ALASKA ECONOMIC TRENDS

AUGUST 2021

WORKING FROM HOME

COVID hastened the trend

ALSO INSIDE

What 10 years of GDP show

Pandemic job losses varied around the state last year

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ALASKA ECONOMIC TRENDS

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ON THE COVER:

These cabins east of Hatcher Pass in Willow are part of Hatcher Pass Lodge.
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Trends is a nonpartisan, data-driven magazine that covers a range of economic topics in Alaska.

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Telework's popularity on the rise

COVID-19 accelerated a trend for certain types of work

By LIZ BROOKS

COVID-19 accelerated multiple long-term trends, such as the growing popularity of food delivery apps, telehealth, online education, and teleworking.

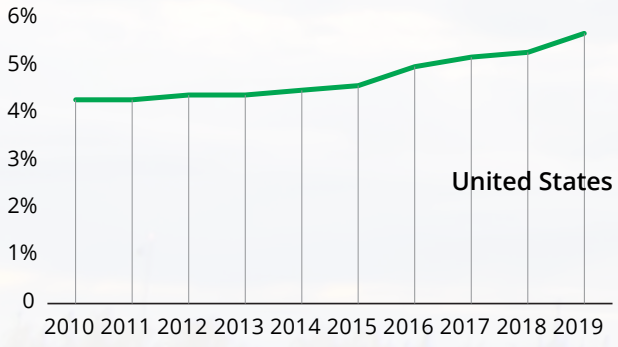
Teleworking skyrocketed last spring after the pandemic began. In May and June, a third of U.S. workers teleworked because of COVID-19 — and that doesn't include people who would have worked at home anyway. Although rates have declined since then, over 14 percent teleworked in June 2021, which was more than twice the pre-pandemic rate.

People whose work could shift to home offices were also less likely to lose their jobs last year. Last May, 34 percent of U.S. workers in occupations unsuitable for telework had lost their jobs because of the pandemic versus 19 percent who could have worked remotely.

Businesses whose work could be done at home had an easier time staying open during the pandemic — when demand held — and keeping their employees. Professional and business services, finance, and wholesale employers increased telework the most.

Conversely, industries unable to transition to telework posted some of the biggest job losses; examples were retail, accommodation and food services, and construction.

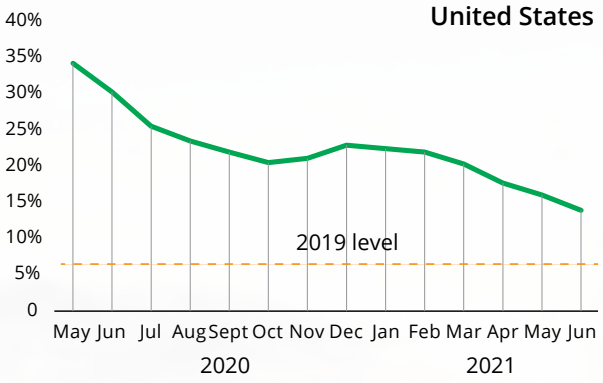
... and telework is on a long-term rise



Note: Americans who "usually worked from home"

Source: U.S. Census Bureau, One-Year American Community Survey for 2010 through 2019

COVID's telework bump waning but still well above pre-pandemic level ...



Note: Americans who teleworked at any time during the previous four weeks because of the pandemic

Source: U.S. Bureau of Labor Statistics, Current Population Survey coronavirus supplement

Teleworking in Alaska during pandemic was on par with nation

During the last quarter of 2020, 35 percent of Alaska households — about 89,000 — had at least one adult who teleworked because of the pandemic.

The likelihood of shifting to telework over that period increased with household income level. Only 11 percent of households bringing in $25,000 a year or less had a teleworker, which rose to more than half of households making between $100,000 and $150,000 and 64 percent of households making $200,000 or more.

The U.S. pattern since 1960

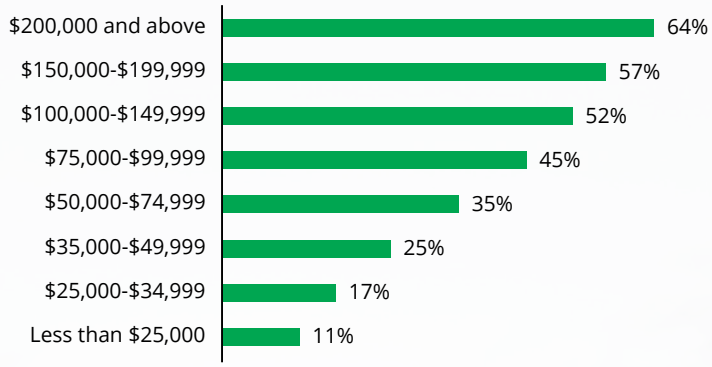
In 1960, when the census first asked about commuting, 7.2 percent of U.S. workers worked from home. The share declined after that, hitting a trough in 1980 of just 2.3 percent after employment at family farms dwindled and typically home-based professionals such as doctors and lawyers consolidated into group practices.

The percentage began to grow again after 1980 but reached just 3.3 percent by 2000. It rose a bit more in the 2010s, and from 2015 to 2019, 5.2 percent worked primarily from home. These included people operating a home business as well as those teleworking. (See the sidebar on page 7 for definitions.)

The numbers grow if we include people who worked from home at least some of the time over that period, to an estimated 8 percent of those who worked for an employer — a number that's conservative because it doesn't include the self-employed.

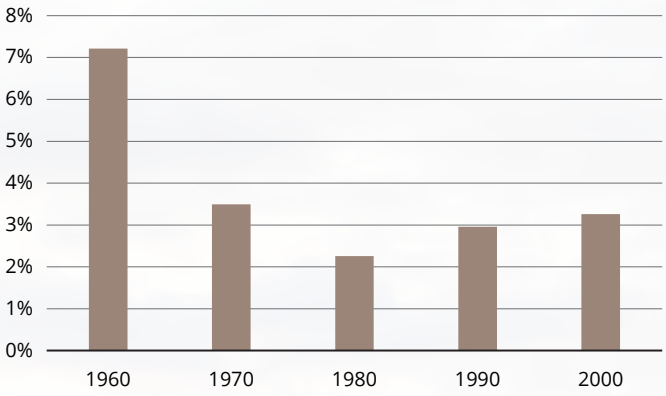
Comparable data aren't available for Alaska, but assuming our rates tracked the nation's, 8 percent of Alaska's wage and salary employees would represent about 26,500 Alaskans working at home at least one day a week before the pandemic.

In Alaska, high earners teleworked more



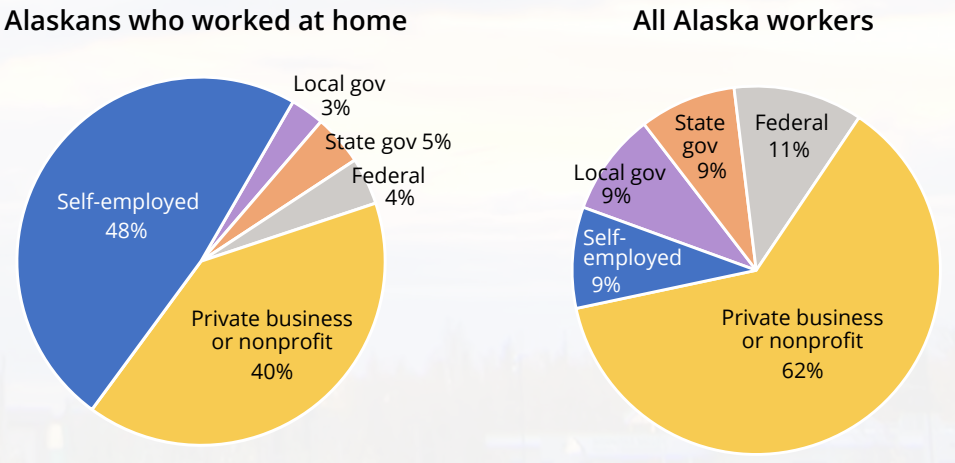
Source: U.S. Census Bureau Household Pulse Survey (Weeks 16 to 21: Sept. 30 to Dec. 21, 2020)

Historical U.S. work-at-home trends, 1960-2000



Source: U.S. Census Bureau, decennial census data

Alaskans who worked at home pre-COVID were largely self-employed



Source: U.S. Census Bureau Five-Year American Community Survey, 2015 to 2019

Telework-favorable U.S. jobs pay more. In 2019, their pay averaged $35.22/hr. For work that couldn't be done at home, it was $20.31.

