by the Employment and Training Services Division of the Alaska Department of Labor and Workforce Development and is published by the department's Research and Analysis Section. Material in this publication is public information, and with appropriate credit may be reproduced without permission.

How AVTEC supports several key Alaska industries



Heidi Drygas
Commissioner

Not many Alaskans remember when AVTEC got its start almost 50 years ago as the Alaska Skill Center, commonly referred to as the Seward Skills Center, but many of us know someone who started a career at AVTEC. With classes in diesel heavy equipment, power generation, industrial electricity, and other fields, AVTEC has long served a central role in training Alaskans for our state's largest industries.

But here are some things you may not know about AVTEC:

- AVTEC has a 97 percent completion rate.
- Ninety percent of AVTEC graduates have a job within a year of graduation.
- AVTEC trains approximately 1,500 Alaskans annually.
- Last year, AVTEC students came from 164 Alaska communities.
- More than 100 Alaska employers serve on AVTEC advisory boards.
- AVTEC offers related instruction for multiple registered apprenticeship programs.

As I've written before, Alaska's economy is changing. I'm proud AVTEC is adapting to new labor market and budgetary conditions by offering more related instruction for apprenticeship programs. More apprenticeship partnerships mean more job opportunities for Alaskans and closer partnerships with Alaska businesses.

AVTEC also continues to innovate in energy generation and energy efficiency. Many Alaskans from different public and private institutions have worked for years to bring down the cost of energy and to make the cost less volatile. AVTEC plays

an important role by training power plant operators, including both diesel generation and wind turbine integration instruction. Power plant operator training has become even more important with rapidly advancing microgrid technology that has the potential to reduce utility costs.

At this key moment in pursuit of a gasline, AVTEC offers numerous training courses for pipefitting, welding, diesel mechanics, carpentry, and other occupations that will be in high demand with construction of the Alaska LNG project. AVTEC has always worked closely with building trade apprenticeship programs so AVTEC graduates can continue training through registered apprenticeships in many of these occupations.

While AVTEC grows in these areas, it continues to offer best-in-class maritime training. AVTEC has world-class marine simulators, the most advanced in the state, and the only ice navigation course in the country. AVTEC is currently working with the local Chamber of Commerce and others on the updated Seward Maritime Industrial Center.

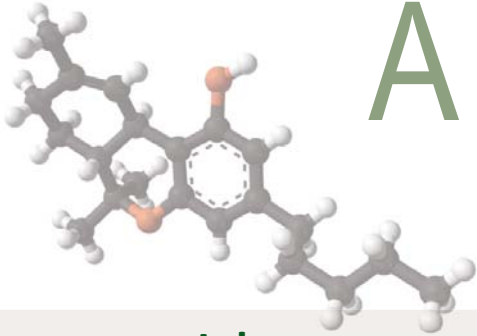
I'm happy the governor had an opportunity to visit AVTEC recently and try out the simulators. With the centrality of maritime jobs in shipping and resource development, AVTEC must continue to offer training for an industry that is a cornerstone in our state's economy.

Across the country, higher education keeps getting more expensive even though many families cannot afford the tuition. I'm proud that in Alaska, generations of workers have started their careers with affordable training at AVTEC. I would confidently tell any parent that AVTEC is a great place for their daughter or son to train to enter the workforce within a couple of years.



Follow the Alaska Department of Labor and Workforce Development on Facebook (facebook.com/alaskalabor) and Twitter (twitter.com/alaskalabor) for the latest news about jobs, workplace safety, and workforce development.

MARIJUANA: A new industry



Jobs, wages, and tax revenue are on a steady rise

By **KARINNE WIEBOLD**

Alaska's marijuana industry is still in its infancy. Voters legalized recreational use in 2014, but marijuana wasn't available commercially until 2016. Most licenses are less than a year old, and many licensed marijuana businesses don't yet show up in wage and salary records because they don't have employees. However, initial data show a steady increase in tax revenue, wages and employment (see Exhibit 1), and the number of licenses in Alaska.

New regulations took time

In late 2014, Alaskans voted to “tax and regulate the production, sale, and use of marijuana in Alaska.” The law went into effect Feb. 25, 2015, allowing people over 21 to carry up to an ounce of marijuana and have up to six plants at home. While personal stashes were clearly no longer contraband, there was not yet a legal mechanism for buying and selling.

Before marijuana could become available for pur-

An ambiguous legal history

Alaska has a complicated history with the legality of marijuana use, a battle that continued for nearly 40 years until 2014, when a ballot initiative legalized and began the process of regulating and taxing recreational marijuana.

Eight other states and the District of Columbia have legalized recreational marijuana possession so far, but Alaska is the only state where courts have decided it's constitutionally protected. In 1975, the Alaska Supreme Court held in *Ravin v. State* that the Alaska Constitution's right to privacy protected an adult's right to possess and use a small amount of marijuana.

Legislators decriminalized marijuana shortly thereafter but subjected those found possessing it to a civil fine of up to \$100. The civil fine conflicted with the *Ravin* decision, and five years later, the Legislature resolved the conflict by eliminating any civil or criminal penalty for an adult possessing

less than four ounces of marijuana for personal use.

Then in 1990, voters passed a ballot initiative that recriminalized all marijuana possession, reintroducing confusion and apparent constitutional conflict. Another ballot initiative successfully decriminalized marijuana for medical use in 1998, and established rules for obtaining a doctor's certification and registering with the state to obtain an identification card, which allowed limited possession of marijuana and marijuana plants.

The Alaska Supreme Court weighed in again in 2003 when it declined to hear the state's appeal of a lower court's decision, in *Noy v. State*, that the state could not enforce statutes that restricted Alaska residents' right to possess less than four ounces of marijuana.

The Legislature criminalized marijuana use again in 2006, although legislators acknowledged at the time that another court challenge would likely follow. It did — and the debate continued until legalization in 2014.

chase, the law required establishment of a Marijuana Control Board to create industry regulations and oversee licensing and enforcement, much like the Alcohol Control Board does for liquor sales. The board, established by House Bill 123 in May 2015 and housed in the Department of Commerce, Community, and Economic Development, adopted regulations that became effective Feb. 21, 2016.

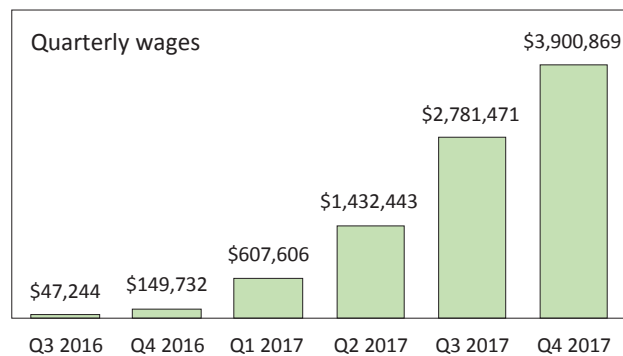
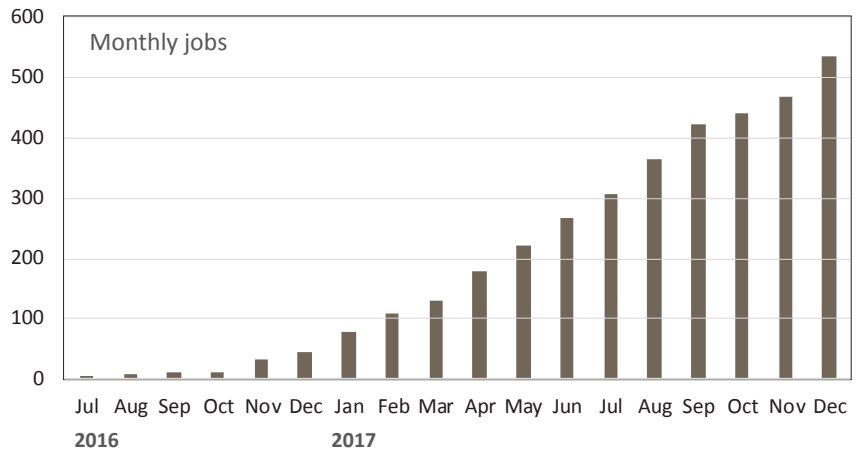
Each stage requires a separate license

