ALASKA ECONOMIC TRENDS OCTOBER 2022

Job projections for 2020-2030

ALASKA DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT • RESEARCH AND ANALYSIS

FROM THE COMMISSIONER

Partnerships are the key to workforce success stories

By Dr. Tamika L. Ledbetter, Commissioner

In this issue of *Trends*, we take an in-depth look at Alaska's 10year industry and occupational projections, which are updated and published every two years.

As commissioner of the Alaska Department of Labor and Workforce Development, I prioritize the development of partnerships with public and private entities that will benefit Alaskans and prepare them for the job opportunities this forecast identifies.

We forged several important al-

liances this summer, including a recent agreement with Yamaha Motor Corporation to expand maritime training opportunities at AVTEC in Seward.

A recent trip to the Manh Cho Mine project near Tok resulted in a partnership with the Delta Mine Training Center to train Alaskans in that area for the high-paying jobs anticipated with the project.

We continue to strengthen other relationships, including with the University of Alaska as we pursue reauthorization of the prestigious USDOT Domestic Center of Maritime Training Excellence for the Alaska Maritime Education Consortium, a partnership between UA and AVTEC.



National Association of State Workforce Agencies photo of Dr. Tamika L. Ledbetter, NASWA Chair

In September, I assumed the duties of the chair of the National Association of State Workforce Agencies, or NASWA. This is another opportunity to collaborate on a national stage and spotlight issues important to Alaska.

Represented by all 50 states, D.C., and the U.S. territories, NASWA is a powerful and unified voice for federal policies that benefit state-level employment and training.

I intend to use my time as chair to promote investment in core workforce training and advocate for policies that encourage youth

employment and opportunities for all.

NASWA is a respected voice for state workforce systems. One of its core values is engaging others with trust and transparency to pursue common goals.

Take every opportunity to reinforce the partnerships that benefit your employees and customers. Build a collaborative workplace, and employees will feel a stronger connection to the organization and its mission. In turn, this will strengthen your organization in the long run.

Contact Dr. Tamika L. Ledbetter, Commissioner, at (907) 465-2700 or commissioner.labor@alaska.gov.



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A mother bear in Katmai National Park, photo courtesy of Flickr user Kasey Mueller License: creativecommons.org/licenses/by-nc-sa/2.0/

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Trends is a nonpartisan, data-driven magazine that covers a variety of economic topics in Alaska.

ON THIS SPREAD: The background image for 2022 is a sparkly Alaska shoreline, taken by Flickr user Darren Hsu. License: creativecommons.org/licenses/by-nc-sa/2.0/

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10-year industry projections

Growth looks different when we figure in pandemic job recovery

By PAUL MARTZ

More than two years after the pandemic began, Alaska is still recovering our pre-pandemic job counts, and we aren't alone in our slow recovery. In the first half of 2022, only 18 states had more jobs than they'd had in the first half of 2019. (See the table on the next page.) Our recovery ranked 47th through that period.

Recovery drivers are complex and variable; supply chain problems, worker shortages, inflation, and COVID-19 spikes have affected states differently. Most states that recovered quickly had been growing faster before the pandemic.

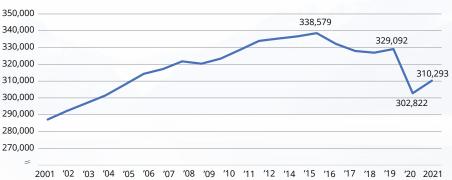
The pandemic has complicated almost everything, and the job projections are no exception. Projections use Alaska's historical trends to look ahead, so with the upheaval of the last few years, putting this release's base year in context required some adjustments. Because the lows of 2020 aren't a representative benchmark, we have included 2019's job numbers to clarify the gains and losses we anticipate through 2030 and to separate regular job growth from pandemic recovery.

Uncharted territory: How 2020 as starting point skews the numbers

The magnitude and speed of the losses in 2020 were a first for Alaska — we lost 26,270 jobs in a single year. For context, the previous recession (from 2015-2018) cost the state roughly 11,600 jobs, and the 1986-1987 recession eliminated 20,500.

At the lowest pandemic point in May 2020, Alaska was down 45,717 jobs from the previous May. The

Total Alaska job count, 2001 to 2021



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

largest comparable decline during the 1980s recession was 18,500 jobs in September 1986. September was also the peak loss month for the 2015-2018 recession (-9,900).

Here's an example of how one hard-hit sector's projected job growth differs if we use 2020 as the starting point instead of 2019, which shows why we need a stable period for comparison.

With 2019 as the base year, total projected growth for the accommodation and food services sector one of the biggest pandemic losers — is 3.4 percent (1,082). But if we start from 2020, projected growth is a whopping 38.4 percent (9,061). That's because the 2020 start date figures in recovery of all the jobs the sector lost that year, which form the bulk of its projected decade growth.

Growth rates in the 20s and beyond are rare in Alaska, especially in large, well-established industries.

Marijuana will carry agriculture

Agriculture is one of the few sectors that didn't lose jobs during the pandemic because the marijuana industry continued to grow. (Marijuana cultivation falls under greenhouse, nursery, and floriculture production). The still-small industry added 73 jobs from 2019 to 2020. That was slower than it grew the year before, but that it grew at all in 2020, when big losses were the norm, is notable.

The marijuana industry has boomed since 2016, the year businesses got a foothold after legalization, growing 524 percent. While we expect growth to continue, some markets may be approaching saturation. For now, ample tourist dollars and continued expansion into smaller markets throughout the state continue to generate job growth.

We project the broader agriculture sector will add 657 new jobs from 2020 to 2030, with 578 of those in greenhouses — a massive 86.4 percent growth rate for greenhouses and 42.9 percent for agriculture overall.

Very slow recovery for oil and gas

The oil and gas industry lost 2,046 jobs from 2019 to 2020 and another 1,489 in 2021. These losses followed declines from 2015 through 2018, then a brief uptick in 2019 before the pandemic hit.

From peak employment in 2015 through 2021, the combined oil and gas industries lost 8,406 jobs. Given the long streak of losses, we project they'll be slow to recover and settle slightly above pre-pandemic job counts in 2030.

In mid-August 2022, oil and gas companies Santos and Repsol announced their Pikka project will move into phase 1. This project will create a slew of temporary jobs but a much smaller number of permanent jobs, in line with what we project for this decade.

The other potential North Slope development, ConocoPhillips' Willow project, is moving through a supplemental environmental review process with a decision due later this year or in early 2023. If approved, this project will follow Pikka's development trend, bringing a wave of short-term construction jobs followed by fewer permanent jobs operating the field.

Mining growth mainly through existing projects

From 2020, mineral mining will add a projected

Text continues on page 8

Pandemic job recovery by state

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	2019*	2022*	Change	Pct chg
Idaho	750,900	811,067	60,167	8.0%
Utah	1,543,467	1,652,767	109,300	7.1%
Montana	479,083	501,433	22,350	4.7%
Texas	12,716,383	13,240,667	524,283	4.1%
Arizona	2,916,383	3,030,300	113,917	3.9%
Florida	8,922,083	9,269,983	347,900	3.9%
North Carolina	4,554,583	4,708,817	154,233	3.4%
Georgia	4,590,450	4,743,117	152,667	3.3%
Tennessee	3,100,033	3,195,183	95,150	3.1%
Colorado	2,763,017	2,831,983	68,967	2.5%
Arkansas	1,278,417	1,306,950	28,533	2.2%
Nevada	1,407,967	1,436,683	28,717	2.0%
South Dakota	436,533	443,050	6,517	1.5%
Washington	3,437,150	3,464,183	27,033	0.8%
South Carolina	2,177,250	2,193,817	16,567	0.8%
Indiana	3,147,600	3,158,683	11,083	0.4%
California	17,316,633	17,357,833	41,200	0.2%
Nebraska	1,021,433	1,022,300	867	0.1%
Kentucky	1,932,750	1,931,650	-1,100	-0.1%
Alabama	2,067,817	2,066,617	-1,200	-0.1%
Mississippi	1,155,783	1,154,917	-867	-0.1%
Missouri	2,901,283	2,894,767	-6,517	-0.2%
New Jersey	4,167,433	4,153,650	-13,783	-0.3%
Maine	627,883	625,533	-2,350	-0.4%
Oregon	1,942,617	1,934,300	-8,317	-0.4%
Virginia	4,034,667	4,017,117	-17,550	-0.4%
New Hampshire	679,883	676,050	-3,833	-0.6%
New Mexico	848,800	842,600	-6,200	-0.7%
Massachusetts	3,666,367	3,617,867	-48,500	-1.3%
lowa	1,580,433	1,558,483	-21,950	-1.4%
Oklahoma	1,699,367	1,671,767	-27,600	-1.6%
Wyoming	287,117	281,650	-5,467	-1.9%
Delaware	463,117	454,150	-8,967	-1.9%
Kansas	1,418,550	1,390,767	-27,783	-2.0%
Illinois	6,084,550	5,961,433	-123,117	-2.0%
Wisconsin	2,970,950	2,905,850	-65,100	-2.2%
Rhode Island	499,767	488,467	-11,300	-2.3%
Maryland	2,755,183	2,692,017	-63,167	-2.3%
Ohio	5,560,083	5,427,200	-132,883	-2.4%
Pennsylvania	6,030,050	5,884,583	-145,467	-2.4%
Minnesota	2,961,150	2,880,350	-80,800	-2.7%
Michigan	4,422,767	4,300,483	-122,283	-2.8%
West Virginia	719,083	698,867	-20,217	-2.8%
Connecticut	1,688,000	1,637,200	-50,800	-3.0%
North Dakota	438,183	423,283	-14,900	-3.4%
New York	9,724,950	9,342,100	-382,850	-3.9%
Alaska	325,033	311,367	-13,667	-4.2%
Louisiana	1,993,667	1,903,967	-89,700	-4.5%
Vermont	315,650	297,333	-18,317	-5.8%
Hawaii	657,717	602,917	-54,800	-8.3%