Before the rise of teleworking in 2020, most at-home workers in Alaska were business owners. Nine percent of Alaskans were self-employed from 2015 to 2019, but they represented nearly half of at-home workers. The self-employed included child care providers, artists, and lodging managers as well as computer workers.

Work-at-home patterns by state

Before the pandemic, Colorado led the nation with 8.3 percent primarily working from home. At 4.8 percent, Alaska was slightly below the national average, although most states fell within a tight range of 4 to 6 percent of workers.

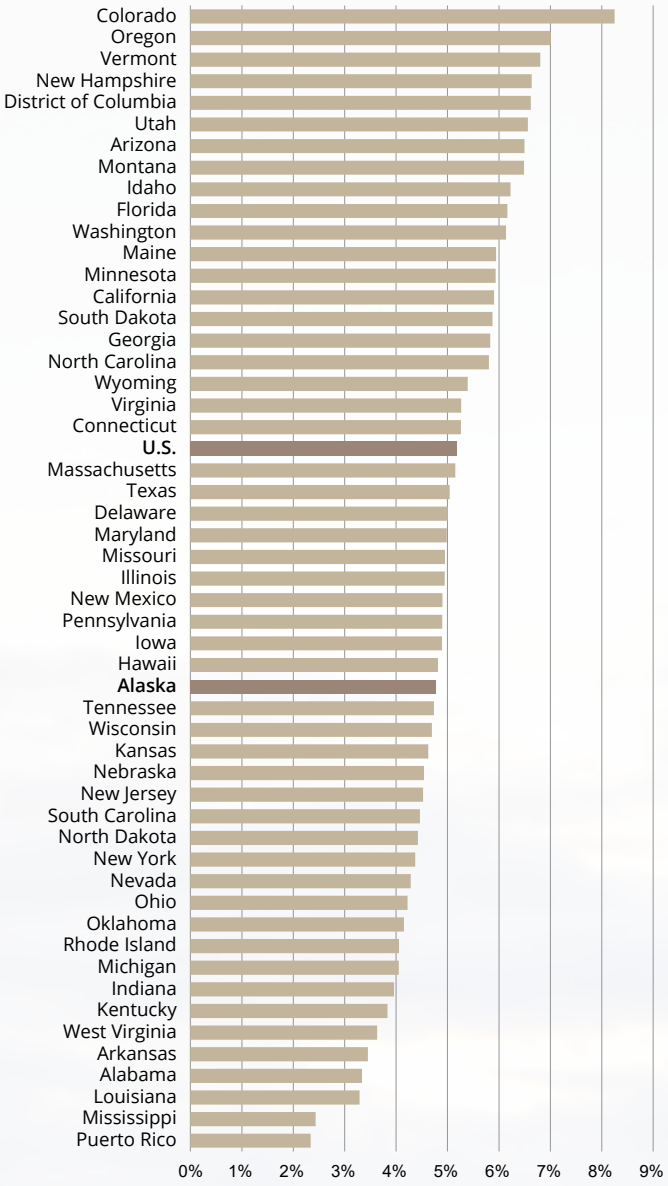
Industry mixes explain the differences among states. Some jobs that are difficult or impossible to do at home — for example, waiters, cashiers, and cooks — are common in all states. But other on-site work is more concentrated here than it is nationwide. Alaska has higher-than-average numbers of underground mining machine operators, air traffic controllers, and fish trimmers.

The numbers of teleworkers leaped up everywhere last year, but Washington D.C.'s climb was steepest. Before the pandemic, D.C.'s rate was about 6.6 percent of workers. In August 2020, over 60 percent of adults in D.C. lived in a household with at least one person teleworking because of the pandemic.

D.C. has a high concentration of telework-suitable federal and other white-collar jobs, and the federal government was an early leader in teleworking. Relative to the average worker, telework was more than twice as common among federal workers before the pandemic.

According to an annual report to Congress, about half of federal employees who were allowed to work at home did so in fiscal year 2019, which was 22 percent of the federal executive branch. During the pandemic, 60 percent of federal employees teleworked every day.

Alaskans less likely than average to work at home before COVID-19



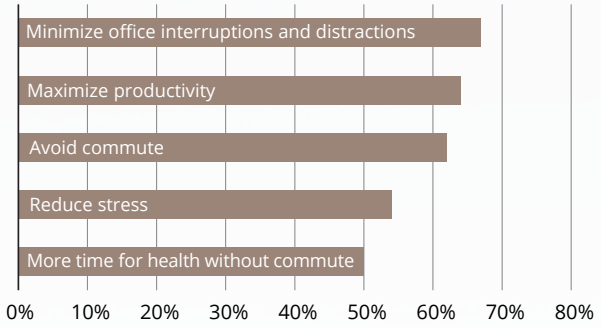
Source: U.S. Census Bureau Five-Year American Community Survey, 2015 to 2019

COVID-19 isn't the only reason working remotely is gaining ground

Aside from safety during the pandemic, employers who offer telework cite benefits such as continuity of operations during emergencies, reduced overhead costs, and employee satisfaction.

Most academic research on teleworking has relied

Reasons federal workers teleworked, 2018



Source: U.S. Office of Personnel Management, Federal Work-Life Survey Government-Wide Report, March 2018

on surveys, but a recent experiment that randomly assigned call-center employees at a large Chinese firm to telework found it increased productivity and cut attrition in half. Researchers cited the lack of noise from coworkers as one reason performance improved.

That experiment echoed findings from a recent survey of U.S. federal teleworkers — two-thirds said they worked remotely to minimize

Continued on page 18

About the data

Telework is performing a job at an approved alternate worksite during regular paid hours. It doesn't cover official travel or field work. Working from home in this article includes telework and other paid work where home is the primary worksite, such as home-based child care.

Because data on work-from-home patterns come from a range of surveys, all of which ask about it differently, most statistics aren't directly comparable across sources. The U.S. Census Bureau's Five-Year American Community Survey is this article's main source. The five-year releases are more reliable for smaller populations. Other sources include the Current Population Survey, which the bureau conducts in partnership with the U.S. Bureau of Labor Statistics, and the Census Bureau's new experimental project, the Household Pulse Survey.

The Census Bureau launched the Household Pulse Survey to see how the pandemic affected households' food security, employment, child care, and health care access. In preparation for the 2020 Census, the bureau had collected email addresses and phone numbers for 80 percent of all U.S. households. Alaska Permanent Fund Dividend applications were one source. From that list, the bureau invited a random sample by email and text message to respond to the survey. In every round, 13,333 Alaskans were invited. Alaska consistently had one of the highest response rates. Utah, Colorado, and Oregon were other top responders.