The department’s Alcohol and Marijuana Control Office grants licenses for each distinct part of the marijuana industry: cultivation, product manufacturing (such as concentrates or edibles), laboratory testing, and retail. Each license must be renewed annually and updated for ownership, business practices, production techniques, and products sold. (See Exhibit 2.)

A business that is “vertically inte-

1 Marijuana Workers and Wages

ALASKA, 2017



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

2 Types of Recreational Marijuana Licenses and Their Costs

ALASKA, APRIL 2018

License or permit type	Description	Application fee*	Annual fee
Retail marijuana store	Sell marijuana to consumers	\$1,000 initial, \$600 renewal	\$5,000
Limited marijuana cultivation facility (under 500 ft of cultivation)	Plant, propagate, cultivate, harvest, trim, dry, cure, package, and label marijuana for sale to stores or manufacturing facilities	\$1,000 initial, \$600 renewal	\$1,000
Marijuana cultivation facility	Plant, propagate, cultivate, harvest, trim, dry, cure, package, and label marijuana for sale to stores or manufacturing facilities	\$1,000 initial, \$600 renewal	\$5,000
Marijuana concentrate manufacturing facility	Purchase marijuana from a licensed cultivator or other manufacturer and extract marijuana concentrate	\$1,000 initial, \$600 renewal	\$1,000
Marijuana product manufacturing facility	Purchase marijuana from a licensed cultivator or other manufacturer and extract marijuana concentrate or manufacture, refine, process, and cook marijuana products with specific product approval	\$1,000 initial, \$600 renewal	\$5,000
Marijuana testing facility	Test, analyze, and certify for potency, moisture content, pesticide/solvent residue, mold, mildew, bacteria, or other contaminants in marijuana or marijuana product	\$1,000 initial, \$600 renewal	\$1,000
Marijuana handler permit	Required for each licensee, employee, or agent of a marijuana establishment who sells, cultivates, manufactures, tests, or transports marijuana	–	\$50 every 3 years

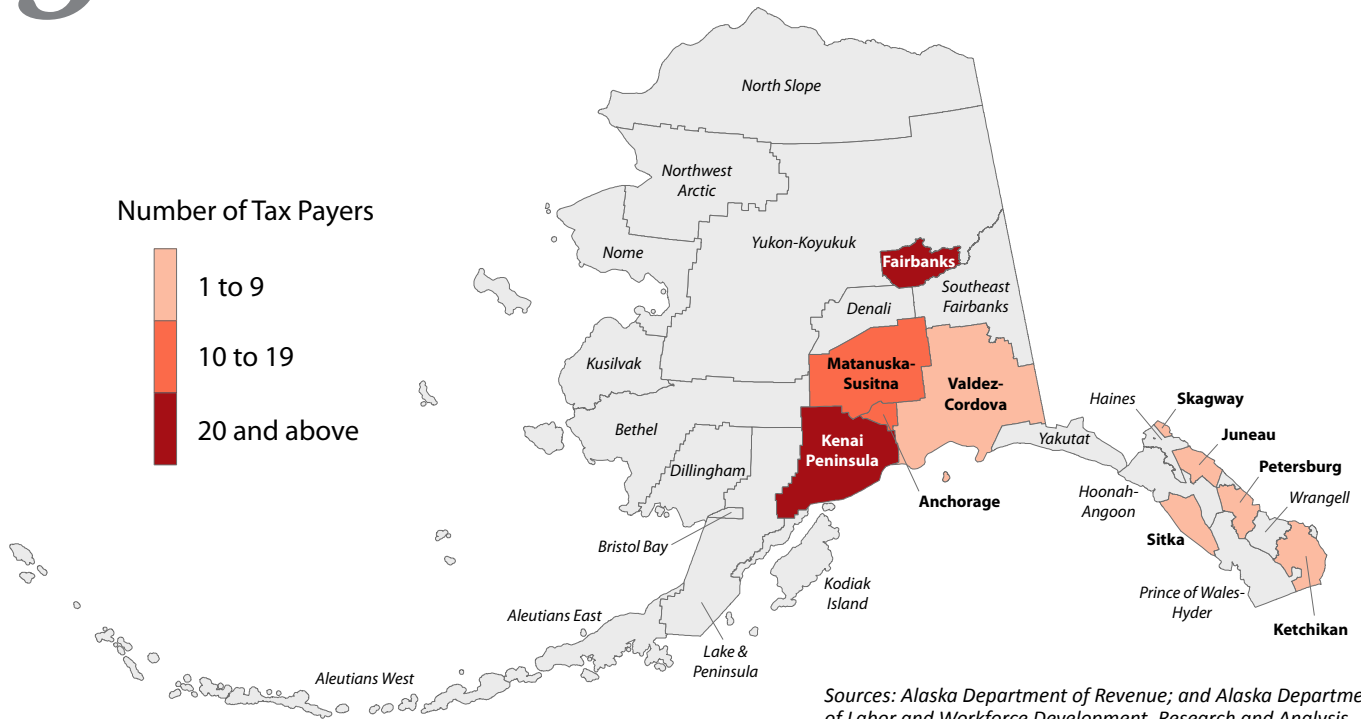
*Licenses must be renewed annually.

Source: 3 AAC 306 Regulations for the Marijuana Control Board

3

Marijuana Cultivators Concentrated in Southcentral

BY NUMBER OF LICENSEES WHO PAID EXCISE TAX IN 2017



Sources: Alaska Department of Revenue; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

grated,” meaning it both grows and sells marijuana or even manufactures edible products, must have a separate license for each business component. There are no restrictions on vertical integration with the exception of testing facilities, which must remain autonomous. A testing business may not hold any other marijuana industry license, and neither the license holders nor any of their employees or agents may own or have a direct or indirect financial interest in another marijuana-licensed business.

The Marijuana Control Board uses 50 percent of application fee revenue plus all of the license fees (which range from \$1,000 to \$5,000) to cover the administrative costs of regulating the industry. The board shares the other half of what it collects in application fees with local governments to offset the costs of their review process. Local governments can restrict or prohibit commercial marijuana through ordinance or a vote and can weigh in on applications based on their own restrictions and requirements.

The board granted the first license in July of 2016 to a marijuana cultivation facility in Fairbanks and approved four more licenses later that year, although

About the data

This article's data, which come from employers who pay in to the unemployment insurance system, are limited to businesses that hold a license for commercial recreational marijuana. The data can't capture all licensed marijuana-related employment and wages, however, as many licensees have no employees and some, such as owner-operators, aren't covered by unemployment insurance.