Note: Compares first six months of 2019 to first six months of 2022; data subject to revision

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics

Alaska industry¹ projections, 2019 and 2020 to 2030

	2019 est jobs²	2020 est jobs²	2030 projected		Change, 2019-30	% change, 2020-30 ³	% change, 2019-30 ³
Total Employment ⁴	329,092	302,822	342,955	40,132	13,862	13.3%	4.2%
Goods-Producing	44,100	40,274	46,758	6,484	2,658	16.1%	6.0%
Natural Resources and Mining	14,973	12,975	16,575	3,599	1,601	27.7%	10.7%
Agriculture, Forestry, Fishing and Hunting	1488	1532	2189	657	701	42.9%	47.1%
Mining	13,485	11,443	14,386	2,943	900	25.7%	6.7%
Oil and Gas⁵	10,225	8,179	10,311	2,132	85	26.1%	0.8%
Oil and Gas Extraction	3,528	3,208	3,491	284	-37	8.9%	-1.0%
Mining (except Oil and Gas)	2,988	3,058	3,663	605	674	19.8%	22.6%
Support Activities for Mining	6,969	5,178	7,232	2,054	263	39.7%	3.8%
Construction	15,736	15,152	16,381	1,229	645	8.1%	4.1%
Construction of Buildings	4,598	4,570	4,884	315	287	6.9%	6.2%
Heavy and Civil Engineering Construction	3,762	3,474	3,894	419	131	12.1%	3.5%
Specialty Trade Contractors	7,376	7,108	7,603	495	227	7.0%	3.1%
Manufacturing	13,391	12,147	13,802	1,655	412	13.6%	3.1%
Food Manufacturing	9,660	8,660	9,822	1,162	162	13.4%	1.7%
Seafood Product Preparation and Packaging	9,075	8,124	9,112	988	37	12.2%	0.4%
Manufacturing, All Other	3,731	3,487	3,980	494	249	14.2%	6.7%
Services-Providing	284,916	262,490	296,067	33,577	11,151	12.8%	3.9%
Trade, Transportation, and Utilities	66,524	60,947	68,434	7,487	1,910	12.3%	2.9%
Wholesale Trade	6,451	6,084	6,247	163	-204	2.7%	-3.2%
Retail Trade	35,315	33,393	35,522	2,129	207	6.4%	0.6%
Transportation and Warehousing ⁶	22,460	19,144	24,092	4,948	1,631	25.8%	7.3%
Air Transportation	6,345	5,246	6,451	1,205	107	23.0%	1.7%
Water Transportation	1214	1090	1250	161	37	14.7%	3.0%
Truck Transportation	2,680	2,583	2,655	72	-25	2.8%	-0.9%
Transportation and Warehousing, All Other	12,222	10,226	13,735	3,510	1,513	34.3%	12.4%
Utilities	2,298	2,326	2,574	248	276	10.7%	12.0%
Information	5,311	4,933	5,085	152	-226	3.1%	-4.3%
Financial Activities	12,409	11,762	12,251	489	-158	4.2%	-1.3%
Finance and Insurance	6,656	6,418	6,428	10	-228	0.2%	-3.4%
Real Estate and Rental and Leasing	5,753	5,345	5,823	479	70	9.0%	1.2%
Professional and Business Services	27,240	25,545	28,528	2,983	1,288	11.7%	4.7%
Professional, Scientific, and Technical Services	13,485	12,836	13,910	1,074	425	8.4%	3.2%
Management of Companies and Enterprises	2307	2122	2383	261	76	12.3%	3.3%
Admin, Support and Waste Mgmt/Remediation Svcs	11,449	10,587	12,235	1,648	786	15.6%	6.9%
Education and Health Services	78,370	74,689	83,910	9,221	5,540	12.3%	7.1%
Educational Services, Public and Private ⁷	28,823	26,345	28,707	2,362	-116	9.0%	-0.4%
Elementary and Secondary Schools, Public/Private	20,476	18,797	20,299	1,502	-178	8.0%	-0.9%
Educational Services, Public and Private, All Other	8,346	7,548	8,408	860	61	11.4%	0.7%
Health Care and Social Assistance, Public and Private ⁸	49,547	48,344	55,203	6,859	5,656	14.2%	11.4%
Ambulatory Health Care Services	22,107	21,543	24,733	3,190	2,627	14.8%	11.9%
Hospitals	14,666	14,517	16,757	2,240	2,091	15.4%	14.3%
Health Care and Social Assistance, All Other	12,774	12,284	13,712	1,429	938	11.6%	7.3%
Leisure and Hospitality	36,539	26,919		11,010	1,390	40.9%	3.8%
Arts, Entertainment, and Recreation	4,958	3,318	5,267	1,949	309	58.7%	6.2%
Accommodation and Food Services Accommodation	31,580	23,601	32,662	9,061	1,082	38.4%	3.4%
	8,930	5,541	9,831	4,290	900	77.4%	10.1%
Food Services and Drinking Places	22,650	18,060	22,831	4,771	181	26.4%	0.8%
Other Services (Except Government)	11,704	10,643		1,426	365	13.4%	3.1%
Total Government	46,819	47,053		809	1,043	1.7%	2.2%
Federal Government ⁹	12,922	13,486		264	828	2.0%	6.4%
State Government ¹⁰	16,405	16,208		280	83	1.7%	0.5%
Local Government ¹¹	17,492	17,359	17,624	265	132	1.5%	0.8%

¹Industry categories differ from other data sets we publish, largely because these combine public and private employment.
²May not sum to total employment due to rounding
³Percent change may be inconsistent with employment change due to employment rounding.
⁴Excludes self-employed workers, fishermen, domestic workers, unpaid family workers, and nonprofit volunteers
⁵Includes oil and gas exploration and oilfield services
⁶Includes U.S. Postal Service employment

⁷Includes local and state government education employment

⁸Includes public sector hospital employment

⁹Excludes uniformed military, postal service, and hospital employment

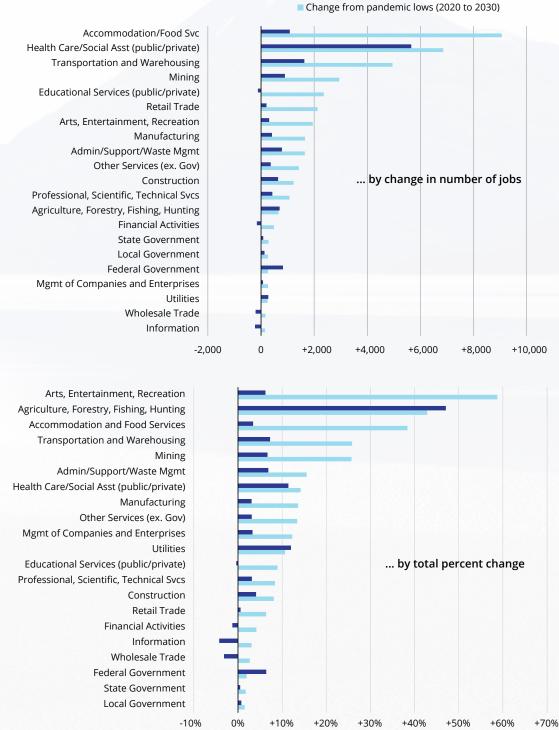
¹⁰Excludes university, railroad, and hospital employment

¹¹Excludes public school and hospital employment

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

Projected job change by industry, 2019 and 2020 to 2030 comparisons

Change without pandemic influence (2019 to 2030)



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

19.8 percent, or about 600 jobs, through 2030. Mining continued to grow during COVID, adding 70 jobs in 2020 and 197 in 2021.

Most of the growth will probably come from ongoing exploration and expansion of existing operations. One example is the Fort Knox mine spreading into nearby areas. The newest plan is to extend the current mills' reach via truck, around 240 miles south of Fairbanks, to the Manh Choh Mine. That mine is on land leased from the Native Village of Tetlin. While this project's expected life is

Alaska's monthly job count, 2019 to 2021



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

just five years, it's the type of project that can pop up when existing infrastructure is within reach.