Another pandemic-specific source is the Current Population Survey's supplement to its usual monthly survey on labor force participation, which included pandemic-specific questions. BLS analysts used these data to write about how COVID-19 affected the U.S. labor market. See https://www.bls.gov/covid19/publications.htm.

Top and bottom work-at-home jobs pre-pandemic

Yellow shading means Alaska has a higher-than-average concentration* of that occupation

	U.S. % who usually worked at home
HIGHEST	
Writers And Authors	40%
Travel Agents	30%
Medical Transcriptionists	30%
Artists And Related Workers	30%
Farmers, Ranchers, etc.	30%
Management Analysts	25%
Web/ Digital Interface Designers	25%
Photographers	25%
Web Developers	25%
Editors	20%
Property Appraisers and Assessors	20%
Medical Records Specialists	20%
Child Care Workers	20%
Claims Adjusters/Appraisers, etc.	15%
Market Research Analysts/Specs	15%
Real Estate Brokers, Sales Agents	15%
Sales Reps (exc Ad, Insure, Travel)	15%
Property, Real Estate Managers	15%
Sales Managers	15%
Personal Care Aides	15%
LOWEST	
Dishwashers	<1.5%
Dental Hygienists	<1.5%
Emergency Medical Technicians	<1.5%
Food Preparation Workers	<1.5%
Fast Food And Counter Workers	<1.5%
Police Officers	<1.5%
Stockers And Order Fillers	<1.5%
Cashiers	<1.5%
Bartenders	<1.5%
Waiters And Waitresses	<1.5%
Butchers, Other Meat Processors	<1.5%
Medical Assistants	<1.5%
Food Processing Workers	<1.5%
Postal Service Carriers and Clerks	<1%
Dental Assistants	<1%
Packers And Packagers, Hand	<1%
Transportation Security Screeners	<1%
Correctional Officers and Jailers	<1%
Industrial Truck/Tractor Operators	<1%
Underground Mining Mach Opers	<1%

*Based on location quotients, which show the concentration of workers in a certain occupation in Alaska relative to the U.S. as a whole. Shaded occupations have an Alaska location quotient higher than 1.0, which is the U.S. average.

Source: U.S. Census Bureau Five-Year American Community Survey, 2015 to 2019 public use microdata

Pandemic's uneven effects by area

Damage was broad, but Southeast's job losses steepest

By NEAL FRIED

COVID-19 carved an uneven economic path through Alaska's 29 boroughs and census areas over the last two years, but it left few unscathed.

Closures, reluctant consumers, and the need to socially distance explain most of the job losses in every part of the state, albeit to varying degrees. Communities with larger service sectors lost the most to social distancing, as industries such as leisure and hospitality, retail, and transportation often require personal contact.

The lack of tourism last year also rippled through most areas of the state, but it hit hardest in Southeast, where the largest numbers of cruise ships would usually dock.

The worldwide economic slowdown and subsequent oil price collapse reverberated throughout Alaska as well. The oil industry's job losses hurt some communities more than others but stung the whole state.

It was a similar story with the fishing industry, a key economic driver in coastal Alaska in particular. While it's impossible to quantify COVID's precise harm to fish processing in 2020 because the industry is so volatile from year to year, the pandemic hampered hiring and required operational changes to keep the workforce safe. (See the November 2020 issue of *Trends*.)

It's worth noting, though, that some of last year's job losses were unrelated to COVID-19 and would have happened anyway. Aside from a slight employment bump in 2019, the state had already been losing jobs since late 2015.

Job loss or growth by area, 2019 to 2020

	Total jobs		Change in jobs	
Area	2019	2020	Number	Percent
Denali Borough	2,098	987	-1,111	-53.0%
Skagway, Municipality	1,080	563	-517	-47.9%
Haines Borough	1,029	774	-255	-24.8%
Hoonah-Angoon Census Area	839	676	-163	-19.4%
Lake and Peninsula Borough	972	787	-185	-19.0%
Bristol Bay Borough	1,303	1,079	-224	-17.2%
Dillingham Census Area	2,538	2,126	-412	-16.2%
Ketchikan Gateway Borough	7,398	6,284	-1,114	-15.1%
Valdez-Cordova Census Area*	4,977	4,326	-651	-15.0%
North Slope Borough	12,812	10,992	-1,820	-14.2%
Sitka, City and Borough	4,311	3,751	-560	-13.0%
Wrangell, City and Borough	824	725	-99	-12.0%
Juneau, City and Borough	17,957	15,872	-2,085	-11.6%
Anchorage, Municipality	150,066	137,774	-12,292	-8.2%
Alaska	**329,092**	**302,628**	**-26,464**	**-8.0%**
Kusilvak Census Area	2,151	1,996	-155	-7.2%
Nome Census Area	3,932	3,670	-262	-6.7%
Fairbanks North Star Borough	38,041	35,580	-2,461	-6.5%
Yukon Koyukuk Census Area	2,316	2,167	-149	-6.4%
Kenai Peninsula Borough	20,007	18,772	-1,235	-6.2%
Prince of Wales-Hyder CA	2,300	2,175	-125	-5.4%
Aleutians East Borough	2,437	2,324	-113	-4.6%
Bethel Census Area	7,051	6,773	-278	-3.9%
Petersburg Borough	1,282	1,237	-45	-3.5%
Kodiak Island Borough	5,871	5,668	-203	-3.5%
Matanuska-Susitna Borough	24,835	24,645	-190	-0.8%
Northwest Arctic Borough	2,923	2,912	-11	-0.4%
Aleutians West Census Area	3,422	3,485	+63	1.8%
Southeast Fairbanks CA	2,461	2,515	+54	2.2%
Yakutat, City and Borough	280	298	+18	6.0%

*The Valdez-Cordova Census Area was split into the Chugach and Copper River census areas in 2020, but the data were still combined in 2019.

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

The biggest losers by area

Employment dropped 8 percent statewide in 2020, which was the largest yearly job loss in Alaska's history. The biggest losers were the areas that shed more than that, and Southeast was one of just two regions with percent losses in the double digits. Southeast took a one-two punch from the pandemic and a poor fishing season.

Skagway was the region's most extreme example,

having lost nearly half its employment when the 2020 cruise ship season evaporated.

The lack of visitors hit many of Southeast's communities, but losses were muted where the industry plays a smaller local role; Petersburg is an example. Yakutat was a curious exception, as its employment grew slightly in 2020. (See the "winners" section for more.)

The Northern Region's losses ranked second-largest, and most came from a single area in a single category: the North Slope Borough's oil industry. The rest of the region's job losses were modest.

The Interior Region lost more than average because of the Denali Borough. Less than half the borough's jobs materialized in 2020, as it's home to Denali National Park, one of the state's most prominent tourist attractions. Job losses in other parts of the Interior were noteworthy, though; Fairbanks lost nearly 2,500 jobs.

Areas with modest losses

The Anchorage/Matanuska-Susitna Region lost slightly less employment than average proportionally, but Anchorage lost the most employment in the state numerically.

The Mat-Su Borough's minor loss blunted the region's final numbers. Mat-Su is one of the few parts of Alaska that has continued to add population in recent years. Also, nearly a third of Mat-Su residents work outside the borough, so those job losses would have been recorded elsewhere.

The Gulf Coast Region's losses were milder than average despite the significant roles the oil, fishing, and tourism-related industries play in its economy. The Kenai Peninsula's economy is one of the state's most diverse, however. The borough is home to several distinct communities that don't operate in unison, so last year's results were mixed.

Kodiak is a good example. Kodiak's economy is built on the U.S. Coast Guard and fishing, so it lost fewer jobs. Kodiak has the largest resident seafood processing workforce in the state and more year-round activity than most processing areas, which likely made it less vulnerable to the COVID-related restrictions on importing outside workers.