Other businesses and workers have some connection to the marijuana industry but their jobs and wages aren't included here if they aren't required to hold licenses. Examples are state marijuana regulators and enforcement workers and those who provide the mandated educational course for people seeking a handler permit.

half were not effective until 2017. The big jump came in 2017 with approval of 168 licenses. Nine licenses were granted in the first two months of 2018, with 445 more in process. That doesn't necessarily mean that many new businesses are on the horizon, though, because a single enterprise can hold mul-

tiple licenses and other applications might not be approved.

In total, Alaska has 182 active licenses, 160 of which were effective in 2017 or before.

All associated must have permit

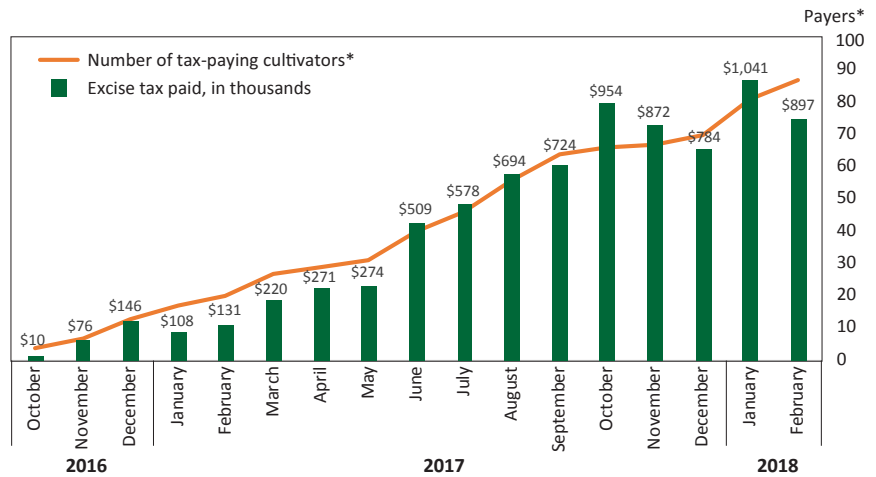
Everyone working in the industry is required to obtain a \$50, three-year marijuana handler permit, even those who check the identification of people coming in the door. Getting a permit requires taking an educational course and exam on statutes, the effects of consumption, how to identify impaired users, how to screen identification, how to prevent unlawful use, and the possible penalties for violations. Seven small companies

emerged to provide the mandatory course, with fees ranging from \$45 to \$75.

Alaska has 3,872 active permits. That means just shy

4 Marijuana Tax Revenues, Payers On The Rise

ALASKA, EXCISE TAXES COLLECTED, OCT 2016 TO FEB 2018



*Reflects the number of cultivators that paid excise tax, which is collected at the time of manufacture

Source: Alaska Department of Revenue

5 How States Tax Recreational Marijuana and Limit Possession

AMOUNTS ALLOWED AND TAXATION, APRIL 2018

State	Legalized	Plants	Max quantity	State excise tax	State sales tax	Other taxes
Alaska	2014	6 plants	1 oz	Excise wholesale, bud/flower \$50/oz, rest of plant \$15/oz	No state sales tax	Local sales and excise taxes where applicable
California	2016	6 plants	1 oz	15% excise retail	7.25%	Cultivation taxes: fresh plant \$1.29/oz, flower \$9.25/dry weight oz, leaves \$2.75/dry weight oz, local sales taxes as applicable
Colorado	2012	6 plants	1 oz	15% excise wholesale, 15% excise retail	Exempt from 2.9% state sales tax	Local sales tax as applicable
Maine*	2016	6 plants	2.5 oz	—	—	—
Massachusetts	2016	6 plants	carry 1 oz/ 10 oz at home	10.75% excise retail	6.25%	Local sales tax up to 3%
Nevada	2016	6 plants	1 oz	15% excise wholesale, 10% excise retail	6.85%	Local sales tax as applicable
Oregon	2014	4 plants	1 oz	17% excise retail	No state sales tax	Local retail excise tax up to 3% (when voter approved)
Vermont*	2018	6 plants	1 oz	—	—	—
Washington	2012	0 plants	1 oz	37% excise retail	6.5%	Local sales tax as applicable
District of Columbia	2014	6 plants	2 oz	No retail sales allowed	—	—

*Regulations, including taxation, are in process.

Source: Alaska Department of Labor, Research and Analysis Section; and each state's revenue department

of 4,000 people in Alaska have or have had some association with the marijuana industry.

Growth in jobs and wages

This new industry creates a small number of direct jobs, including nursery workers, laboratory testers, and retail sales workers. By extension it creates or supports jobs in other industries as well, such as accountants and state regulators, although those are outside the scope of this article. See the sidebar on page 6.)

Just nine marijuana businesses were open in the second half of 2016, some of which hadn't yet received licenses to sell marijuana but were generating jobs and paying wages in the interim. The industry grew rapidly once it had its regulatory footing, to 73 businesses in 2017 with 62 of those reporting jobs and wages.

In terms of paid employees, the industry averaged just 19 per month in the second half of 2016. By January 2017, 79 people worked for a licensed marijuana business, excluding owner-operators. That more than doubled by April, to 180, and doubled again by August, to 365. Employment continued to grow each subsequent month, reaching 536 in December. (See Exhibit 1 on page 5.)

The industry paid just \$197,000 in total wages in 2016, and wages also rose dramatically in 2017. In the fourth quarter, the industry paid nearly \$4 million in wages and the total was about \$8.5 million for all of 2017. The lion's share of wages were paid in Anchorage, at \$3.8 million, followed by Fairbanks at \$2.1 million.

How Alaska taxes marijuana

Due to conflict between state and federal marijuana laws (marijuana is still illegal under federal law), the marijuana industry is primarily cash-based, including tax payments. The Alaska Department of Revenue reports that 74 percent of taxes have been paid in cash, with the remainder paid by cashier's check, money order, bank check, or wire transfer.

Marijuana is subject to an excise tax, which has two common definitions, both of which apply in Alaska's

case. An excise tax is a tax on a particular good or service, such as gasoline, rather than a broadly applied tax like a general sales tax. It can also be imposed during manufacture rather than when it's sold.

Alaska collects tax when marijuana is transferred or sold to retail or manufacturing facilities. Flower, the highest value part of the plant, is taxed at \$50 per ounce while leaves and trim (used for manufacturing food and concentrates) is taxed at \$15 per ounce.

Four businesses paid the industry's first taxes in October 2016, contributing \$10,406 combined. Tax revenue has increased nearly every month since, topping \$1 million in January 2018. (See Exhibit 4 on page 7.) In all, the marijuana industry generated \$8.3 million in taxes in its first 17 months, not including any local sales taxes. Juneau, for example, has a 5 percent sales tax. Fairbanks does not collect sales tax, and while Anchorage doesn't either, it imposes an additional 5 percent excise tax on marijuana sales.

All marijuana tax the state collects goes into its general fund, but half is earmarked for the Recidivism Reduction Fund, authorized in 2016 by Senate Bill 91 as part of a criminal reform package. The other half is available for unrestricted general fund use.

Taxation varies by state

As states consider marijuana tax policy, they balance the cost of regulating the industry and revenue generation with the awareness that over-taxation may drive demand back to the black market.