Red Dog is another example. Current resources will allow the mine to operate into the early 2030s, and Red Dog plans to expand north to two zinc deposits, Aktigiruq and Anarraaq. Connecting will require some new transportation infrastructure, but expansions often increase a mine's longevity.

Pogo, Greens Creek, and Kensington are also engaged in exploration or expansion.

These projections don't figure in any new mines, although the Donlin Creek Gold Project is the most likely candidate for a new large-scale mine. The project completed the federal permitting process in August 2018 and is advancing through state permitting. This project is far from certain, though, and it likely has years of exploration and legal challenges before any final decision.

Because of long lead times and high uncertainty, we don't include potential projects in the projections until they are near-certain. This applies to all large-scale projects, some of which are talked about for decades with little or no progress.

Modest rebound for construction

The construction sector lost 584 jobs in 2020, but we project it will recover those and add 645 more by 2030.

Residential building bounced back between 2019 and 2020 after tepid growth during the 2015-2018

recession. The bump was probably temporary, driven by earthquake repairs and surging pandemic demand. We expect employment will level out just above the long-term average: 1,523 total jobs by 2030. That would be a decline of 96 jobs from 2020 but even with 2019.

We project nonresidential construction will add 285 jobs from 2019 to 2030, which includes recovery of the 126 jobs lost in 2020.

Specialty trade contractors shed 268 jobs in 2020 after losing almost 1,000 during the prior recession. We project the industry will grow 3.1 percent between 2019 and 2030 — all the jobs lost during COVID and an additional 227.

Most of the heavy and civil engineering categories shed jobs in 2020, for an overall loss of 288 (-7.7 percent). We project they will recover all losses and add 131 more by 2030 for a growth rate of 3.5 percent.

The Infrastructure Investment and Jobs Act will boost heavy and civil engineering during the next few years, but the jobs will be temporary and will probably wrap up by 2030.

Seafood processing to stay down

Like industries linked to tourism, seafood processing has an outsized need for out-of-state workers — something the pandemic losses reflect. Seafood processing lost 951 jobs over that first year, a 10.5 percent hit.

With travel restrictions during the 2020 summer hiring season and heightened concern about illness in remote areas, the industry quarantined employees before moving them around the state. This staved off even bigger cuts in 2020.

Peak 2019 employment was 20,209 in July, which fell to 15,986 in July 2020. The industry has remained down but is inching toward recovery. We project employment will level out near 2019 numbers by 2030, at 9,112 average monthly jobs.

Shift online limits retail, finance

Retail and wholesale trade followed similar trajectories during the pandemic. Wholesale employ-

ment dropped 5.7 percent and retail by 5.4 percent in 2020. Strong consumer spending fueled by federal pandemic relief payments softened the landing.

Using 2020 makes projected growth look bigger than it is; most of what looks like growth is clawing back the ground lost the year before.

We expect the 2020 declines to swing back but wholesale trade to stay below 2019 job levels through the decade

(ending at 6,247 total). Retail will recover but end up only 207 projected jobs over 2019, for a total of 35,522 in 2030.

Limited population growth and an ongoing shift to e-commerce will constrain retail long term. Worker shortages will also inhibit recovery in the short term, as we saw in 2021.

Consumers aren't just shopping online — they're also seeking finance and insurance services remotely. We anticipate that sector's pandemic job losses — about 238 — will be permanent.

Even with a boom in mortgage refinancing and surging demand for homes during the pandemic, banking institutions continued to shed jobs. The insurance industry managed to stay flat through 2021 but we project a 7.3 percent job loss through 2030.

Robust growth in transportation

Air transportation stalled in 2020, losing 1,099 jobs (-17.3 percent), but its long-term outlook is healthy.

Scheduled air transportation, which is mainly airlines, is set to recover the bulk of the decline over the decade (about 954 jobs) and level out to just under its 2019 count (4,973). This industry's losses have been sticky, as it regained just 56 jobs in 2021. Tourism's strong return is a positive sign, but worker shortages are an ongoing drag even with increased flight demand.

The pandemic effectively closed the 2020 and 2021 seasons for scenic and sightseeing transportation businesses. Land sightseeing took the biggest blow, losing 73.1 percent of its employment — a slide to just 307 total jobs in 2020 from 1,141 the year before. The 2021 season only brought back 75 jobs.

Water transportation losses weren't far behind, at a 61.9 percent loss for 2020 (-679) and a 30 percent partial recovery last year.

> By 2030, the combined land and water categories are projected to recoup the losses and land 12 percent above pre-pandemic levels. (These industries are another example of how misleading 2020 can be as a base year. Using 2020 instead of

2019 bumps the 12 percent growth projection to 247 percent.)

At the opposite end of the spectrum, couriers and the warehousing and storage industry flourished with increased online shopping, growing 13 and 29 percent respectively from 2019 to 2021. We project that will continue, with double-digit percent gains for both.

Professional services will track with oil, transportation

Professional, scientific, and technical services tend to track with the industries they serve, and the decline in business in 2020 spurred a loss of 649 jobs. Half of those came from engineering and drafting services.

The infrastructure bill will fire up demand for those services, but the new jobs will be temporary. Similarly, any large-scale mining or oil and gas development would expand employment over the short-tomedium term.

Another consideration is which jobs can be performed outside Alaska and whether the increasing popularity of remote work will move more out of the office — especially for large corporations wanting to reduce costs for projects in remote places.

Starting from 2019, we project 3.2 percent job growth for professional, scientific, and technical services through 2030 (425).

Education faces several obstacles

Public and private education took a -8.6 percent employment hit in 2020 (-2,478). We project most of those jobs will return slowly, and education will end up about 116 jobs below 2019 by 2030.

Elementary and secondary schools took the brunt of the losses and improved little in 2021. We expect employment to recover short-term but end up 0.9 percent lower by 2030, mainly because the number of 5-to-18 year-olds is projected to decline from 144,583 in 2022 to 135,837 in 2030.

Postsecondary education's projected increase from 2019 levels is just 0.7 percent (61 additional jobs). These schools started to recover in 2021 after a deep decline in 2020 and will likely continue to add jobs for a few years, but the long-term outlook is flat.

The University of Alaska has absorbed several years of budget cuts and enrollment has fallen. An increase in the college-age population could boost enrollment, but that's unlikely because migration trends are downward for that age group.

Health care will expand a projected 12 percent

Health care and social assistance, public and private, fared well throughout the pandemic, losing just 2.4 percent that first year.

The largest health care category is ambulatory, which is mainly practitioners' offices. Demand for most in-person services tanked with stay-at-home orders starting in April 2020, putting that month about 3,000 jobs below the previous April for ambulatory health care. We project long-term growth, however, of 12 percent over 2019 levels by 2030 (2,627 additional jobs).

Hospitals only lost about 1 percent of their jobs in

2020, with the largest loss in July at 398 fewer jobs than in July 2019. The pattern was the opposite of what one might have predicted, with the first wave of job losses coinciding with the first wave of CO-VID-19 hospitalizations.

Vaccines weren't available then, patient outcomes were worse early on, and measures to avoid infection were strict. Reasons employment would fall amid increasing hospitalizations included burnout, difficulty hiring, and sickness among staff.

Overall, we project hospital employment will rise 14 percent, to 16,757. Most of the growth will come from expanding existing facilities and increasing

> care in rural Alaska, which remains underserved. Rural Alaskans typically rely on urban facilities for hospital and emergency care.

Nursing and residential care stayed mostly flat during the pandemic, with a slight uptick of 74 jobs in 2020 followed by a loss of 52 in 2021.

Employment in nonresidential

individual and family services dropped 4.9 percent, however. These include jobs in adult day care facilities and nonmedical home and personal care. People caring for their own families and perceived risk reduced the need for these services, and some providers downsized. Since then, employment has trended back up, with a recovery of 106 jobs in 2021.

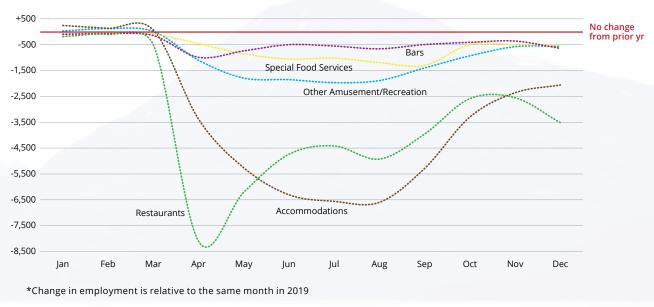
We project nursing and residential care to grow 13 percent by 2030 and the nonresidential portion to increase 8.7 percent — 508 and 403 new jobs, respectively. Nursing homes have been underrepresented in Alaska's health care mix for years, and the aging population will require even more staff.

The Alaska population 80 and older is projected to grow 68.8 percent between 2022 and 2030, to 28,465. So much demographic change in such a short time will spur job growth even if in-home care becomes more common or more seniors leave the state.