On the other hand, the Valdez-Cordova area took a major hit. While some losses came from fishing and tourism, the oil industry likely explains Valdez's heavier losses and truncated ferry traffic was probably a drag on Cordova.

Most of the Southwest Region's loss was among fish processors in Bristol Bay. While 2020 was a good fishing year in Bristol Bay, assembling such a large processing workforce for a short season is always a challenge. The pandemic multiplied the difficulties, resulting in a smaller workforce.

A few places added jobs last year

Despite the pandemic, three areas eked out modest job gains in 2020: Southeast Fairbanks, Aleutians West, and Yakutat.

The Southeast Fairbanks Census Area's economy is tied to the Fort Greely Army Garrisons, whose work continued throughout the pandemic.

Aleutians West also recorded slight growth. Like Kodiak, its seafood processing industry operates year-round, so much of its workforce was already in place before the pandemic began. The remote worksites also lent themselves well to isolating.

The Aleutians also had a good fishing year, although fluctuating harvest levels don't necessarily alter job numbers. As mentioned earlier, we can't isolate the pandemic's effects on the fishing industry because its annual employment is so volatile.

Yakutat has the smallest borough-level workforce in the state at about 300 people. Yakutat lost some leisure and hospitality jobs last year, but gains in health care and transportation offset those declines. The reasons Yakutat bucked the trend aren't clear, but even minor changes can produce visible fluctuations in workforce numbers that small.

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Decade of GDP reflects Alaska's lag

Underperforming the U.S. linked to the mix we produce

State GDP took a 5% hit from COVID-19

COVID-19 did a number on Alaska's gross domestic product, like it did on every economic indicator, taking a 5 percent bite in 2020. That was a drop of more than $2.6 billion. GDP began to grow again in the third and fourth quarters, but not enough to offset the initial loss.

Most Alaska industries absorbed the blow, ranging from a 3 percent loss for government to 29 percent from leisure and hospitality. The latter sector's value dropped from $1.6 billion in 2019 to $1.1 billion as demand for entertainment, hotels, and eating out evaporated. Before 2020, leisure and hospitality's value had trended upward for most of the decade. Health care and social assistance's 7 percent loss was also unusual, as health care had grown predictably each previous year. Transportation took a similar hit at 8 percent.

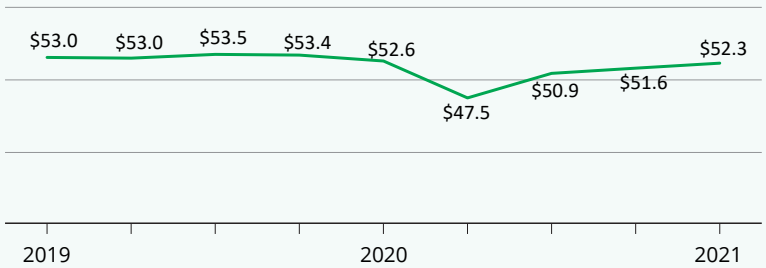
A handful of industries increased their output last year or held steady. Construction was one, and another was the financial sector, which benefitted from healthy stock and real estate markets and from administering COVID-related programs.

Retail was the biggest surprise. The industry shed 6 percent of its jobs last year, or about 2,200, as retailers closed or curtailed their operations. The industry's production decreased just 3.5 percent, though. Some retailers kept operating but needed fewer front-line staff.

The GDP recovery that began later in 2020 continued into 2021. While GDP hasn't regained its pre-COVID level, the first quarter's annualized value rose to $52.3 billion as oil prices and employment recovered and COVID-relief payments continued.

Alaska's GDP is on the rise from 2020's low

In billions, inflation-adjusted to 2012 value and annualized



Source: U.S. Bureau of Economic Analysis

By NEAL FRIED

Gross domestic product measures the value of everything produced within our borders. In 2020, Alaska generated $51 billion in goods and services.

At the state level, GDP jumps around more than it does nationally, and those common, dramatic swings have fewer economic consequences than they would at the national level. Alaska's GDP volatility stands out among states, too, given our dependence on oil.

For example, in 2013, Alaska's total employment and income grew modestly but our GDP fell by $3 billion, or about 5 percent, then slid another $1 billion the following year. A similar drop in GDP at the national level would have probably spurred a deep recession with significant job loss.

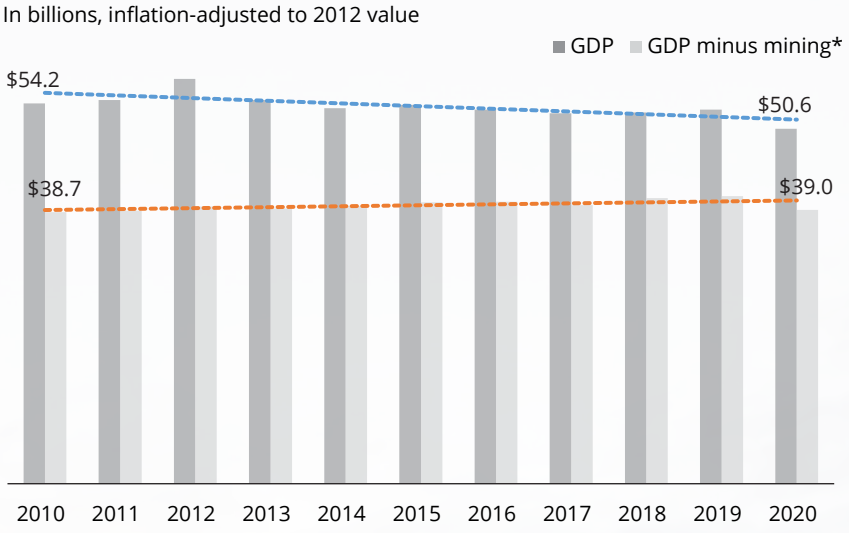
An even more dramatic and opposite example is 2009. Alaska lost jobs and income declined, but with record oil prices, our GDP grew 10 percent — the decade's largest increase.

Yearly changes in the value of Alaska's GDP say little on their own about what's happening with the state's economy. (See the sidebar on the next page.) These figures' value lies in showing how Alaska's productivity and the makeup of our economy stack up with other states and the nation. And because these

data have been around a long time, they also illuminate historical patterns; in fact, Alaska's GDP history helps explain why our economy lagged the nation's over the last decade.

While this article takes a long-term view, the sidebar on page 10 summarizes how COVID-19 affected the state's GDP last year.

State GDP trend is flat when oil's role is removed



*Oil and gas represents 85 percent of the mining sector's value, on average.

Source: U.S. Bureau of Economic Analysis

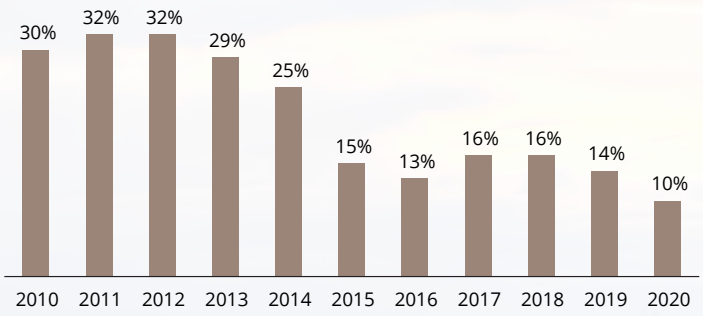
It wasn't a good decade for GDP

Alaska's annual GDP growth rate was negative over the last decade while the nation's was 1.7 percent. Only two states underperformed Alaska: Louisiana and Wyoming. (See the table on the next page.) It wasn't a good time for the mature energy-dependent states.