The resulting tax mechanisms vary among states. For example, Alaska has a fairly simple tax structure with flat excise tax rates. So does Oregon, which has a 17 percent excise tax, no sales tax, and the local option to impose up to an additional 3 percent.

California's tax structure is more complicated, with an excise tax, a cultivation tax that varies by the type of plant material, and a regular state sales tax. (See Exhibit 5 on page 7.) Colorado imposes a 15 percent excise tax on wholesale marijuana and an additional 15 percent on retail sales while exempting it from regular sales tax.

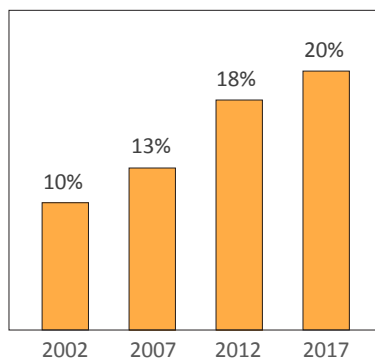
Continued on page 12

The marijuana industry paid \$8.5 million in wages in 2017.

MORE WORKERS ARE 55 AND OVER

An increasing share of Alaska workers are older

1 More 55-Plus Workers ALASKA, 2002 TO 2017



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

About the data

This article covers roughly 80 percent of all wage and salary workers. It excludes federal workers, those for whom age data weren't available, and others not required to pay unemployment insurance taxes, such as the self-employed.

While federal workers aren't included here, the federal workforce skews older in places with more administrative jobs and younger in military installations, according to the U.S. Office of Management and Budget.

By MALI ABRAHAMSON

While senior citizens make up a smaller share of Alaska than most states, Alaska has the fastest-growing senior population in the nation. The state's 65-plus population grew by 44 percent between 2010 and 2016, and more growth is on the horizon. People are also staying in the workforce longer than in previous decades, which is a nationwide trend. (See the sidebar on the next page.)

An aging population and the growing tendency to work later in life mean a growing share of Alaska's workforce is 55 or older. The percentage has increased markedly, from 10 percent of the resident workforce in 2002 to 20 percent in 2017. (See Exhibit 1.)

The growth in older workers has been fueled by the large baby boomer generation — those born between 1946 and 1964 — the youngest of whom turned 53 in 2017 while the oldest reached their early 70s. This group has shifted the overall age profile of Alaska workers up from a decade ago, when most baby boomers were in their 40s and 50s and the sizable echo boom generation, their children, were mostly in their 20s. (See Exhibit 2.)

Older workers make more in most jobs

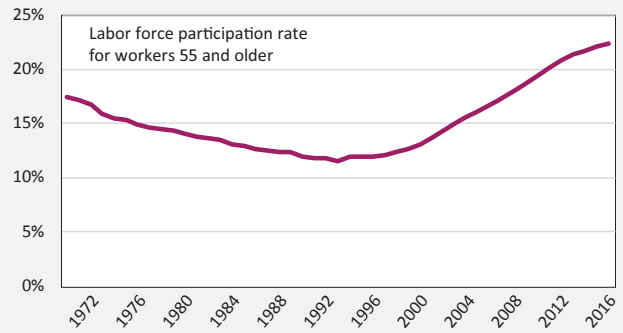
Working longer means more time to build up a career and salary, and workers 55 and older stand out for earning higher wages across the board. They make more than younger workers in nearly every occupation (see Exhibit 3), especially those between 55 and 64, the highest-earning age group. (Wages drop off after age 65, when 40 percent of those still working make less than \$15,000 a year on average, which suggests

Working later in life is a nationwide trend

Workplace demographics are shifting older as the population ages, and Americans are also staying in the workforce longer. The labor force participation rate, or the percentage of people 55 or older who are either working or looking for work, topped 20 percent in recent years and is projected to keep increasing in the near future.

According to the U.S. Bureau of Labor Statistics, people are continuing to work for a range of reasons. Overall, they're healthier and more educated than previous generations and they have longer life expectancies. Some keep working due to economic necessity.

Another factor in the shift to an older workforce is that



Source: U.S. Bureau of Labor Statistics

while older people are remaining in the labor force longer, younger groups' labor force participation rates have been decreasing for decades.

many work part time.)

While older workers made up 20 percent of the Alaska workforce in 2017, they took home 23 percent of the \$14 billion in total wages. (See Exhibit 4.)

The occupations with the highest percentages of older workers tend to be the high-paying jobs that take years of experience to reach. For example, older workers held 25 percent of top executive positions in 2017 and 28 percent of postsecondary teaching jobs, such as university professorships. Older people are also likely to work in government, where wages are often higher. They represent 25 percent of public sector workers but just 16 percent of private sector workers.

While retail sales has the largest *number* of older workers, they are just 11 percent of the retail workforce. Retail sales worker is the most common occupation for Alaskans of all ages.

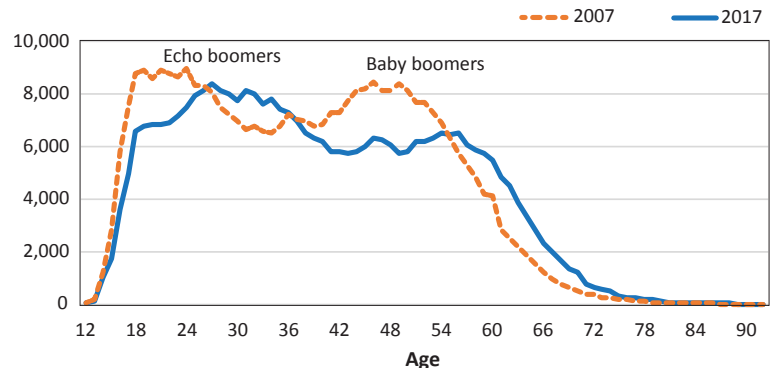
A wider gender pay gap

Among older workers, men out-earn women in most industries, and the gender pay gap is wider than among younger workers. Older women have the most wage parity in local government, where they earn 84 cents on their male counterparts' dollar.

Older women are more likely than men to hold gov-

2 Alaska's Worker Age Profile Shifted

NUMBER OF WORKERS BY AGE, 2007 AND 2017



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

ernment jobs in general, partly because some traditionally female positions such as teachers and nurses are in the public sector. Women represent 59 percent of older workers in state and local government, which includes public schools.

Wages for older women in government are an exception to the higher-earning age trend, however, as they don't earn much more than their younger counterparts.