Leisure and hospitality faces a big pandemic recovery first

The leisure and hospitality sector represented just over a third of all the jobs Alaska lost in 2020 (9,619 of the 26,270). That was -26.3 percent for the sector in a year. After recovering the lost jobs, leisure and

The University of Alaska has absorbed a few years of budget cuts and falling enrollment.



Some types of leisure and hospitality were hit harder in 2020*

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

hospitality will likely grow an additional 3.8 percent by 2030. (See the graph above.)

These businesses serve locals as well as tourists, and the largest category is restaurants, at nearly half the jobs. Alaska eateries averaged about 18,809 jobs in 2019, which dropped to 15,325 in 2020. When combined with bars and special food services (such as caterers and food trucks), the overall loss was 4,590 jobs in one year.

Travel demand plummeted and so did the need for hotels, RV parks, and other temporary accommodations. With fewer travelers, the accommodation sector shed 3,390 jobs in 2020. By 2030, we project the industry will recover pandemic losses and add another 900 jobs for a total growth rate of 10.1 percent.

Not much change for government

Federal, state, and local governments are all projected to grow slightly in the coming decade.

Federal employment (excluding military, postal service, and hospitals) grew 4.4 percent in 2020 with

temporary hires for the 2020 Census and showed no noticeable decrease during the pandemic. We project a 2.0 percent gain (264) between 2020 and 2030.

Jobs in state government (excluding the railroad, University of Alaska, and hospitals) dipped by 197 jobs in 2020 but over 10 years is set to recover those jobs and grow another 0.5 percent.

We don't anticipate any protracted periods of elevated oil prices to drive up state employment, and the state is unlikely to use market earnings to expand government services. Finally, the population is projected to increase only slightly from 2022 to 2030, keeping the demand for public services at current levels.

Similar to state government, local government (excluding public schools and hospitals) recorded a slight decline in 2020 but is projected to recover and gain 132 more jobs through 2030 (0.8 percent growth). The population isn't likely to grow significantly and state support to local governments is unlikely to rise, keeping the employment outlook relatively flat.

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How we create 10-year industry and occupational projections

The Alaska Department of Labor and Workforce Development's Research and Analysis Section creates 10-year industry and occupational projections for Alaska every other year. These projections are the product of four steps:

Step 1: Project industry employment using a base year with solid data

We use data from the Quarterly Census of Employment and Wages to determine the number of jobs for each industry during the first year, or "base year," of the projection period. We used 2020 as the base year because it's important to begin with a solid set of numbers that won't be revised further rather than to use newer but preliminary data — however, for this set of projections we have included 2019 numbers for context, for the reasons explained on page 4.

Estimates and projections do not include self-employed workers, private household workers, most agricultural workers and fishermen (who are self-employed), and others not covered by the state's unemployment insurance program. We combine certain types of public sector employment – such as education, hospitals, rail transportation, and the U.S. Postal Service – with private sector industries because their underlying drivers differ from most government employment.

We create projections for each industry based primarily on historical trends, Alaska and U.S. population projections, and other industry-specific variables. The projections also factor in knowledge of specific projects, if certain, and observations of the current economic climate.

Step 2: Determine the occupational makeup, or staffing pattern, of each industry

To estimate base year employment for each occupation, we determine the occupational staffing pattern of each industry. Most industries have a variety of occupations. The staffing pattern is the breakdown of each occupation's share of the industry's total employment, referred to as "staffing ratios."

Employers in Alaska report their workers' occupations when they submit unemployment insurance quarterly contribution reports, which form the basis of Alaska's Occupational Database. We use an analysis of the data that corresponds to the projections' base year, the most recent Occupational Employment Statistics data available, and a baseline of historic industry staffing patterns to calculate occupational staffing ratios for the industries.

Step 3: Calculate base year and projected occupational employment

For each occupation, we multiply each industry's estimated base year employment by the staffing ratio, and then sum the results to get the base year estimate. We make some adjustments to staffing ratios within an industry, called "change factors." Change factors are multipliers that increase or decrease an occupation's estimated share of industry employment based on factors other than an industry's projected employment change. Examples include changes in consumer demand, technology, or business practices.

We then multiply each industry's projected employment by the adjusted staffing ratio for each occupation, and then sum the results by each occupation to get the projections.

Step 4: Estimate job openings

Job openings for an occupation result from new jobs and vacated positions, called separation openings. An occupation's growth openings are equal to its change over the projection period. Estimates of separation openings are based on rates provided by the U.S. Bureau of Labor Statistics that account for labor force exits and occupational transfers. For more on separations, see https://www.bls.gov/emp/documentation/separations-methods.htm.

10-year occupational projections

Types of job opportunities likely to arise in Alaska through 2030

By PAUL MARTZ

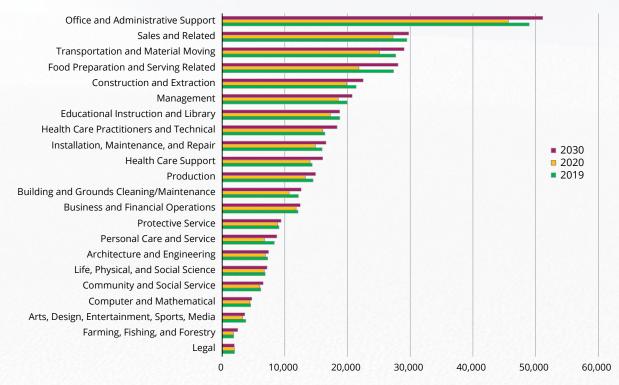
Projections by occupation show growth in certain types of work and the additional job openings we expect from people vacating existing positions. These separations will generate 90 percent of the nearly 40,000 job openings we project for Alaska between 2020 and 2030. The remaining 10 percent will come from job growth, which for this edition includes the recovery of jobs lost during the pandemic.

Even though the occupational projections focus more on openings than growth, recovery from the pandemic will still make the growth we project look bigger than it is. As with the industry projections, we included 2019 job numbers here to add context and to separate longer-term growth or decline from pandemic recovery. Using 2020 as the base year makes the starting point artificially low. (For more on how drastic the difference can be between using 2019 and 2020 as base years, see the section on page 4 in the industry article called "uncharted territory.")

Where relevant, we also break down the growth estimates into two types: the typical job growth that springs from economic trends and the recovery of the jobs lost during the pandemic. (These are called structural and cyclical growth, respectively.)

While the economic upheaval of the last two years was extreme, it probably won't permanently reshape the state's economy or change the

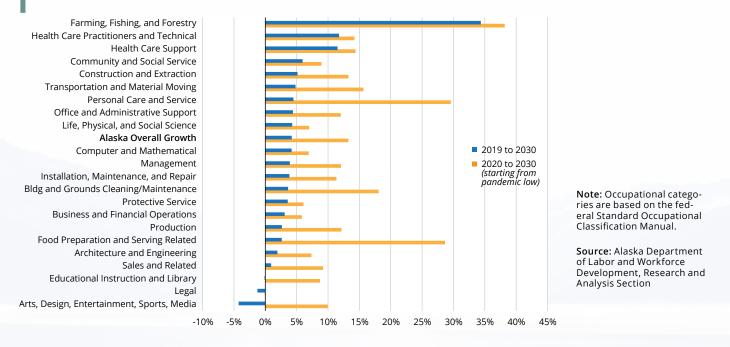
Projected total job counts by occupational group through 2030



Note: Occupational categories are based on the federal Standard Occupational Classification Manual.

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

Projected percent growth for occupational groups through 2030



long-running trends in the types of job opportunities we expect.

Pandemic's disparate impacts on occupations and the ripple effects

The pandemic's varying effects on occupations were just as extreme. Occupations that are mainly white-collar fared relatively well when COVID-19 hit. Many have few public-facing duties and easily transition to remote work.

Blue-collar and service occupations took the brunt of the losses, especially with mandated shutdowns, capacity restrictions, and customers shying away from in-person services.

Office work and jobs preparing or serving food are good examples of the differences. The office and administrative support category is Alaska's largest, representing more than 49,000 jobs in 2019. In 2020, this group shrunk 6.8 percent while the food preparation and serving category, which is roughly half the size, contracted 20 percent.

The drastic losses weren't limited to occupations hit by stay-at-home orders and wary consumers, though. Some damage was secondary. Jobs in building maintenance and groundskeeping don't depend on interaction or consumer behavior, for example, but these declined 12.2 percent as office workers began teleworking, leaving many buildings empty.

Fewer people commuted or traveled, so the drop in gasoline demand spurred an oil price freefall. For Alaska, this meant a wipeout of oil and gas jobs that reverberated into production and construction/extraction occupations. These two categories fell 8.5 and 7.2 percent, respectively.

We can't attribute all of those losses to the oil price shock, as the industry grappled with COVID mitigation measures as well, but the price drop and growing uncertainty about future oil demand dealt an outsized blow.

Marijuana cultivation and health care occupations will grow most

We project most occupational categories will grow over the next decade.