Distinct from much of the nation, which recorded robust and sustained economic growth over the last decade, Alaska weathered a severe recession from late 2015 to 2018. Even before that, our economic growth was subpar.

Falling oil prices and production were behind most of Alaska's poor performance. If you subtract mining — 85 percent of which is oil and gas in Alaska — Alaska's GDP increased slightly from 2010 to 2020 when adjusted for inflation.

Oil's share of state GDP has fallen



Notes: Percentages represent the mining sector's share of GDP. Oil and gas is 85 percent of mining's value, on average. Based on nominal dollar value.

Source: U.S. Bureau of Economic Analysis

GDP at the state level

Gross domestic product measures the value of everything that businesses and the government produce within United States borders. The federal government's quarterly release of the national GDP numbers gets a lot of attention, as it's one of the broadest measures of economic health and drives numerous major private and public policy decisions.

The feds also release comparable quarterly and annual GDP numbers for all states and some metropolitan areas. At the state level, GDP is a blunt and less nuanced statistic. For that reason, it rarely drives major policy decisions.

Subtle and sometimes large shifts are common and less meaningful at the state level, so state GDP data shouldn't be used on their own to gauge Alaska's economic health. Employment, income, and population numbers paint a more accurate picture.

The value of state GDP numbers lies in their insights into historical trends and the ability to compare Alaska's economic output to other states and the nation.

GDP growth rates by state, 2010-2020

		Avg annual growth rate, 2010-20
	United States	1.7%
1	Washington	3.6%
2	North Dakota	3.2%
3	Utah	3.2%
4	California	2.8%
5	Colorado	2.8%
6	Texas	2.7%
7	Oregon	2.6%
8	Idaho	2.5%
9	Arizona	2.2%
10	Georgia	2.2%
11	Florida	2.0%
12	South Carolina	1.9%
13	Massachusetts	1.6%
14	Nebraska	1.6%
15	Tennessee	1.6%
16	Oklahoma	1.5%
17	South Dakota	1.5%
18	Kansas	1.4%
19	Minnesota	1.4%
20	North Carolina	1.4%
21	Montana	1.4%
22	Nevada	1.3%
23	Ohio	1.3%
24	Iowa	1.2%
25	Maryland	1.1%
26	Michigan	1.1%
27	Pennsylvania	1.1%
28	Indiana	1.0%
29	New Hampshire	1.0%
30	New Mexico	1.0%
31	New York	1.0%
32	Wisconsin	1.0%
33	Virginia	0.9%
34	Arkansas	0.8%
35	Alabama	0.7%
36	Hawaii	0.7%
37	Illinois	0.7%
38	Kentucky	0.7%
39	Maine	0.5%
40	Missouri	0.3%
41	New Jersey	0.3%
42	Delaware	0.2%
43	Mississippi	0
44	Rhode Island	0
45	Vermont	0
46	West Virginia	0
47	Connecticut	-0.3%
48	**Alaska**	**-0.7%**
49	Louisiana	-0.9%
50	Wyoming	-0.9%

Note: Inflation-adjusted to 2012 dollars

Source: U.S. Bureau of Economic Analysis

Long-term GDP growth by industry

Alaska industry	Percent growth, 2010-2020	Percent growth, 2009-2019
Total	**-9.4%**	**-4.7%**
Ag, Forestry, Fishing, Hunting	-16.3%	-14.0%
Mining	-37.5%	-33.6%
Utilties	39.3%	27.1%
Construction	-30.8%	-31.0%
Manufactruing	2.6%	3.8%
Wholesale Trade	15.5%	20.7%
Retail Trade	5.6%	9.4%
Transp and Warehousing	3.2%	12.7%
Pipeline Transportation	NA	28.0%
Information	14.9%	20.1%
Finance, Insurance, Real Estate	7.6%	8.5%
Professional/Business Svcs	-4.7%	-1.9%
Education, Health Care, Social	28.0%	38.1%
Health Care	NA	50.0%
Leisure and Hospitiality	-26.4%	3.4%
Government	-0.5%	2.6%
Federal Civilian	3.4%	-1.1%
Military	-14.2%	-14.2%
State and Local	4.6%	11.6%

Notes: Inflation-adjusted to 2012 dollars. NA means data were not available.

Source: U.S. Bureau of Economic Analysis

Mining represented the largest slice of Alaska's GDP after oil started flowing down the pipeline in the late 1970s. During the 1980s, the share often topped 50 percent.

As recently as 2014, mining still produced 25 percent of Alaska's GDP. Then in 2015, when oil prices tanked, its share fell to 15 percent. In 2020, it hit a low of 10 percent.

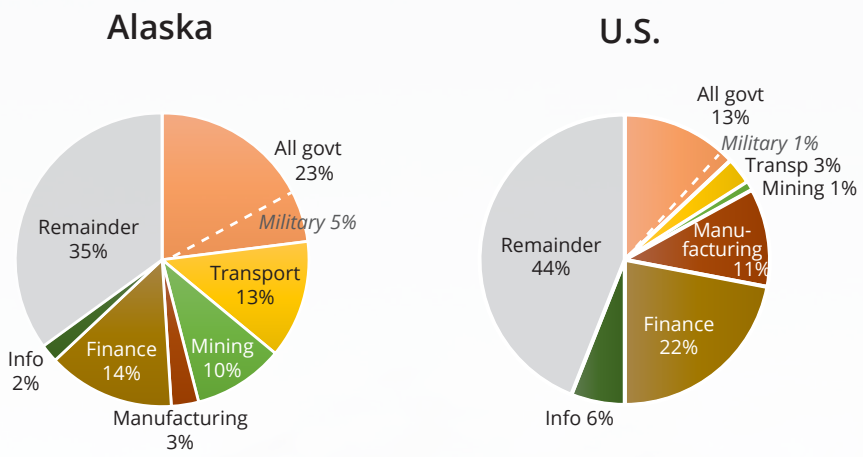
The downward trend for oil and growth or stability in other sectors continue to shrink oil's role in Alaska's economy, and our GDP growth is unlikely to return to its halcyon days. That's not to say oil won't recover some of its share of GDP in the coming years — the current low of 10 percent will rise with 2021's higher oil prices, and some analysts predict prices will climb even higher as the national and world economies recover from the pandemic. In the longer term, though, the state GDP will likely continue reflecting oil's diminishing presence.

Besides oil, here's what Alaska produces

In 2020, the public sector made up 23 percent of Alaska's gross product, making government the biggest contributor to our GDP. The largest share came from the federal government, evenly split between the military and the civilian portions. The U.S. Bureau of Economic Analysis doesn't divide the local and state government numbers, but their combined role was also substantial.

The transportation and warehousing sector followed at over 13

How Alaska's GDP mix differs from the U.S., 2020



Notes: Based on nominal values. Military is a subset of "all government." In Alaska, oil and gas are about 85 percent of mining's value, and most manufacturing is seafood processing.

Source: U.S. Bureau of Economic Analysis

percent. It's a big player in Alaska but only 3 percent of GDP nationally. It takes more effort and expense to move goods in Alaska, and the state is home to the Ted Stevens Anchorage International Airport, the world's second-busiest cargo hub for landed weight. The largest piece is pipeline transportation, though, which represents 9 percent of the state's GDP on its own.

The nonoil share of mining — hard rock, coal, and gravel — represented just under 3 percent of 2019's GDP, at about $1.6 billion. These data shed little light on trends in this category, as mineral values are all over the map. During the last decade, total value ranged from a high of $2.3 billion in 2011 to a low of $1.2 billion in 2015. These wildly fluctuating numbers have little effect on the industry's daily operations, though. Employment was remarkably stable over that period.