Fewer in highly seasonal workforces

Across the state, areas with older populations such as Southeast also tend to have higher percentages of older workers. An example is Hoonah-Angoon, where people 55 and older represent 39 percent of the

3

Older Workers Make More in Almost All Occupations

OCCUPATIONS WITH THE MOST WORKERS 55 AND OLDER, ALASKA, 2017

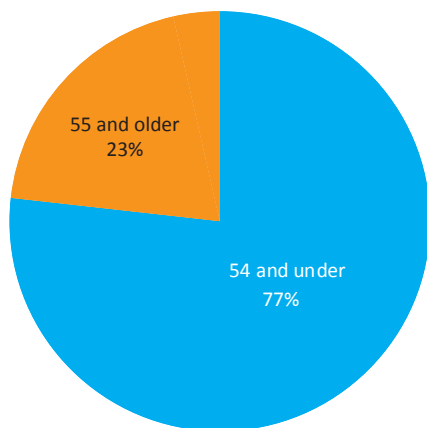
Occupation	Number of workers 55 and older	Median wage, 55 and older	Median wage, all workers	Percent workers 55 and older
Retail Sales Workers	3,597	\$20,400	\$13,246	11%
Construction Trades Workers	3,093	\$44,501	\$40,385	13%
Health Diagnosing and Treating Practitioners	2,672	\$76,913	\$69,292	17%
Other Office and Administrative Support Workers	2,564	\$33,301	\$25,470	14%
Other Management Occupations	2,562	\$73,775	\$66,680	22%
Building Cleaning and Pest Control Workers	2,309	\$23,369	\$13,662	16%
Top Executives	2,241	\$81,815	\$71,274	25%
Motor Vehicle Operators	2,222	\$30,480	\$28,074	19%
Information and Record Clerks	2,181	\$32,625	\$27,206	14%
Other Installation, Maintenance, and Repair Occupations	1,960	\$49,237	\$42,474	18%
Other Personal Care and Service Workers	1,952	\$15,294	\$13,194	16%
Secretaries and Administrative Assistants	1,799	\$39,882	\$33,787	18%
Financial Clerks	1,732	\$38,910	\$34,410	16%
Other Teachers and Instructors	1,708	\$9,264	\$10,823	23%
Other Education, Training, and Library Occupations	1,664	\$21,812	\$17,678	19%
Preschool, Primary, Secondary, and Spec Ed Teachers	1,617	\$64,797	\$57,563	16%
Material Moving Workers	1,447	\$30,857	\$19,837	12%
Counselors, Social Workers, Other Community/Social Svc Specialists	1,433	\$44,716	\$39,637	18%
Food Processing Workers	1,414	\$18,248	\$10,158	7%
Business Operations Specialists	1,345	\$57,202	\$54,148	20%
Cooks and Food Preparation Workers	1,272	\$21,467	\$11,967	9%
Operations Specialties Managers	1,152	\$73,719	\$68,872	21%
Food and Beverage Serving Workers	1,108	\$16,663	\$10,585	6%
Vehicle and Mobile Equip Mechanics, Installers, Repairers	1,056	\$59,164	\$46,356	13%
Material Recording, Scheduling, Dispatching, and Distributing Workers	1,021	\$36,347	\$28,096	13%
Engineers	941	\$90,585	\$87,171	17%
Financial Specialists	920	\$66,243	\$57,256	17%
Health Technologists and Technicians	913	\$50,717	\$41,952	14%
Postsecondary Teachers	895	\$54,202	\$55,097	28%
Other Transportation Workers	821	\$31,469	\$25,200	16%

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

4

A Larger Share of Wages

PERCENT OF TOTAL ALASKA WAGES, 2017



Older people are 20 percent of workers but they make 23 percent of total wages.

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

population and 22 percent of the workforce. Wrangell's and Yakutat's numbers are similar.

Areas with younger populations, such as Kusilvak and Bethel, tend to have younger workforces and so do places known for their large seasonal workforces. Examples include Aleutians East Borough and Bristol Bay, with their large fishing industries, and Skagway with its summer tourism. While 25 percent of Aleutians East's population is 55 or older, that group represents just 8 percent of its workers. For Bristol Bay it's 34 percent and 6 percent, respectively, and in Skagway it's 29 percent and 8 percent.

Mali Abrahamson is a research analyst in Juneau. Reach her at (907) 465-6029 or mali.abrahamson@alaska.gov.

5 Workers 55 and Older by Area

ALASKA, 2017

Borough or census area	Percent of workers 55+	Population that is 55+	Borough or census area	Percent of workers 55+	Population that is 55+
Aleutians East Borough	8%	25%	Lake and Peninsula Borough	12%	22%
Aleutians West Census Area	16%	24%	Matanuska-Susitna Borough	17%	24%
Anchorage, Municipality	17%	23%	Nome Census Area	17%	18%
Bethel Census Area	15%	17%	North Slope Borough	19%	20%
Bristol Bay Borough	6%	34%	Northwest Arctic Borough	16%	17%
Denali Borough	9%	29%	Petersburg Census Area	17%	34%
Dillingham Census Area	14%	22%	Prince of Wales-Hyder Census Area	19%	31%
Fairbanks North Star Borough	16%	22%	Sitka, City and Borough	16%	30%
Haines Borough	18%	41%	Skagway, Municipality	8%	29%
Hoonah-Angoon Census Area	22%	39%	Southeast Fairbanks Census Area	21%	29%
Juneau, City and Borough	18%	27%	Valdez-Cordova Census Area	16%	29%
Kenai Peninsula Borough	19%	33%	Wrangell, City and Borough	21%	40%
Ketchikan Gateway Borough	19%	30%	Yakutat, City and Borough	21%	32%
Kodiak Island Borough	19%	23%	Yukon-Koyukuk Census Area	23%	29%
Kusilivak Census Area	14%	14%			

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

MARIJUANA

Continued from page 8

Effects on Alaska's economy

Creating jobs and wages and generating tax revenue are two measurable economic effects of the decision to tax and regulate the use of marijuana in Alaska. But while these are still growing, the marijuana industry will likely remain a tiny piece of the overall economy.

Licensed marijuana employment reached 536 in December 2017, which was less than 0.2 percent of total Alaska employment. Similarly, the \$8.3 million in marijuana taxes the state collected in the

first 17 months was just a fraction of a percent of Alaska's total tax revenue.

The emerging marijuana industry affects Alaska's economy in other ways that are outside this article's scope but worth noting. As just one example, legalization combined with regulation and taxation moved some revenue from the black market into legal wages, profit, and taxes — in essence, it shifted "off the books" money onto the books. Money spent legally on marijuana is probably a combination of money that would have been spent on the black market and money that would have been spent on other things.

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

INCOME UP SLIGHTLY IN 2017

Alaska's personal income growth remains historically low

By NEAL FRIED

Alaska's total personal income increased by 0.4 percent in 2017 after declining slightly in 2016. (See Exhibit 1.)

Personal income is money people receive from all sources, not just what they earn by working. (See the sidebar on page 18 for what personal income includes.)

The decline in 2016 was due to the recession, a drop in earnings, and a smaller Alaska Permanent Fund Dividend. Alaska was one of just three states whose personal income declined that year.

Earnings share is down

Although total personal income resumed growth in 2017, earnings fell again as Alaska's economy continued to shed jobs. However, the increases in dividends, interest, and rent and in transfer payments more than offset that loss. Earnings fell by \$316 million while the other two categories grew by \$191 million and \$300 million, respectively. The boost came from the burgeoning stock market and in-

1 Slight Increase After 2016 Drop

ALASKA TOTAL PERSONAL INCOME, 2006 TO 2017



Source: U.S. Bureau of Economic Analysis

creases in Social Security checks and other transfer payments.

