

Telework's popularity on the rise

COVID-19 accelerated a trend for certain types of work

By LIZ BROOKS

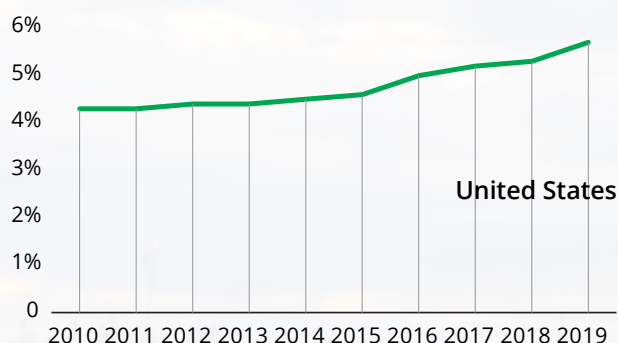
COVID-19 accelerated multiple long-term trends, such as the growing popularity of food delivery apps, telehealth, online education, and teleworking.

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

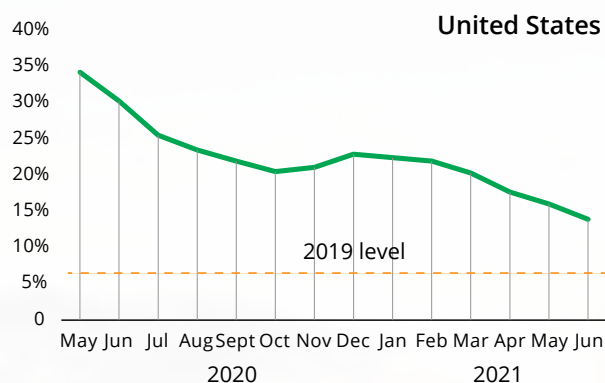
... and telework is on a long-term rise



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

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.

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

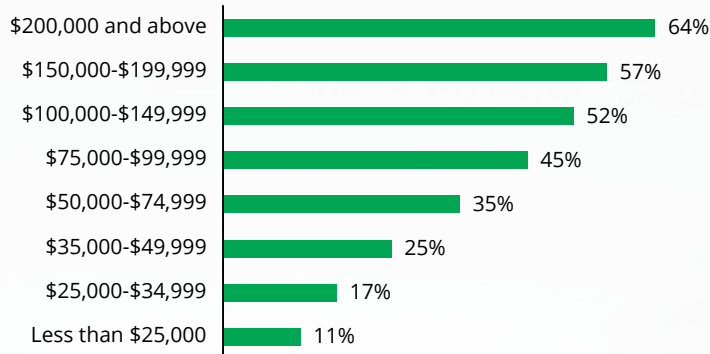
In 1960, when the census first asked about commuting, 7.2 percent of U.S. workers worked from home. The share declined after that, hitting a trough in 1980 of just 2.3 percent after employment at family farms dwindled and typically home-based professionals such as doctors and lawyers consolidated into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

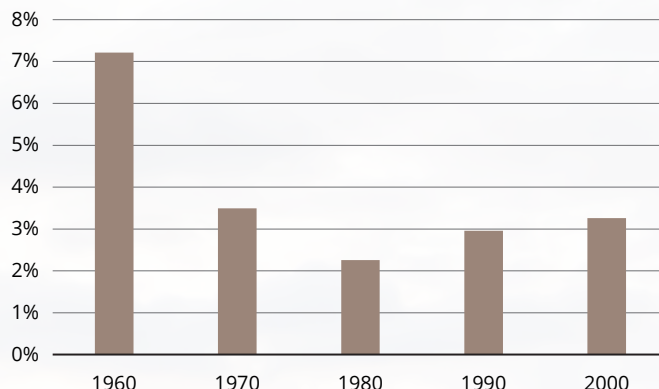
Comparable data aren't available for Alaska, but assuming our rates tracked the nation's, 8 percent of Alaska's wage and salary employees would represent about 26,500 Alaskans working at home at least one day a week before the pandemic.