Alaska's GDP includes a range of other substantial categories. Health care generated 7 percent of our GDP in 2019, the most recent year available for health care's breakout. Health care plays a bigger role in our GDP than it did in the past. While total GDP dropped nearly 5 percent between 2009 and 2019, health care's value jumped 50 percent.

State GDP doesn't provide a clear tally of the value of Alaska's seafood industry, because it shows up in several categories and its value "leakage" is massive. The large trawler fleet based in Washington and other states harvests millions of dollars' worth of seafood in Alaska's waters, for example, but much of the value is counted in those states' GDP numbers.

Our GDP mix stands out nationally

Alaska's GDP blend is unusual relative to the rest of the nation. The biggest differences are in oil and gas, transportation, government, manufacturing, and finance.

In 2020, even with a diminished oil industry, oil represented nearly 10 percent of our gross domestic product but only 1 percent of the nation's.

Alaska's government share is more than twice what it is nationally, a testament to Alaska's large military and federal civilian presence. Our state and local government share is bigger, too, as it's harder to deliver basic services in such a large state.

Another difference is manufacturing, which is virtually absent in Alaska at just 3 percent of GDP but generates 11 percent of national GDP. Our small amount of manufacturing is mostly seafood processing.

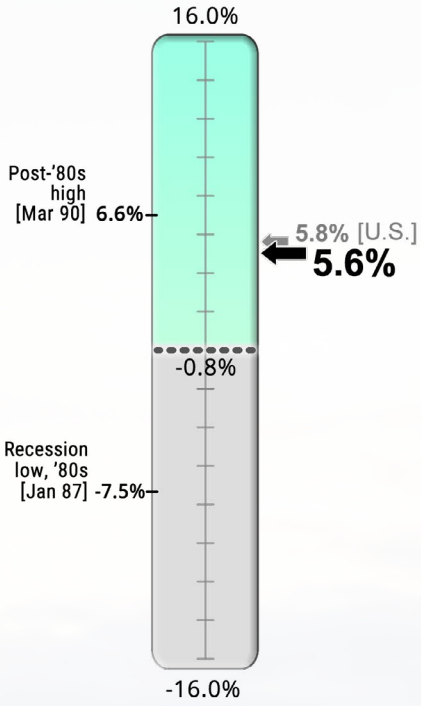
Finance — banks, mortgage companies, brokerage houses, and real estate companies — plays a more prominent role nationally. Large financial entities don't headquarter in Alaska, and Alaska exports few of its financial services to other states, as many states do.

Continued on page 18

Gauging The Economy

Job Growth

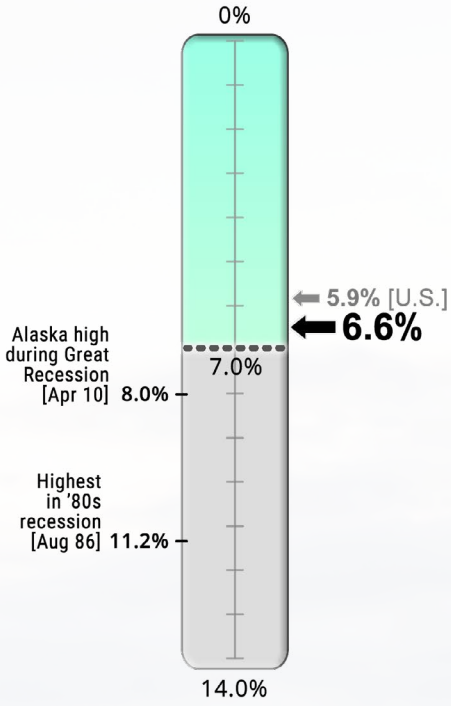
June 2021
Over-the-year percent change



- The spread of COVID-19 caused a rapid drop in employment beginning in April 2020. April 2021 marked the first comparison to a month in 2020 that had COVID-related job loss. Although employment is up significantly from that low period, it's well below the same months' job levels in 2019.

Unemployment Rate

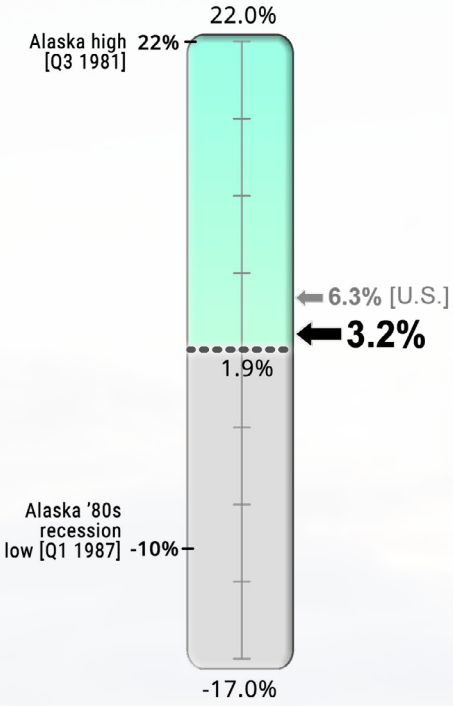
June 2021
Seasonally adjusted



- Alaska's unemployment rate has been difficult to calculate during the pandemic and is less useful as an economic measure than it normally would be.

Wage Growth

4th Quarter 2020
Over-the-year percent change



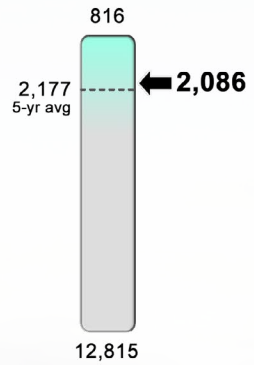
- After being well down during the second and third quarters of 2020, total wages paid by Alaska employers climbed above year-ago levels in the fourth quarter.

Gauging The Economy

ALASKA'S 10-YR AVERAGE
CURRENT ALASKA

Initial Claims

Unemployment, week ending July 10, 2021**

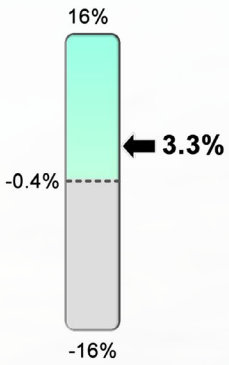


- Unemployment claims jumped in the spring of 2020 with the pandemic as many businesses shut down or limited services, and they remain elevated.

**Four-week moving average ending with specified week

GDP Growth

1st Quarter 2021
Over-the-year percent change*

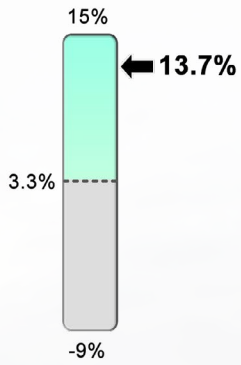


- Gross domestic product is the value of the goods and services a state produces. Alaska's GDP dropped significantly when COVID-19 hit, but is slowly recovering.

*In current dollars

Personal Income Growth

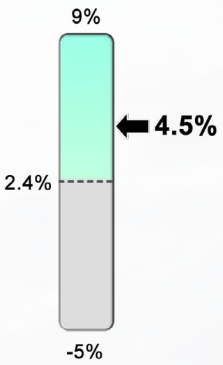
1st Quarter 2021
Over-the-year percent change



- Personal income jumped well above year-ago levels, largely because of federal COVID-19 relief funding. Wages were relatively flat over the period.