Growth lags historical averages

The state's 25-year average for personal income growth is 4.9 percent per year, but over the past decade, total personal income grew by an average of

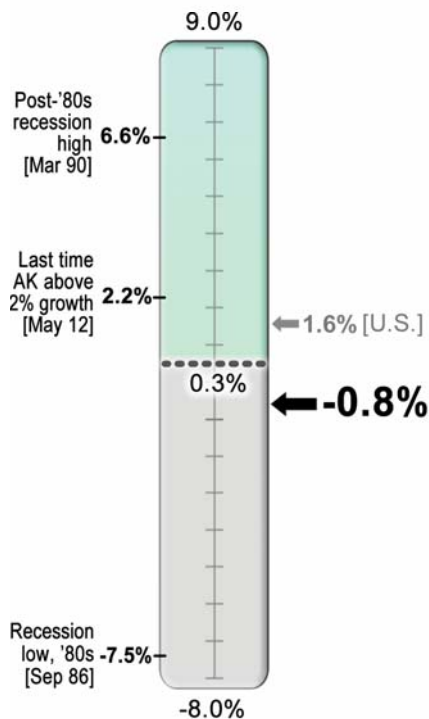
Continued on page 18

Gauging Alaska's Economy



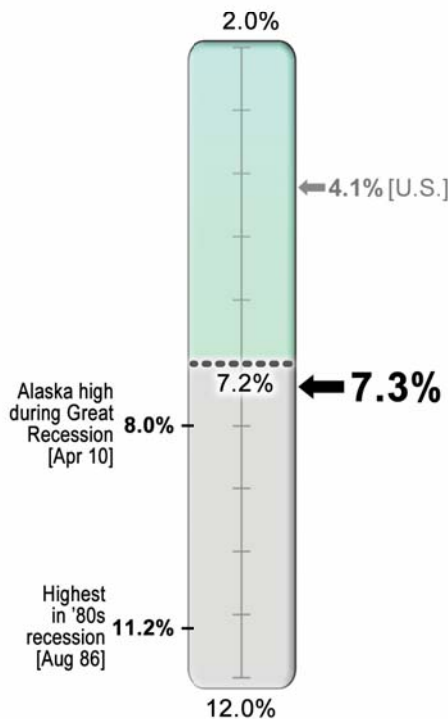
Job Growth

March 2018
Over-the-year percent change



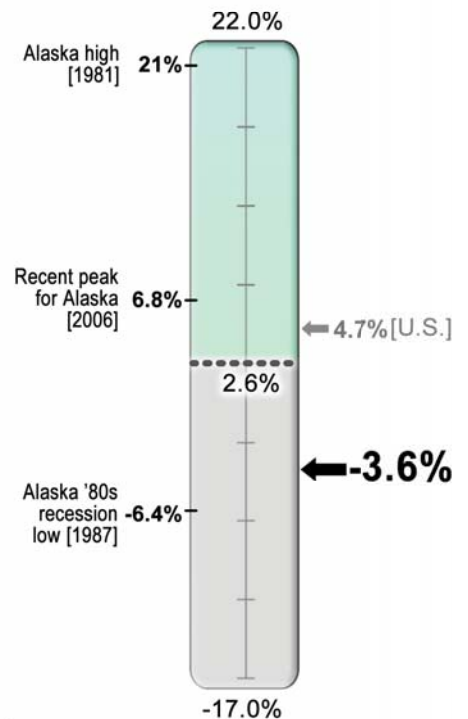
Unemployment Rate

March 2018
Seasonally adjusted



Wage Growth

3rd Quarter 2017
Over-the-year percent change



- March was the 29th consecutive month Alaska has recorded job losses.
- Alaska had 25 consecutive months of job losses during the state's 1980s recession, although the magnitude of the losses in the '80s was much larger as a percentage of total jobs.
- Job losses during the current recession were at their worst in September 2016 (-2.5 percent).

- Alaska's unemployment rate is the highest in the nation, but is only one-tenth of a percentage point above its 10-year average.
- Unemployment rates are more complicated as an economic indicator than job growth, although most of the time high rates signal economic weakness.
- In the short term, unemployment rates can rise because a state is especially attractive to job seekers (a positive) or fall because people have given up on looking for work (a negative).

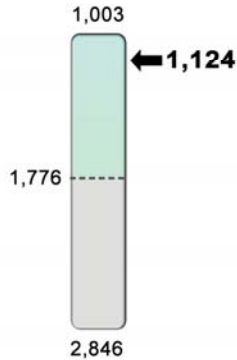
- Wage growth or decline is one of the most basic and useful measures of overall economic health.
- Resumed and sustained wage growth, when it occurs, will be one of the best indicators that Alaska's recession has ended.
- After being up slightly in the first quarter, wages fell in the second and third quarters of 2017 compared to their year-ago levels.

Gauging Alaska's Economy

----- ALASKA'S 10-YR AVERAGE
 ← CURRENT ALASKA

Initial Claims

Unemployment, week ending April 7, 2018†

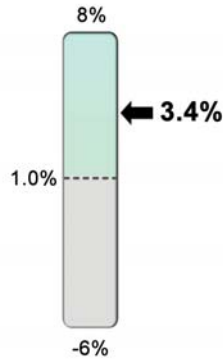


➤ For a variety of reasons, initial claims are well below the 10-year average despite job losses.

† Four-week moving average ending with the specified week

GDP Growth

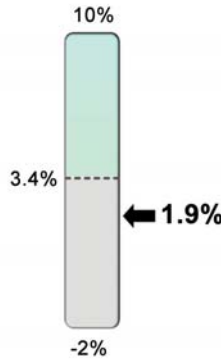
3rd Quarter 2017
Over-the-year percent change



➤ Gross domestic product is the market value of all goods and services. It's promising for economic recovery that growth has been positive for three consecutive quarters after declining for the previous 17 consecutive quarters.

Personal Income Growth

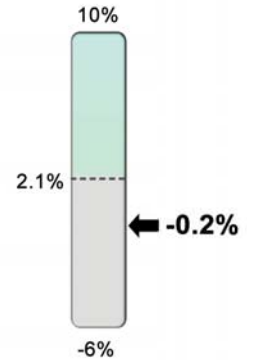
4th Quarter 2017
Over-the-year percent change



➤ Personal income includes wages as well as government transfer payments (such as Social Security, Medicaid, and the PFD) and investment income.

Change in Home Prices

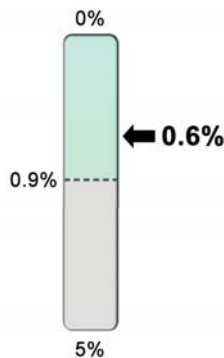
4th Quarter 2017
Over-the-year percent change



➤ Home prices include only those for which a commercial loan is used. This indicator tends to be volatile from quarter to quarter.

Foreclosure Rate

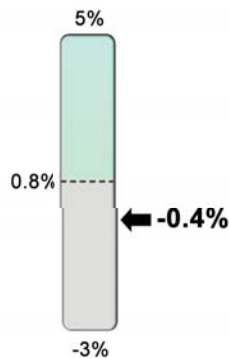
4th Quarter 2017



➤ Foreclosure rates remain very low, highlighting how different the current recession is from the '80s recession when foreclosure rates exceeded 10 percent.

Population Growth

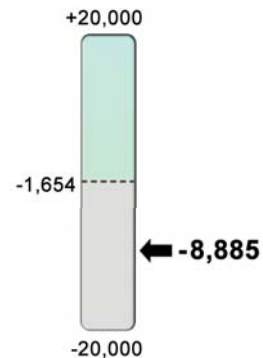
2016 to 2017



➤ The state's population has remained remarkably stable during the state's recession, although 2017 was the first year of population decline since 1988.