The farming, fishing, and forestry category will add the most jobs proportionally, at a projected 38.2 percent, largely because of marijuana. Though still relatively small, this category has skyrocketed since legalization established the industry throughout Alaska. Its dominant occupation is farmworkers and laborers (crop, nursery, and greenhouse), which represents about 40 percent of marijuana employment but 78 percent of its projected growth between 2020 and 2030. This occupation didn't decline during the pandemic.

Health care is also well-represented in the list of growing occupational categories. Practitioners and technical health care occupations are projected to grow 11.8 percent from 2019, and health care support occupations by 11.5 percent. Both lost jobs during the pandemic, but not many.

14 of the fastest-growth jobs are in health care

For individual occupations, health care represents 14 of the top 25 for percent growth. Respiratory therapists are ninth, at 14.9 percent between 2019 and 2030. Registered nurses, nursing assistants, and nurse practitioners also made the list, all at around 12 percent. These combined occupations represented 8,206 jobs in 2019, which dipped by only 134 jobs the following year.

The rest of the top 10, shown at right, are mainly productionrelated work in mining, oil and gas, agriculture, and manufacturing.

New on the list this year is couriers (17 percent). This occupation grew with COVID-driven demand for home delivery — a trend that will outlast the pandemic.

Media occupations will continue declining

Media occupations have made the fastest-declining list for the last decade. Seven of the occupations on this list are in the arts, design, entertainment, sports, and media category. One caveat is that we don't know how many are transitioning to freelance work, as the data do not capture the selfemployed.

High 25, low 25 jobs for growth through 2030

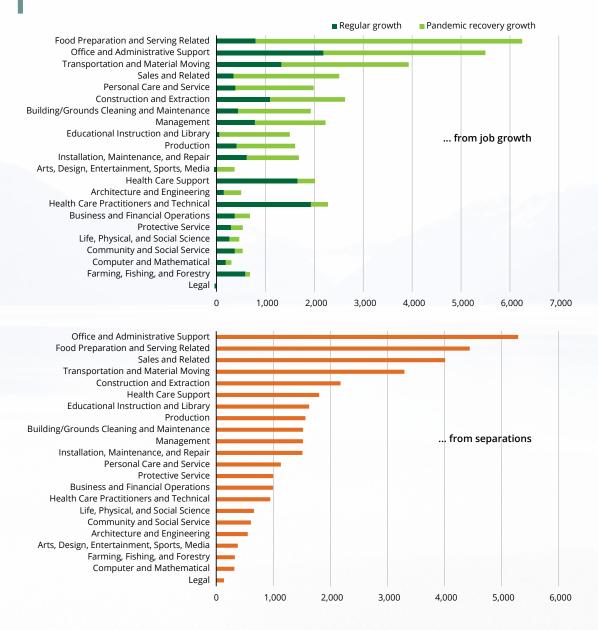
	Highest-growth occupations	Growth, 2019-30		Change in 2020
1	Farmworkers/Laborers, Crop, Nursery, Greenhouse	89.4%	75.1%	8.2%
2	Helpers: Extraction Workers	23.1%	81.3%	-32.1%
3	Earth Drillers, Explosives Wkrs, Ordnance/Blasters	22.3%	45.2%	-15.7%
4	Machine Setters, Operators, and Tenders	19.1%	32.8%	-10.3%
5	Millwrights	17.3%	15.2%	1.9%
6	Couriers and Messengers	17.0%	18.8%	-1.5%
7	Veterinary Technologists and Technicians	16.1%	18.5%	-2.1%
8	Aircraft Cargo Handling Supervisors	16.0%	22.1%	-5.0%
9	Respiratory Therapists	14.9%	15.6%	-0.6%
10	Veterinary Assts and Lab Animal Caretakers	14.7%	17.7%	-2.6%
11	Veterinarians	13.9%	16.0%	-1.8%
12	Diagnostic Medical Sonographers	13.7%	15.5%	-1.5%
13	Radiologic Technologists and Technicians	13.4%	15.1%	-1.5%
14	Surgical Technologists	13.4%	15.0%	-1.4%
15	Medical Secretaries and Administrative Assistants	13.3%	15.5%	-1.9%
16	Derrick Operators, Oil and Gas	13.2%	81.8%	-37.7%
17	Clinical Laboratory Technologists and Technicians	12.8%	14.9%	-1.8%
18	Physical Therapists	12.4%	14.6%	-1.9%
19	Registered Nurses	12.4%	14.3%	-1.7%
20	Nursing Assistants	12.4%	14.0%	-1.4%
21	Health Care Social Workers	12.3%	15.1%	-2.5%
22	Medical and Health Services Managers	12.2%	14.1%	-1.7%
22	Dietitians and Nutritionists	11.7%	12.4%	-0.6%
24	Nurse Practitioners	11.7%	14.6%	-2.5%
25	Recreational Therapists	11.6%	14.6%	-2.6%

	Occupations to decline most	Loss, 2019-30	Change, 2020-30	Change in 2020
1	Broadcast Announcers and Radio Disc Jockeys	-43.0%	-37.1%	-9.3%
2	News Analysts, Reporters, and Journalists	-40.8%	-34.4%	-9.7%
3	Broadcast Technicians	-40.6%	-34.5%	-9.4%
4	Editors	-20.3%	-11.9%	-9.5%
5	Advertising Sales Agents	-17.0%	-4.2%	-13.4%
6	Printing Press Operators	-15.0%	3.0%	-17.5%
7	Insurance Sales Agents	-14.8%	-12.7%	-2.4%
8	Print Binding and Finishing Workers	-10.0%	8.0%	-16.7%
9	Media and Communication Workers, All Other	-9.6%	1.5%	-11.0%
10	Insurance Claims and Policy Processing Clerks	-7.8%	-6.1%	-1.7%
11	Logging Equipment Operators	-5.6%	-1.4%	-4.2%
12	Bartenders	-5.0%	31.1%	-27.5%
13	Fallers	-4.3%	-1.5%	-2.9%
14	Legal Secretaries and Administrative Assistants	-4.3%	-2.6%	-1.8%
15	Ushers, Lobby Attendants, and Ticket Takers	-4.2%	39.5%	-31.3%
16	Audio and Video Technicians	-4.0%	11.9%	-14.2%
17	Mechanical Drafters	-3.4%	4.9%	-7.9%
18	Rehabilitation Counselors	-3.1%	4.0%	-6.8%
19	Insurance Underwriters	-2.5%	-4.1%	1.7%
20	Tellers	-2.5%	2.3%	-4.7%
21	Paralegals and Legal Assistants	-2.5%	-1.9%	-0.6%
22	Advertising and Promotions Managers	-2.4%	8.1%	-9.8%
23	Personal Financial Advisors	-2.4%	1.9%	-4.2%
24	Merchandise Displayers and Window Trimmers	-2.3%	6.7%	-8.4%
25	Graphic Designers	-2.2%	11.9%	-12.6%

Note: The top 25 list includes only the occupations that have at least 50 workers and projected growth of at least 20 jobs. It excludes residual occupations ending with "all other" and jobs with a high ratio of self-employment to covered employment. The bottom 25 list covers only occupations with at least 50 workers.

 $\ensuremath{\textbf{Source:}}$ Alaska Department of Labor and Workforce Development, Research and Analysis Section

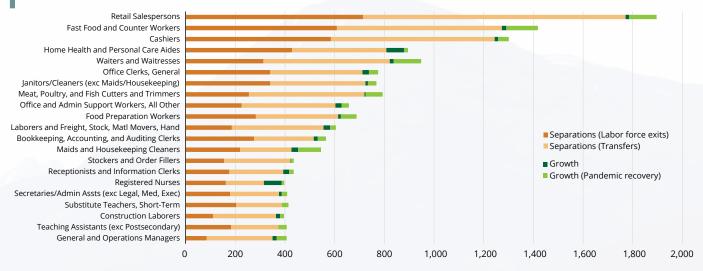
Types of job openings by occupational group through 2030



Notes: Occupational categories are based on the federal Standard Occupational Classification Manual. Occupations in decline will have no growth openings but may have openings from separations, which are vacated positions. Separations result from people leaving the labor force or transferring to a different occupations. Separations typically represent openings for new workers, but in declining occupations, not all separations result in openings (i.e. if the position is cut).

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

Most job openings will come from workers leaving an occupation



Notes: Annual openings for these projections are a combination of new jobs (growth), pandemic recovery, people permanently leaving the labor force (labor force exits), and people leaving an occupation for a different one (occupational transfers). Occupational separations are the sum of labor force exits and transfers. In declining occupations, not all separations result in job openings.

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

The fastest-declining occupation is broadcast announcers/radio disc jockeys, which we project will shrink 43 percent from 2019 to 2030. It's a small group, as that decline represents just 36 lost jobs over the decade, 10 of which disappeared when the pandemic started. However, this occupation would have continued declining without the pandemic.

Others on the bottom 25 list include bartenders and ushers, lobby attendants, and ticket takers. If we were to look only at 2020-2030, these occupations would appear to be among the *fastest* growing — but they hemorrhaged jobs during the pandemic, making the recovery look like massive growth. From pre-pandemic levels, the decade decline is around 5 percent.