Change in Home Prices

Single-family, percent change from prior year, Q4 2020**

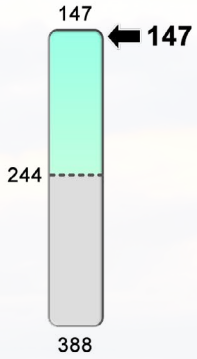


- Home prices include only those for which a commercial loan was used. This indicator tends to be volatile from quarter to quarter.

**Four-quarter moving average ending with specified quarter

Foreclosures

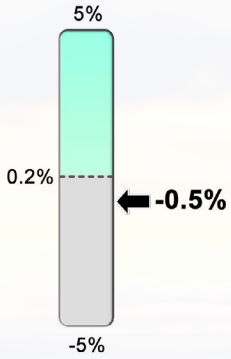
1st Quarter 2020



- Because of the pandemic, there has been an indefinite moratorium on foreclosures since the second quarter of 2020.

Population Growth

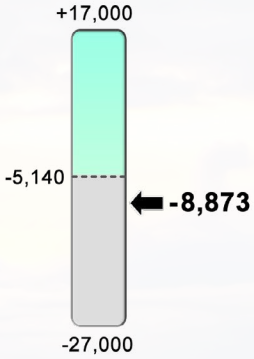
2019 to 2020



- This was the fourth straight year of population decline.

Net Migration

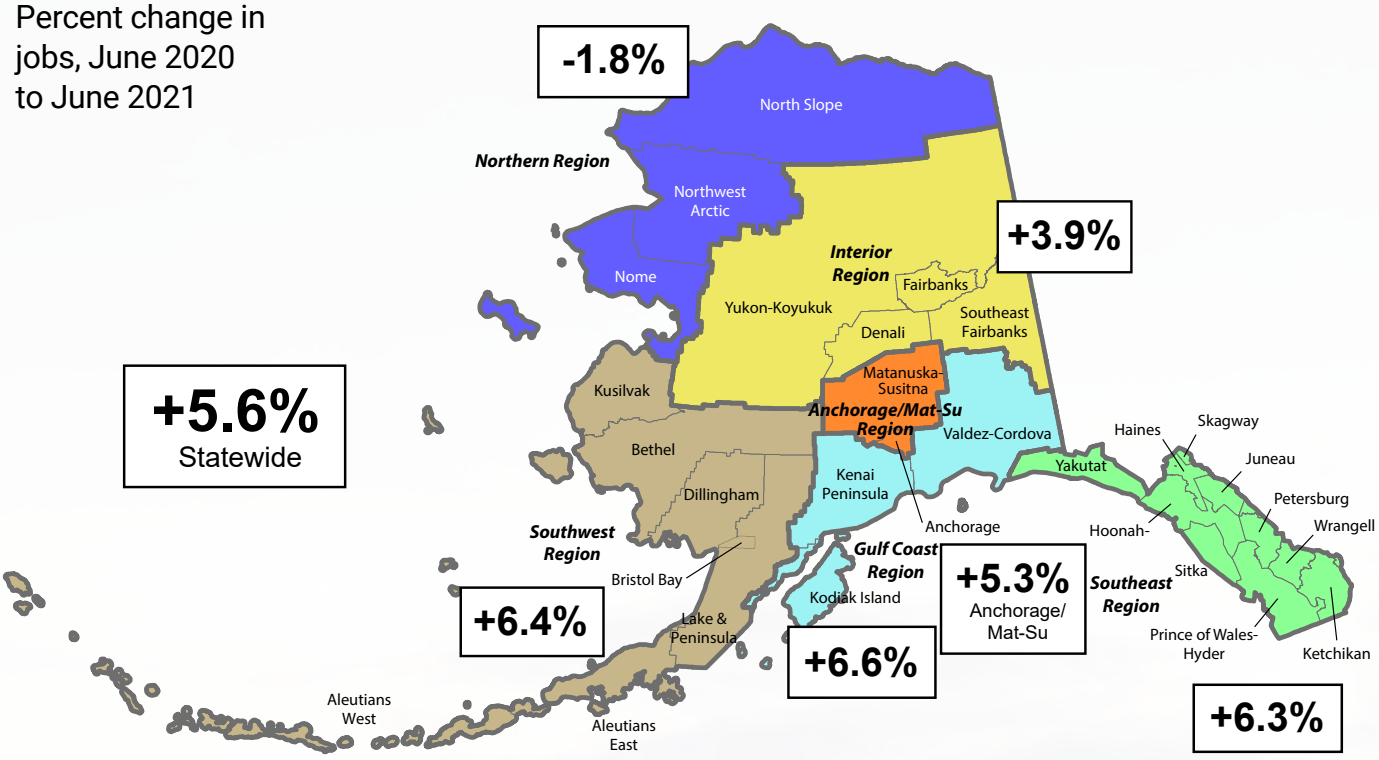
2019 to 2020



- The state had net migration losses for the eighth consecutive year in 2020. Net migration is the number who moved to Alaska minus the number who left.

Employment by Region

Percent change in jobs, June 2020 to June 2021



Seasonally adjusted

	Prelim.	Revised	
	06/21	05/21	06/20
United States	**5.9**	**5.8**	**11.1**
Alaska	**6.6**	**6.6**	**11.3**

Not seasonally adjusted

	Prelim.	Revised	
	06/21	05/21	06/20
United States	**6.1**	**5.5**	**11.2**
Alaska	**6.6**	**6.4**	**11.2**

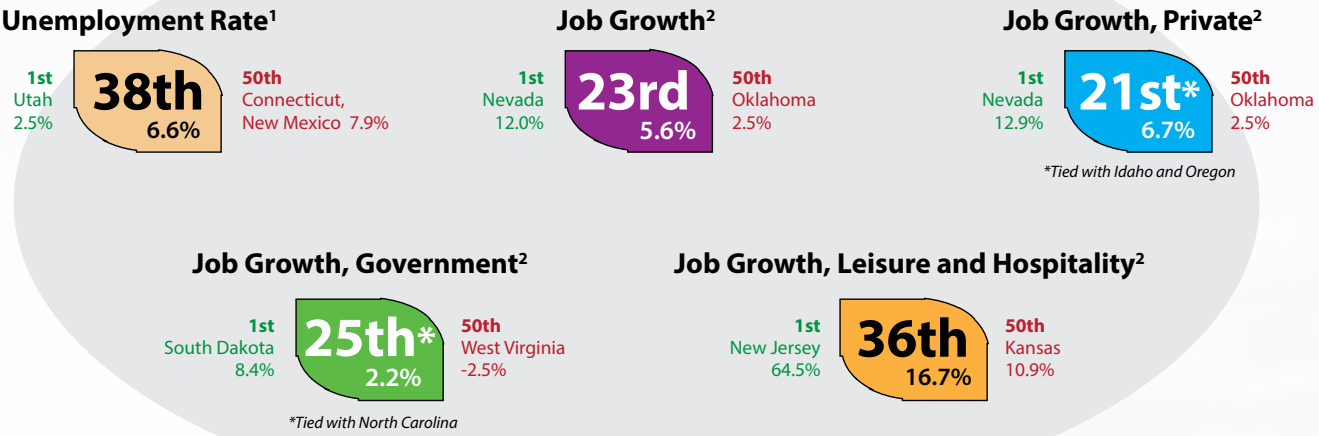
Regional, not seasonally adjusted

	Prelim.	Revised	
	06/21	05/21	06/20
Interior Region	**5.7**	**5.4**	**9.8**
Denali Borough	9.8	11.9	19.8
Fairbanks N Star Borough	5.2	4.9	9.3
Southeast Fairbanks Census Area	6.9	6.3	9.1
Yukon-Koyukuk Census Area	12.4	11.8	16.0
Northern Region	**10.7**	**9.9**	**13.5**
Nome Census Area	11.8	11.3	14.6
North Slope Borough	7.0	6.0	9.3
Northwest Arctic Borough	12.9	12.4	16.5
Anchorage/Mat-Su Region	**6.4**	**6.1**	**11.1**
Anchorage, Municipality	6.2	5.9	10.9
Mat-Su Borough	7.2	6.8	11.8