Net Migration

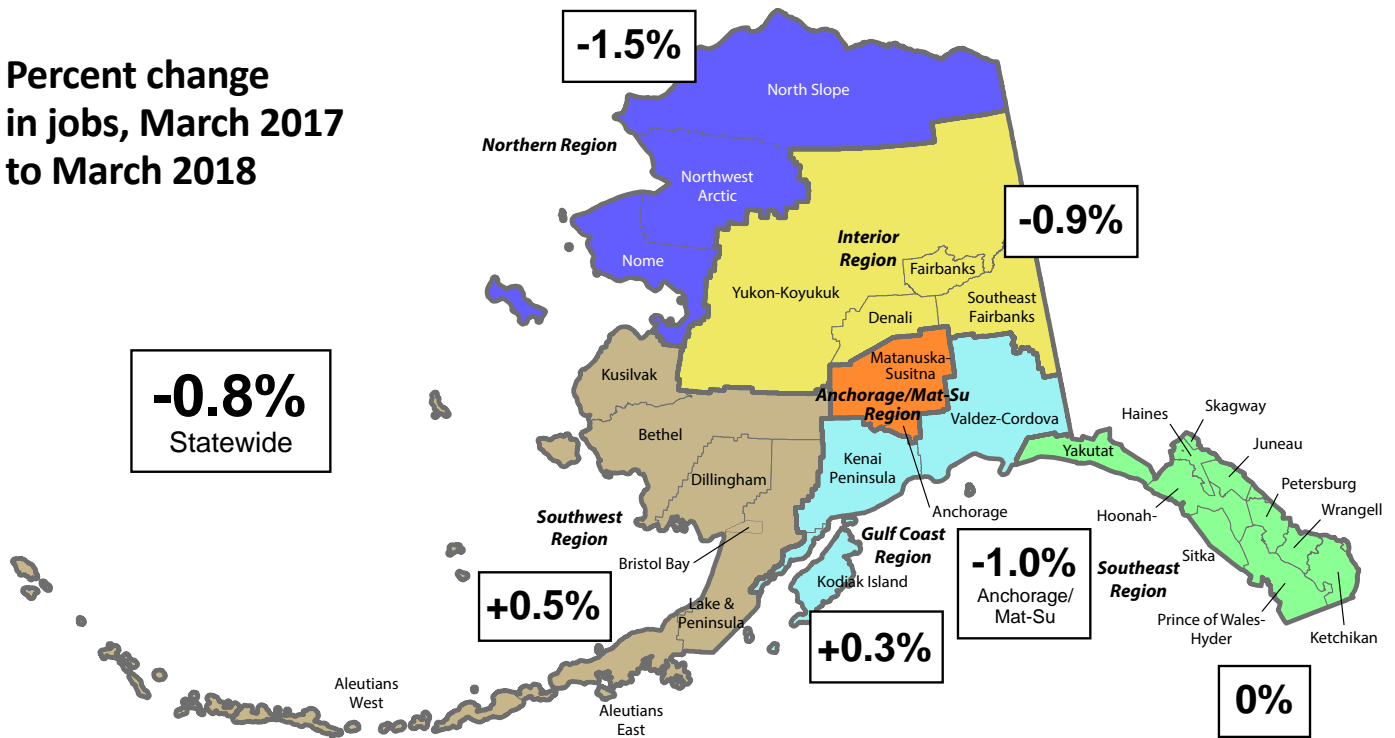
2016 to 2017



➤ The state had net migration losses for the fifth consecutive year in 2017, although natural increase (births minus deaths) offset those losses each year until 2017.

Employment by Region

Percent change
in jobs, March 2017
to March 2018



Unemployment Rates

Seasonally adjusted

	Prelim.		Revised
	3/18	2/18	3/17
United States	4.1	4.1	4.5
Alaska	7.3	7.3	7.1

Not seasonally adjusted

	Prelim.		Revised
	3/18	2/18	3/17
United States	4.1	4.4	4.6
Alaska	7.9	8.2	7.7

Regional, not seasonally adjusted

	Prelim.			Revised		
	3/18	2/18	3/17	3/18	2/18	3/17
Interior Region	8.0	8.5	7.7			
Denali Borough	18.2	19.1	21.3			
Fairbanks N Star Borough	6.9	7.4	6.6			
Southeast Fairbanks Census Area	12.4	12.9	11.7			
Yukon-Koyukuk Census Area	20.1	21.5	20.1			
Northern Region	11.7	12.3	11.7			
Nome Census Area	13.2	13.6	12.2			
North Slope Borough	6.7	7.2	7.1			
Northwest Arctic Borough	16.1	17.0	17.0			
Anchorage/Mat-Su Region	7.2	7.5	7.0			
Anchorage, Municipality	6.4	6.7	6.2			
Mat-Su Borough	9.7	10.0	9.7			
Southwest Region	10.2	10.5	9.8			
Aleutians East Borough	1.8	1.9	1.8			
Aleutians West Census Area	2.5	2.5	2.4			
Bethel Census Area	13.9	14.6	13.7			
Bristol Bay Borough	16.3	18.1	14.3			
Dillingham Census Area	9.7	10.5	9.8			
Kusilvak Census Area	22.6	22.3	20.7			
Lake and Peninsula Borough	15.5	16.5	13.8			
Gulf Coast Region	9.2	9.7	9.0			
Kenai Peninsula Borough	9.9	10.3	9.8			
Kodiak Island Borough	5.0	5.4	4.7			
Valdez-Cordova Census Area	11.2	12.2	11.0			
Southeast Region	7.8	8.3	7.5			
Haines Borough	15.1	16.9	12.2			
Hoonah-Angoon Census Area	20.5	22.3	17.9			
Juneau, City and Borough	5.2	5.4	5.2			
Ketchikan Gateway Borough	8.0	8.1	7.8			
Petersburg Borough	12.5	12.3	11.0			
Prince of Wales-Hyder Census Area	14.5	15.9	13.7			
Sitka, City and Borough	5.0	5.3	5.0			
Skagway, Municipality	21.1	25.3	21.0			
Wrangell, City and Borough	9.2	10.5	9.0			
Yakutat, City and Borough	9.8	12.2	10.0			

How Alaska Ranks

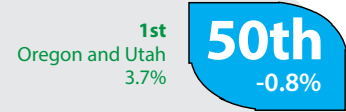
Unemployment Rate¹



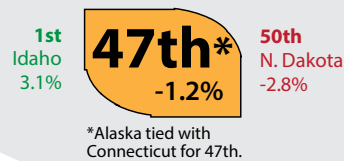
Job Growth²



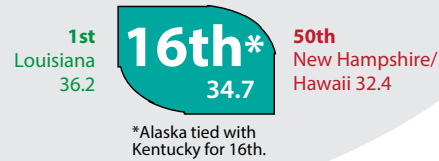
Private Sector Job Growth²



Local Government Job Growth²



Average Weekly Hours Worked, Private Sector³



¹March seasonally adjusted unemployment rates

²March employment, over-the-year percent change. Local government includes K-12 public schools and tribal government. Source of Alaska numbers: Alaska Department of Labor and Workforce Development, Research and Analysis Section

³March, U.S. Bureau of Labor Statistics

Sources are U.S. Bureau of Labor Statistics and Alaska Department of Labor and Workforce Development, Research and Analysis Section, unless otherwise noted.