Most job openings will come from people leaving existing positions

As mentioned earlier, people leaving the labor force or changing careers will be the main source of job opportunities over the next decade. These exits and transfers are called separations, and they will outnumber growth openings 25 to 1 if we exclude pandemic recovery.

We anticipate separations will generate 35,829 job openings annually. For comparison, the number of projected growth openings averages just over 4,000 a year, and that's inflated because of the 2020 declines. Using the more stable 2019 to 2030 period puts the average at just 1,386 growth openings per year.

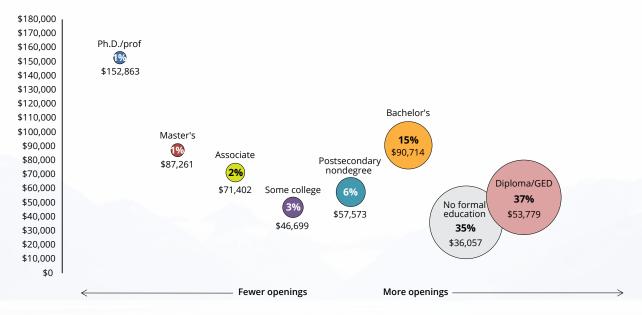
The occupational group with the most growth *and* separations is also the largest. Office and administrative support will generate a projected 215 new jobs per year from 2019 and another 5,290 separation openings. This category encompasses a diverse set of office jobs that span nearly every industry in Alaska, which insulates it from economic shocks.

Size partly predicts the number of separation openings, but separations also tend to be high in categories with lower-paying occupations requiring minimal education or training.

The breakdown of openings by occupation reveals more nuance. Retail salespeople require little training or education and are lower on the pay scale, so these are the first job for many people. People transferring to another field — often advancing to a higher-paying job with more prerequisites — will create about 1,056 openings a year in retail sales, and labor force exits will open another 715 positions a year. (Labor force exits are people dropping out for any reason, from retirement to attending school to caring full-time for family members.)

Through 2030, 93.4 percent of job opportunities

Percent of yearly openings by education level and wages, 2020-30



Notes: Annual wage estimates are based on employment-weighted averages of 2020 Occupational Employment Statistics wage data. Occupational education levels are based on the U.S. Census Bureau American Community Survey Public Use microdata. Openings include annual average wage growth and separations for occupations with a reported OES wage.

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

Projected yearly wages by category, 2020 to 2030

Occupational category	Avg annual wages
Management	\$110,030
Health Care Practitioners and Technical	\$102,275
Architecture and Engineering	\$96,653
Legal	\$90,906
Computer and Mathematical	\$81,914
Business and Financial Operations	\$81,287
Life, Physical, and Social Science	\$75,615
Construction and Extraction	\$66,646
Installation, Maintenance, and Repair	\$63,912
Transportation and Material Moving	\$63,187
Educational Instruction and Library	\$63,038
Protective Service	\$62,453
Community and Social Service	\$56,926
Arts, Design, Entertainment, Sports, and Media	\$52,830
Production	\$48,257
Office and Administrative Support	\$47,789
Farming, Fishing, and Forestry	\$43,188
Health Care Support	\$42,176
Sales and Related	\$37,469
Building and Grounds Cleaning and Maintenance	\$37,431
Personal Care and Service	\$35,653
Food Preparation and Serving Related	\$29,456

Note: Wages are based on 2020 Occupational Employment Statistics wage estimates for Alaska, weighted by base year 2020 employment.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section in retail sales will come from separations. Of the remaining 6.6 percent, 5.9 percent of the growth openings will be pandemic recovery.

At the other end of the spectrum, registered nurses leaving their jobs will open 162 positions each year from exits and 153 from transfers to other occupations.

In percent terms, for registered nurses, job openings will be 79.5 percent separations, 18.1 percent growth openings, and 2.4 percent pandemic job recovery.

Registered nurses' exits are usually a mix of retirements and temporary departures from the labor force to further their education. Unlike many occupations, registered nurses have a direct path to advancement. With a master's degree, they can become nurse midwives, nurse anesthetists, or nurse practitioners. Nurses who continue working while getting these additional credentials are counted as occupational transfers when they move up.

Three-quarters of job openings will have minimal prerequisites

The numbers of openings are tied to educational

Projected growth and separation openings for select jobs

-		
	Growth Growth (pan	demic recovery)
All Alaska Occupations	4% <mark>6%</mark>	90%
Retail Salespeople	0 <mark>.7% 5</mark> .9%	93.4%
Industrial Machinery Mechanics	4% 10.3%	85.7%
Service Unit Operators, Oil and Gas	16.1%	83.8%
Information Security Analysts	16.7%	83.3%
Registered Nurses	18% 2 <mark>.4</mark> %	79.5%
Hotel, Motel, and Resort Desk Clerks	5% 19.8%	75.1%
Milling and Planing Machine Setters	25%	75.0%
Tour and Travel Guides	4.8% 20.8%	74.4%
Bus Drivers, Transit and Intercity	4% 22.4%	73.5%
Derrick Operators, Oil and Gas	8.6% 24.7%	66.7%
Anesthesiologists	40%	10% 50%

Notes: Growth openings are new jobs. Separations are the projected numbers of workers permanently leaving an occupation.

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

requirements and wages. Those requiring no formal education or minimal credentials, such as high school graduation or some college, will generate 75 percent of job openings in Alaska.

Wages increase with the required level of education, with one exception in Alaska: master's degrees. On average, jobs requiring a master's pay slightly less than those requiring a bachelor's degree, at \$87,261 versus \$90,714.

This is mainly because the number of occupations that require a master's degree is small, and a few are notably low-paying, pushing down the average. For example, medical occupations that require a master's pay about 50 percent more than social work and counseling, but Alaska has far more social workers and counselors.

Another reason for the disparity is the degree requirement doesn't factor in additional prerequisites that significantly boost earnings, such as training, apprenticeships, or work experience. This is a factor in some bachelor-level occupations, too, with many of the higher-paying occupations requiring medium- or long-term on-the-job training or experience in addition to the degree.

Many 'top jobs' require a bachelor's degree

There are numerous ways to gauge an occupation's outlook — whether it's growing, pays well, and has good prospects — which can make it difficult for workforce development and education stakeholders to determine the most meaningful comparisons or rankings. To help with these comparisons, we created a list of "top jobs" we anticipate will have high earnings and openings between 2020 and 2030. This table begins on the next page, and the footnote explains what makes an occupation a top job.

By education, 22 of the 51 on this year's list require a bachelor's degree and 21 require a diploma or GED. Of the occupations requiring only high school education, nine need additional moderate-term onthe-job training, and six require an apprenticeship or long-term on-the-job training. The remaining six are supervisory or management occupations that require additional work experience.