	Prelim.	Revised	
	06/21	05/21	06/20
Southwest Region	**9.7**	**10.3**	**12.5**
Aleutians East Borough	1.7	2.9	4.4
Aleutians West Census Area	3.2	4.7	7.6
Bethel Census Area	13.0	12.3	15.0
Bristol Bay Borough	3.5	5.7	4.8
Dillingham Census Area	8.3	8.5	11.3
Kusilvak Census Area	24.0	20.5	28.7
Lake and Peninsula Borough	8.5	9.6	11.2
Gulf Coast Region	**6.7**	**7.2**	**11.1**
Kenai Peninsula Borough	7.1	7.4	12.0
Kodiak Island Borough	5.5	6.1	8.1
Valdez-Cordova Census Area	6.1	7.5	9.8

	Prelim.	Revised	
	06/21	05/21	06/20
Southeast Region	**6.4**	**6.1**	**12.3**
Haines Borough	10.0	10.4	20.5
Hoonah-Angoon Census Area	10.5	10.3	16.7
Juneau, City and Borough	5.1	4.9	10.8
Ketchikan Gateway Borough	7.7	7.4	13.4
Petersburg Borough	6.7	6.7	10.8
Prince of Wales-Hyder Census Area	7.9	7.2	12.4
Sitka, City and Borough	4.7	4.7	11.3
Skagway, Municipality	12.2	12.4	26.1
Wrangell, City and Borough	6.5	6.2	11.2
Yakutat, City and Borough	7.5	7.4	8.9

How Alaska Ranks



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

	Current		Year ago	Change
Urban Alaska Consumer Price Index (CPI-U, base yr 1982=100)	227.258	2nd half 2020	228.495	-0.54%
Commodity prices				
Crude oil, Alaska North Slope,* per barrel	$73.18	June 2021	$41.79	+75.11%
Natural gas, Henry Hub, per thousand cubic feet (mcf)	$3.27	June 2021	$1.70	+92.35%
Gold, per oz. COMEX	$1,811.40	7/21/2021	$1,843.90	-1.76%
Silver, per oz. COMEX	$25.00	7/21/2021	$21.56	+15.96%
Copper, per lb. COMEX	$4.26	7/21/2021	$2.96	+43.92%
Zinc, per lb.	$1.32	7/21/2021	$0.99	+33.33%
Lead, per lb.	$1.06	7/21/2021	$0.81	+30.86%
Bankruptcies	63	Q1 2021	93	-32.26%
Business	5	Q1 2021	14	-64.29%
Personal	58	Q1 2021	79	-26.59%
Unemployment insurance claims				
Initial filings	7,662	June 2021	30,580	-74.94%
Continued filings	39,377	June 2021	188,961	-79.16%
Claimant count	9,849	June 2021	43,768	-77.50%

*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

WORKING FROM HOME

Continued from page 7

distractions and interruptions. The survey found several other reasons for working at home, which the bar graph on the previous page shows.

Worker responsibility for family care is another factor, although its nature will shift in the coming decades. During the pandemic, workers had a hard time finding child care. The share of households responsible for children is projected to decline as the median age rises, but the percentage caring for elders will grow even faster, making remote work options increasingly attractive.

Teleworking is expected to stick

Business analysts predict teleworking numbers will remain higher, even when COVID is in the rearview mirror. Hybrid arrangements that mix work at home and on-site are especially likely to gain ground.

Many employers and employees put all the necessities in place during the pandemic. They've already bought the equipment required to work remotely — hardware, web conferencing tools, cloud-based collaboration tools, and furniture. Attitudes have also changed. Keeping computer systems secure will remain a challenge for agencies with teleworkers, but that isn't new, nor is it unique to telework arrangements.

Multiple computer-based jobs with high rates of remote work even before the pandemic top the list of occupations projected to grow nationally over the next decade. Software developers, technical support specialists, systems and system security managers/analysts, web developers and designers, and database administrators are all among the top 10. Others on the list include marketing specialists, interpreters, event planners, and animal trainers.

Recent studies also suggest there's room to grow. A University of Chicago analysis of more than 1,000 occupations found telework is feasible for about a third of U.S. jobs, meaning they require computer use and time spent sitting. However, in a Bureau of Labor Statistics sample from 2016 and 2017, only about 25 percent of workers in suitable jobs were teleworking.

There's a limit, though, as many jobs will never be telework-friendly. Jobs that require wearing protective equipment; operating, maintaining, or repairing vehicles or equipment; and handling and moving objects will continue to need workers on site. (The table on page 7 lists the occupations with the highest and the lowest work-from-home likelihoods before the pandemic.)

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STATE GDP

Continued from page 13

Alaska's per capita GDP ranks eighth

GDP reflects the workforce's productivity, too, when carved up into a per capita figure. In theory, it shows how much wealth each person in the state generates. Per capita GDP isn't adjusted for residency, however, so we can't pinpoint how much of that wealth goes to people, businesses, and governments outside the state.

Alaska's per capita GDP was $72,263 in 2020, which ranked eighth in the nation. Just a decade ago, Alaska was first. Oil prices and production have made the difference.

Per capita GDP tracks broadly with per capita income, even though the two figures measure different things with some overlap. This relationship highlights another way that GDP can reflect economic well-being, however — a state or nation with high wealth output per person probably also has residents with access to a comfortable income.

This correlation held in Alaska in 2020. Our per capita income ranked ninth nationally at $64,740.

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EMPLOYER RESOURCES

Labor resources for Alaska agricultural employers

The Department of Labor and Workforce Development recognizes agriculture's essential role in the sustainability and growth of commodities throughout Alaska. Our local farmers, producers, and growers enhance the state economy, provide Alaskans with fresh products, and maintain marketplace competition.

Alaska has more than 1,000 farms, primarily in the Matanuska Valley. Alaska agriculture includes livestock, nursery work, tree farming, and crops including hay, potatoes, and barley. Alaska aquaculture is limited to aquatic plants like kelp and seaweed, and shellfish such as oysters, mussels, clams, and scallops.

Agriculture and aquaculture are expanding in Alaska as new technologies and methods have emerged for growing and producing food in some of the harshest environments in the country, but much of the work is still seasonal. Some agricultural employers recruit seasonal workers for these positions.

Alaska Job Center staff help agricultural employers fill seasonal positions by finding and referring qualified Alaskans. Recruiting employers can call (877) 724-2539 to be routed to their nearest Alaska Job Center or visit the Business Connection website at jobs.alaska.gov/employer to find information on recruiting, labor laws, and hire incentives such as tax credits and bonding.

Agricultural employers who provide housing to their migrant or seasonal workers need to ensure it's safe and habitable. Employers can contact Alaska's State Monitor Advocate by emailing ian.sexton@alaska.gov. The State Monitor Advocate ensures migrant or seasonal farm workers receive the same employment resources and protection as all Alaska workers.

To promote equitable treatment of migrant and seasonal farm workers, state and federal labor laws require employers to post the Notice of Migrant and Seasonal Agricultural Worker Protection Act poster in a space conspicuous to their workers: https://www.dol.gov/whd/regs/compliance/posters

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