Other Economic Indicators

	Current		Year ago	Change
Anchorage Consumer Price Index (CPI-U, base yr 1982=100)	219.131	2nd half 2017	218.660	+0.9%
Commodity prices				
Crude oil, Alaska North Slope, * per barrel	\$66.60	March 2018	\$51.81	+28.55%
Natural gas, residential, per thousand cubic feet	\$8.93	Jan 2018	\$9.38	-4.80%
Gold, per oz. COMEX	\$1,337.70	4/20/2018	\$1,283.80	+4.20%
Silver, per oz. COMEX	\$17.18	4/20/2018	\$17.94	-4.24%
Copper, per lb. COMEX	\$315.75	4/20/2018	\$255.10	+23.77%
Zinc, per MT	\$3,223.00	4/19/2018	\$2,584.00	+24.73%
Lead, per lb.	\$1.06	4/19/2018	\$1.03	+2.91%
Bankruptcies				
	116	Q4 2017	109	+6.4%
Business	4	Q4 2017	10	-60.0%
Personal	112	Q4 2017	99	+13.1%
Unemployment insurance claims				
Initial filings	4,972	March 2018	5,624	-11.59%
Continued filings	46,062	March 2018	54,809	-15.96%
Claimant count	12,670	March 2018	13,947	-9.16%

*Department of Revenue estimate

Sources for pages 14 through 17 include Alaska Department of Labor and Workforce Development, Research and Analysis Section; U.S. Bureau of Labor Statistics; U.S. Bureau of Economic Analysis; U.S. Census Bureau; COMEX; Bloomberg; Infomine; Alaska Department of Revenue; and U.S. Courts, 9th Circuit

PERSONAL INCOME

Continued from page 13

3.4 percent per year.

Among states, Alaska ranked 48th for personal income growth in 2017. Only Iowa and North Dakota ranked lower, due to weak agricultural prices. It's no surprise Alaska is trailing most states in income growth, as much of the nation is in its eighth year of economic expansion: one of the longest stretches in U.S. history.

Although inflation increased by a mere 0.5 percent in 2017, that effectively eliminated the buying power of the 0.4 percent gain in personal income. This trend of slower income growth is not likely to change until Alaska's job growth resumes.

\$56,042 for every woman, man, and child in the state

One of the most popular byproducts of these data is per capita income, which is total personal income divided by the resident population. (See Exhibit 2.) Per capita income is considered a good measurement of economic well-being.

Alaska's per capita income of \$56,042 put us in 10th place among states in 2017, 11 percent higher than the nation overall and just shy of 1 percent higher than the previous year. Alaska ranked eighth in 2016 and fifth in 2015, which was the state's highest ranking in the past decade.

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About the data

Personal income is total income received by all residents in the state from all sources. It includes three main categories:

1. Net earnings (mostly wages and salaries)
2. Dividends, interest, and rents (corporate dividends, income from rent, and interest earned from savings)
3. Transfer payments (income from government or private social insurance programs and in Alaska's case, Alaska Permanent Fund dividends)

2 Alaska's Income is 10th Per Capita

BY STATE, 2017

1	Connecticut	\$70,121
2	Massachusetts	\$65,890
3	New Jersey	\$62,554
4	New York	\$60,991
5	Maryland	\$59,524
6	California	\$58,272
7	New Hampshire	\$57,574
8	Wyoming	\$56,724
9	Washington	\$56,283
10	Alaska	\$56,042
11	North Dakota	\$54,643
12	Virginia	\$54,244
13	Colorado	\$53,504
14	Minnesota	\$53,042
15	Illinois	\$52,808
16	Pennsylvania	\$52,096
17	Hawaii	\$51,939
18	Rhode Island	\$51,503
19	Vermont	\$51,114
	United States	\$50,392
20	Nebraska	\$50,395
21	Delaware	\$49,125
22	South Dakota	\$48,281
23	Wisconsin	\$47,850
24	Kansas	\$47,603
25	Texas	\$46,942
26	Florida	\$46,858
27	Oregon	\$46,361
28	Iowa	\$45,996
29	Ohio	\$45,615
30	Michigan	\$45,255
31	Maine	\$45,072
32	Nevada	\$44,626
33	Tennessee	\$44,266
34	Montana	\$43,907
35	Missouri	\$43,661
36	Louisiana	\$43,491
37	Oklahoma	\$43,449
38	North Carolina	\$43,303
39	Georgia	\$43,270
40	Utah	\$42,043
41	Arizona	\$41,633
42	Indiana	\$41,165
43	Arkansas	\$40,791
44	Idaho	\$40,507
45	South Carolina	\$40,421
46	Alabama	\$39,976
47	Kentucky	\$39,393
48	New Mexico	\$39,023
49	West Virginia	\$37,924
50	Mississippi	\$36,346

Source: U.S. Bureau of Economic Analysis

Employer Resources

Marijuana labor exchange services prohibited

Employers and one-stop job center staff are prohibited from using ALEXsys, Alaska's online labor exchange system, for job orders, job referrals, employer outreach, hiring events, career counseling, or training to fill positions that directly or indirectly promote or support the use, possession, growth, or distribution of marijuana.

ALEXsys is a federally funded system, and federal law

classifies marijuana as an illegal Schedule 1 narcotic (21 U.S.C. 812). Labor exchange services in one-stop job centers cannot be contrary to state or federal law without risking cessation of federal funds.

Employer Resources is written by the Employment and Training Services Division of the Alaska Department of Labor and Workforce Development.

Safety Minute

How to prevent injury when working outdoors

Alaskans are beginning spring outdoor chores such as planting gardens, pruning trees and shrubs, tuning up yard equipment, and working with hand tools. While many of these tasks seem safe and easy, being unintentionally complacent can lead to injury. The following tips will help you stay safe and injury free so you can enjoy working outside this spring.

- Before any outdoor work, hydrate and stretch to avoid injury and exhaustion.
- Unplug or disconnect spark plug wires before servicing engine-powered yard equipment.
- Fix or replace broken handles on shovels, rakes, axes, and other yard implements to avoid splinters or cuts.
- When pruning overhead tree limbs, wear a hard hat and safety glasses and avoid overhead power lines.
- Look out for rainwater or snowmelt when using electrical equipment outside, and plug in to an outlet that is Ground Fault Circuit Interrupter protected, or GFCI, to prevent shock or electrocution.
- Inspect ladders for damage and ensure they are on firm ground before use. The thawed ground may be

soft and unstable, and it may be necessary to secure the ladder.

- Use good body positions or ask for help when lifting heavy items such as bags of soil, lumber, or equipment.
- Keep a straight back and bend at the hips and legs when using shovels. Try not to round your back when lifting the shovel.
- When digging, be aware there may be buried utilities such as gas, power, or steam. Contact utility providers to find out more. (In Alaska, dial 811 to contact the Alaska Dig Line.)
- Make it a habit to wear personal protective equipment such as gloves, safety glasses, ear plugs/muffs, and safety-toed boots.

For more information on safety and health, please contact the Alaska Occupational Safety and Health Consultation and Training program at (800) 656-4972 or visit the federal OSHA Web site at <http://www.osha.gov>.

Safety Minute is written by the Labor Standards and Safety Division of the Alaska Department of Labor and Workforce Development.