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		Employment	nent			Aver opening	Average annual openings, 2020-2030	ual -2030			
	2019	2020	2030 2	Pct chg 2019-30	Pct chg 2020-30	Structural growth*	Sepa- rations	Total* openings	Training** required	Work exp required	Wage*** quartile
		Bach	Bachelor's degree	gree							
Registered Nurses	5.778	5.682	6.495	12.4%	14.3%	72	315	387	None	None	\$\$\$\$
General and Operations Managers	4,398	3,984	4,561	3.7%	14.5%	16	350	366	None	5+ years	\$\$\$\$
Elementary School Teachers, Except Special Education	2,230	2,053	2,213	-0.8%	7.8%	0	150	150	None	None	\$\$\$
Airline Pilots, Copilots, and Flight Engineers	2,080	1,915	2,320	11.5%	21.2%	24	227	251	Moderate OJT	<5 years	\$\$\$\$
Accountants and Auditors	1,944	1,858	2,014	3.6%	8.4%	7	169	176	None	None	\$\$\$
Chief Executives	1,706	1,589	1,773	3.9%	11.6%	7	114	121	None	5+ years	\$\$\$\$
Secondary School Teachers, Except Special and Career/Tech Education	1,656	1,522	1,642	-0.8%	7.9%	0	106	106	None	None	\$\$\$
Administrative Services and Facilities Managers	1,236	1,147	1,288	4.2%	12.3%	Ŋ	96	101	None	<5 years	\$\$\$\$
Financial Managers	1,134	1,071	1,164	2.6%	8.7%	m	79	82	None	5+ years	\$\$\$\$
Construction Managers	1,021	947	1,061	3.9%	12.0%	4	72	76	Moderate OJT	None	\$\$\$\$
Civil Engineers	1,018	978	1,024	0.6%	4.7%	-	70	71	None	None	\$\$\$\$
Medical and Health Services Managers	961	945	1,078	12.2%	14.1%	12	76	88	None	<5 years	\$\$\$\$
Computer and Information Systems Managers	931	922	972	4.4%	5.4%	4	69	73	None	5+ years	\$\$\$\$
Zoologists and Wildlife Biologists	913	911	952	4.3%	4.5%	4	81	85	None	None	\$\$\$
Sales Managers	807	750	817	1.2%	8.9%	-	65	99	None	<5 years	\$\$\$\$
Network and Computer Systems Administrators	745	718	TTT	4.3%	8.2%	m	48	51	None	None	\$\$\$\$
Compliance Officers	732	728	757	3.4%	4.0%	ε	58	61	Moderate OJT	None	\$\$\$\$
Buyers and Purchasing Agents	691	663	712	3.0%	7.4%	2	67	69	Moderate OJT	None	\$\$\$
Environmental Scientists and Specialists, Including Health	629	598	644	2.4%	7.7%	2	59	61	None	None	\$\$\$
Human Resources Specialists	619	597	654	5.7%	9.6%	4	59	63	None	None	\$\$\$
Clinical Laboratory Technologists and Technicians	601	590	678	12.8%	14.9%	00	40	48	None	None	\$\$\$
Management Analysts	522	519	550	5.4%	6.0%	m	48	51	None	<5 years	\$\$\$\$
		Asso	Associate degree	ree							
Dental Hygienists	701	678	779	11.1%	14.9%	œ	44	52	None	None	\$\$\$\$
Civil Engineering Technologists and Technicians	647	623	642	-0.8%	3.1%	0	58	58	None	None	\$\$\$
Paralegals and Legal Assistants	528	525	515	-2.5%	-1.9%	<u>,</u>	55	54	None	None	\$\$\$
Postsect	Postsecondary nondegree award	ndegree	award or		some college, no degree	degree					
Aircraft Mechanics and Service Technicians	1,480	1,313	1,538	3.9%	17.1%	9	115	121	None	None	\$\$\$
Telecommunications Equip Installers and Repairers, Except Line Install	738	723	789	6.9%	9.1%	Û	84	89	Moderate OJT	None	\$\$\$\$
Captains, Mates, and Pilots of Water Vessels	666	526	701	5.3%	33.3%	4	61	65	None	<5 years	\$\$\$\$
Massage Therapists	540	496	598	10.7%	20.6%	9	61	67	None	None	\$\$\$
	High	school d	High school diploma or equivalent	r equival	ent						
Operating Engineers and Other Construction Equipment Operators	2,874	2,627	2,946	2.5%	12.1%	7	291	298	Moderate OJT	None	\$\$\$
Carpenters	2,284	2,206	2,388	4.6%	8.3%	10	210	220	Apprentice	None	\$\$\$
First-Line Supervisors of Office and Administrative Support Workers	2,068	1,940	2,163	4.6%	11.5%	10	201	211	None	<5 years	\$\$\$
Electricians	1,819	1,694	1,881	3.4%	11.0%	9	183	189	Apprentice	None	\$\$\$
Plumbers, Pipefitters, and Steamfitters	1,342	1,242	1,383	3.1%	11.4%	4	132	136	Apprentice	None	\$\$\$\$
Police and Sheriff's Patrol Officers	1,284	1,276	1,298	1.1%	1.7%	-	97	98	Moderate OJT	None	\$\$\$\$
Correctional Officers and Jailers	1,283	1,268	1,289	0.5%	1.7%	-	117	118	Moderate OJT	None	\$\$\$
Sales Reps, Wholesale and Manufacturing, Except Tech and Sci Products	1,180	1,103	1,162	-1.5%	5.4%	0	110	110	Moderate OJT	None	\$\$\$
Commercial Pilots	924	799	984	6.5%	23.2%	9	96	102	Moderate OJT	None	\$\$\$\$

Alaska's top jobs, 2019 to 2030

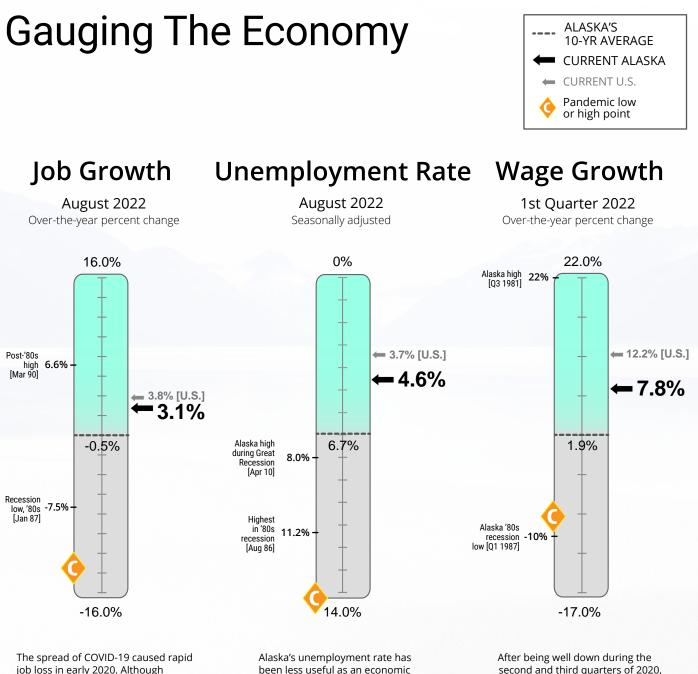
Alaska's top jobs, 2019 to 2030, continued

		Employment	ment			Avera opening	Average annual openings, 2020-2030	ا 030			
	2019	2020	2030	Pct chg 2019-30	Pct chg 2020-30	Structural Sepa- Total* growth* rations openings	Sepa- ations o	Total* penings	Training** required	Work exp Wage*** required quartile	Wage*** quartile
-	High school diploma or equivalent, continuec	diplom	a or equi	valent, co	ntinued						
Mobile Heavy Equipment Mechanics, Except Engines	842	795	924	9.7%	16.2%	∞	84	92	Long OJT	None	\$\$\$
First-Line Supervisors of Construction Trades and Extraction Workers	766	682	807	5.4%	18.3%	4	69	73	None	5+ years	\$\$\$\$
Bus and Truck Mechanics and Diesel Engine Specialists	713	651	727	2.0%	11.7%	-	63	64	Long OJT	None	\$\$\$
1st-Line Supervisors of Transp/Matl Moving Wkrs, Exc Aircraft Cargo	685	654	734	7.2%	12.2%	S	73	78	None	<5 years	\$\$\$
First-Line Supervisors of Mechanics, Installers, and Repairers	681	638	718	5.4%	12.5%	4	60	64	None	<5 years	\$\$\$\$
First-Line Supervisors of Production and Operating Workers	642	590	666	3.7%	12.9%	2	61	63	None	<5 years	\$\$\$\$
Welders, Cutters, Solderers, and Brazers	608	564	642	5.6%	13.8%	m	64	67	Moderate OJT	None	\$\$\$
Food Service Managers	604	492	625	3.5%	27.0%	2	62	64	None	<5 years	\$\$\$
Water and Wastewater Treatment Plant and System Operators	499	489	538	7.8%	10.0%	4	46	50	Long OJT	None	\$\$\$
Miscellaneous Construction and Related Workers	481	455	496	3.1%	9.0%	2	54	56	Moderate OJT	None	\$\$\$
Flight Attendants	458	373	456	-0.4%	22.3%	0	51	51	Moderate OJT	<5 years	\$\$\$\$
Hazardous Materials Removal Workers	409	400	458	12.0%	14.5%	5	51	56	Moderate OJT	None	\$\$\$
	No fo	rmal ed	ucationa	No formal educational credentia	al						
Service Unit Operators, Oil and Gas	1,029	820	1,030	0.1%	25.6%	0	109	109	Moderate OJT	None	\$\$\$

Notes: To rank as a "top job," an occupation must: 1) rank in the top two wage quartiles; AND 2) have total 10-year projected growth of at least 75 jobs and greater percentage growth than all occupations combined, OR be among the 50 occupations with the most projected average annual openings (of those with wages in the top two quartiles). Residual "all other" occupations are excluded. *structural growth is typical job growth that comes from stable trends in the economy and does not include recovery of pandemic job losses. The total openings category only includes structural growth openings and separations.

OJT = on-the-job training. Moderate-term is one to 12 months and long-term is more than 12 months. *Wages: \$\$\$ = \$60,740 to \$80,520 annually (\$29.20 to \$38.71 hourly), \$\$\$\$ = More than \$80,520 annually (\$38.71 hourly), based on Bureau of Labor Statistics Occupational Employment and Wage Statistics' May 2020 MB3 Estimates for Alaska

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



The spread of COVID-19 caused rapic job loss in early 2020. Although employment is up significantly from pandemic lows, it is still 3.9 percent below August 2019.

U.S. employment, which was up 3.8 percent from July 2021, is now 1 percent above its 2019 level.

Alaska's unemployment rate has been less useful as an economic measure during the pandemic because of data collection difficulties and an unusually large number of people leaving the labor market that is, not working or looking for a job. After being well down during the second and third quarters of 2020, total wages paid by Alaska employers climbed above year-ago levels in the fourth quarter of 2020.

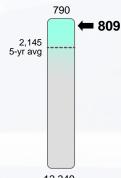
Wages were up 7.8 percent from year-ago levels in the first quarter of 2022 and 3.1 percent above first quarter 2019.