In Alaska, high earners teleworked more



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

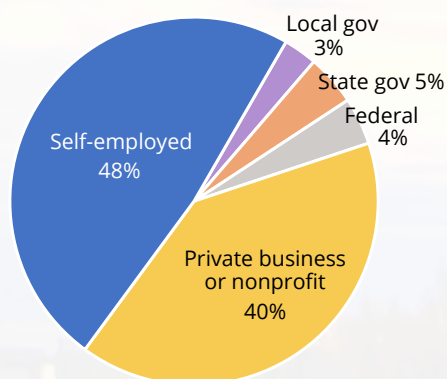
Historical U.S. work-at-home trends, 1960-2000



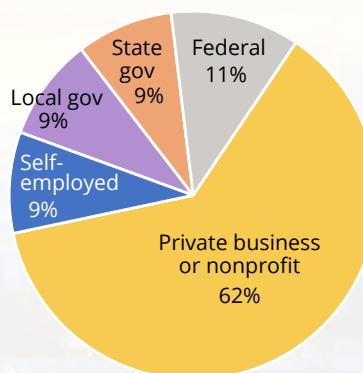
Source: U.S. Census Bureau, decennial census data

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

Alaskans who worked at home



All Alaska workers



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.

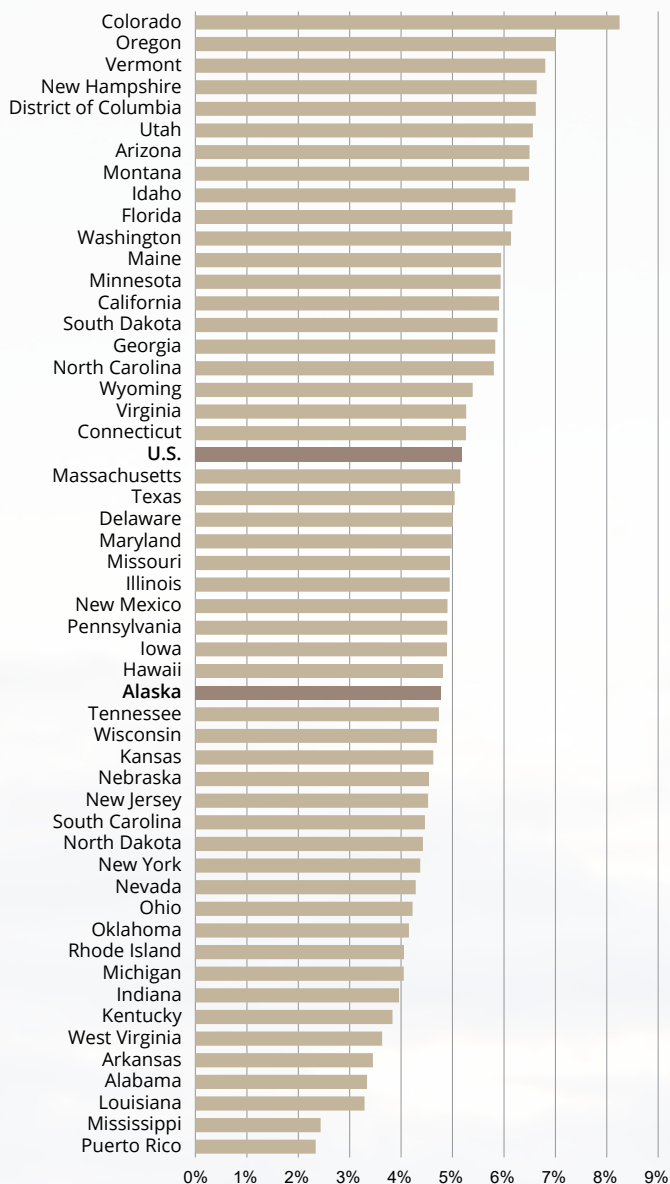
Industry mixes explain the differences among states. Some jobs that are difficult or impossible to do at home — for example, waiters, cashiers, and cooks — are common in all states. But other on-site work is more concentrated here than it is nationwide. Alaska has higher-than-average numbers of underground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



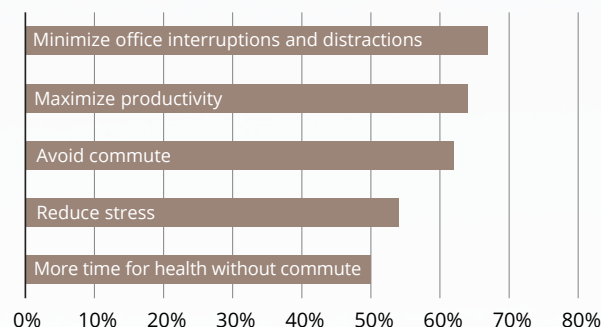
Source: U.S. Census Bureau Five-Year American Community Survey, 2015 to 2019

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

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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

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

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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