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.

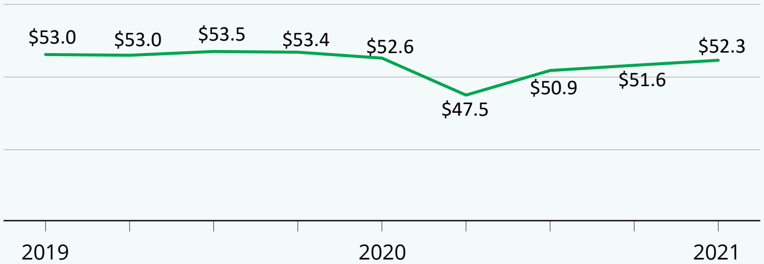
A handful of industries increased their output last year or held steady. Construction was one, and another was the financial sector, which benefitted from healthy stock and real estate markets and from administering COVID-related programs.

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.

It wasn't a good decade for GDP

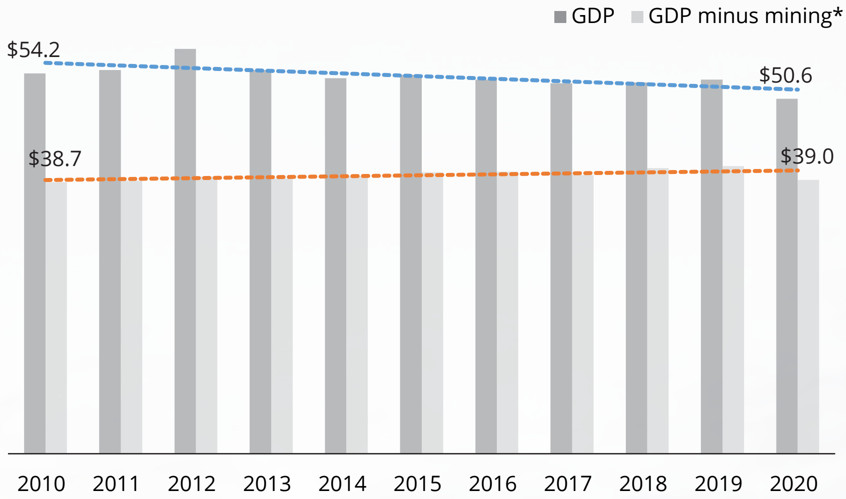
Alaska's annual GDP growth rate was negative over the last decade while the nation's was 1.7 percent. Only two states underperformed Alaska: Louisiana and Wyoming. (See the table on the next page.) It wasn't a good time for the mature energy-dependent states.

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.

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

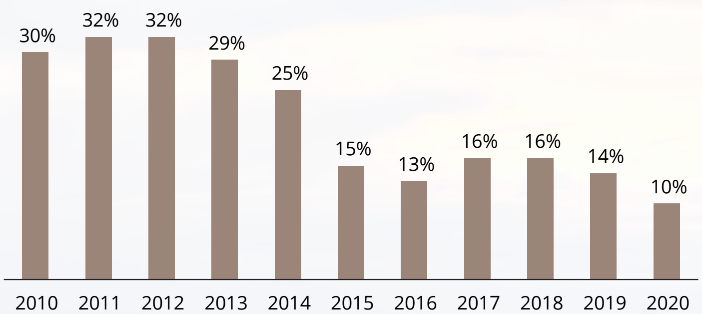
In billions, inflation-adjusted to 2012 value



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

Source: U.S. Bureau of Economic Analysis

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.

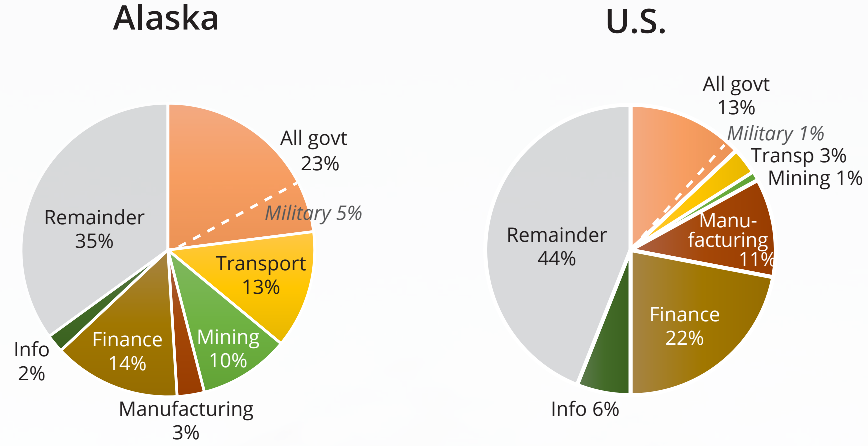
The downward trend for oil and growth or stability in other sectors continue to shrink oil's role in Alaska's economy, and our GDP growth is unlikely to return to its halcyon days. That's not to say oil won't recover some of its share of GDP in the coming years — the current low of 10 percent will rise 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.

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WORKING FROM HOME

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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

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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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