Gauging The Economy

ALASKA'S 10-YR AVERAGE CURRENT ALASKA

Initial Claims

Unemployment, week ending Sep. 3, 2022*



12,349

Unemployment claims jumped in the spring of 2020 with the pandemic as many businesses shut down or limited services. Pandemic-driven claims loads have fallen, and new claims for benefits are back below their long-term average.

*Four-week moving average ending with specified week



GDP Growth

Gross domestic product is the value of the goods and services a state produces. Alaska's GDP fell hard in early 2020 but recovered most of those losses in 2021.

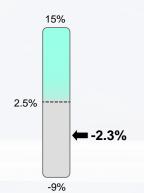
-20%

*In current dollars

0%



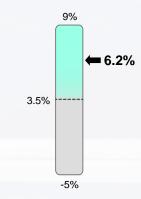
1st Quarter 2022 Over-the-year percent change



Although wages and other types of employment income were up, a bigger decline in transfer receipts (government payments) pulled personal income into negative territory.

Change in Home Prices

Single-family, percent change from prior year, Q1 2022*



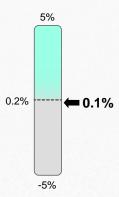
Home prices shown include only those for which a commercial loan was used. This indicator tends to be volatile from quarter to quarter.

*Four-quarter moving average ending with specified quarter

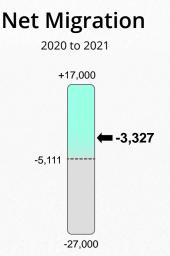


Population Growth

2020 to 2021

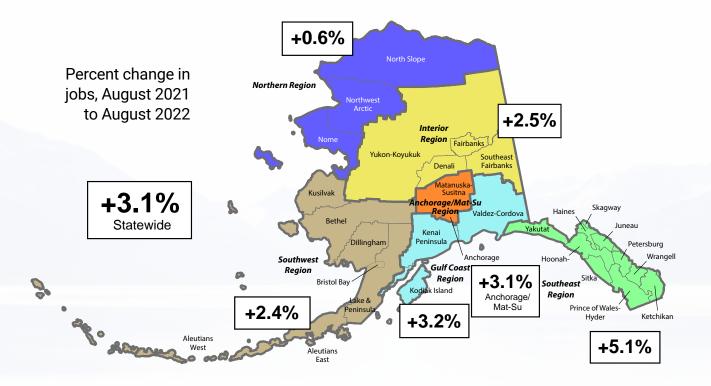


After four years of decline, Alaska's population grew slightly in 2021.



The state had net migration losses for the ninth consecutive year in 2021, although the loss was smaller. Net migration is the number who moved to Alaska minus the number who left.

Employment by Region



Unemployment Rates

Seasonally adjusted

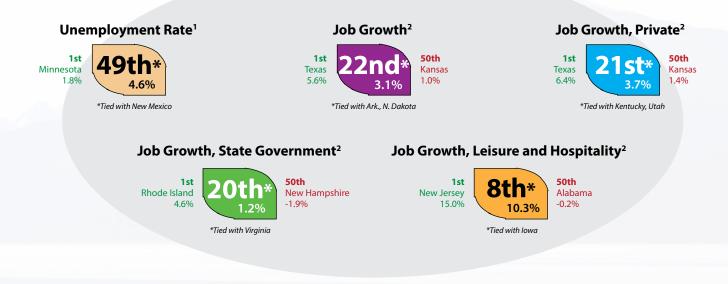
Not seasonally adjusted

	Prelim.	Revi	sed
	8/22	7/22	8/21
Inited States	3.7	3.5	5.2
Alaska	4.5	4.6	6.3

Regional, not seasonally adjusted

	Prelim.	Revi	sed		Prelim.	Revis	sed		Prelim.	Revi	sed
	8/22	7/22	8/21		8/22	7/22	8/21		8/22	7/22	8/21
Interior Region	4.0	4.3	5.0	Southwest Region	6.3	6.9	8.6	Southeast Region	2.9	3.5	4.6
Denali Borough	4.7	5.3	5.6	Aleutians East Borough	1.2	1.2	1.4	Haines Borough	5.5	6.6	7.9
Fairbanks N Star Borough Southeast Fairbanks	3.6 4.9	3.9 5.3	4.7 6.0	Aleutians West Census Area	2.0	2.5	2.4	Hoonah-Angoon Census Area	3.6	4.4	5.2
Census Area				Bethel Census Area	9.6	11.0	13.0	Juneau, City and Borough	2.3	2.7	3.7
Yukon-Koyukuk	8.8	8.8	10.5	Bristol Bay Borough	2.0	1.1	2.7	Ketchikan Gateway	3.4	3.9	5.8
Census Area				Dillingham Census Area	5.0	5.4	7.2	Borough			
Northern Region	8.9	8.9	10.0	Kusilvak Census Area	14.6	17.9	19.7	Petersburg Borough	3.7	4.1	4.8
Nome Census Area	9.4	9.3	10.7	Lake and Peninsula Borough	3.9	4.7	6.7	Prince of Wales-Hyder Census Area	5.0	5.9	7.:
North Slope Borough	5.6	6.1	6.4	2010081				Sitka, City and Borough	1.9	2.4	2.0
Northwest Arctic Borough	11.9	11.3	13.0	Gulf Coast Region	3.6	4.3	5.2	Skagway, Municipality	4.7	5.7	7.7
Anchorage/Mat-Su Region	3.2	3.9	5.1	Kenai Peninsula Borough	3.8	4.6	5.5	Wrangell, City and Borough		5.1	6.0
Anchorage, Municipality	2.9	3.6	5.0	Kodiak Island Borough	2.9	3.3	4.3	Yakutat, City and Borough	3.7	3.4	5.3
Mat-Su Borough	4.0	5.0	5.6	Chugach Census Area	2.5	2.8	3.8	Takatat, city and borough	5.7	5.4	5.
inde ou porougit		5.0	510	Copper River Census Area	6.5	7.2	6.2				

How Alaska Ranks



Note: Government employment includes federal, state, and local government plus public schools and universities. ¹August seasonally adjusted unemployment rates

²August employment, over-the-year percent change

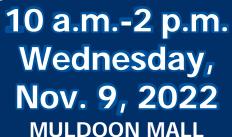
Sources: U.S. Bureau of Labor Statistics; and Alaska Department of Labor and Workforce Development, Research and Analysis Section

Other Economic Indicators

	Cu	rrent	Year ago	Change
Urban Alaska Consumer Price Index (CPI-U, base yr 1982=100)	252.271	1st half 2022	232.679	+8.42%
Commodity prices				
Crude oil, Alaska North Slope,* per barrel	\$102.96	August 2022	\$70.28	+46.50%
Natural gas, Henry Hub, per thousand cubic feet (mcf)	\$8.78	August 2022	\$4.03	+117.87%
Gold, per oz. COMEX	\$1,671.10	9/21/2022	\$1,778.20	-6.02%
Silver, per oz. COMEX	\$19.18	9/21/2022	\$22.61	-15.17%
Copper, per lb. COMEX	\$3.50	9/21/2022	\$4.13	-13.25%
Zinc, per lb.	\$1.42	9/21/2022	\$1.40	+1.43%
Lead, per lb.	\$0.83	9/21/2022	\$0.96	-13.54%
Bankruptcies	29	Q1 2022	63	-53.97%
Business	0	Q1 2022	5	-100%
Personal	29	Q1 2022	58	-50.00%
Unemployment insurance claims				
Initial filings	3,601	August 2022	6,562	-45.12%
Continued filings	14,748	August 2022	28,261	-47.82%
Claimant count	3,363	August 2022	6,216	-45.90%

*Department of Revenue estimate

Sources for this page and the preceding three pages 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. Energy Information Administration; Kitco; U.S. Census Bureau; COMEX; NASDAQ; Alaska Department of Revenue; and U.S. Courts, 9th Circuit



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EMPLOYER RESOURCES

Alaska tax credit is one more reason to hire a veteran

Most employers know there are many reasons to hire military veterans, including the job and leadership skills veterans bring to a business and their proven ability to be responsible and dependable employees. Another reason is that employers may be entitled to a tax credit for each qualified veteran they employ!

The Alaska Veteran Employer Tax Credit is different from the federal Work Opportunity Tax Credit. The process is simple and straightforward, and there's no certification process. Employers apply when they submit their corporate taxes, and there are only three credit categories. To qualify, the veteran must have been:

- Unemployed for at least four weeks immediately preceding the date employment begins, and
- Discharged or released from military services:
 - Less than 10 years before the date employment begins for disabled veterans (service-connected dis-

 ability through the Veterans Administration), or
Less than two years before the date employment begins for veterans who are not disabled

The credit amount depends on whether the veteran is disabled, and whether the veteran is a permanent hire or a seasonal worker:

- \$3,000 for a disabled veteran in a permanent position
- \$2,000 for a veteran who is not disabled in a permanent position
- \$1,000 for a veteran in a seasonal position

Employers can apply for this tax credit with the state Form 6325 when they file annual corporate income taxes. The form and instructions are <u>available here</u>.

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