New Research: Unemployment Rate in Computer Occupations Changed Little From January to September 2020

Tech Employment Data Undermine DOL and DHS Push For H-1B Visa Rules

Arlington, Va. – The unemployment rate for individuals in computer occupations changed little from 3% in January 2020 (before the pandemic spread in the U.S.) to 3.5% in September 2020, according to an analysis of the Bureau of Labor Statistics’ (BLS) Current Population Survey by the National Foundation for American Policy (NFAP).¹ The unemployment rate was also 3% in January and 3.5% in September for computer and mathematical occupations, according to BLS. The rates are well below the unemployment rate of 7.8% for non-computer occupations. Active job vacancy postings advertised online in computer occupations are at 655,386 in the United States as of October 2, 2020, an increase of 4.7% over May 2020, according to Emsi Job Posting Analytics. These economic indicators show that computer occupations have weathered the pandemic well, particularly when compared to occupations connected to travel, leisure and hospitality.

The data indicate stability in the unemployment rate in computer occupations and contradict Trump administration statements in proclamations and regulations that “good cause” exceptions to the rulemaking process and emergency actions are needed to impose new restrictions on H-1B visas for high-skilled foreign nationals due to high unemployment caused by Covid-19. The highest computer and mathematical occupation unemployment rate in 2020 was 4.6% (in August), but since the year 2000 there have been 51 months with an unemployment rate in computer and mathematical occupations higher than 4.6% and no previous president or federal agency viewed those periods as requiring emergency measures to restrict legal immigration.


In the NFAP analysis of government unemployment rate data, the computer occupations track those listed in the H-1B “characteristics report” for FY 2019 published by U.S. Citizenship and Immigration Services (USCIS). According to the USCIS report, 66% of H-1B beneficiaries in FY 2019 were in computer-related occupations.

There are several likely explanations for why professionals in computer occupations have fared much better than workers in other occupations. The skills in computer occupations are those that generally can be performed remotely, an important characteristic during the coronavirus pandemic, according to labor economist and NFAP Senior Fellow Mark Regts. He notes the skills in computer occupations remain in demand today and are going to be in even higher demand in the future as work continues to move or remain online.

¹ Note: “The Current Population Survey (CPS) is a monthly survey of households conducted by the Census Bureau for the Bureau of Labor Statistics,” according to BLS.
On October 8, 2020, the U.S. Department of Labor published a rule to change the way prevailing wage is determined for H-1B visa holders and employment-based immigrants. DOL issued the rule as “interim final,” allowing it to go into effect immediately without prior notice and comment. The agency claimed one reason for the “good cause” exception to the Administrative Procedure Act (APA) is unemployment caused by the coronavirus pandemic.

The Department of Homeland Security, like DOL, published a rule on October 8, 2020, that substantially changes the H-1B visa category and made similar arguments for issuing the regulation as interim final, including citing the June 2020 proclamation.

“H-1B visa holders work primarily in computer occupations,” notes the NFAP report. “The U.S. unemployment rate for individuals in computer occupations – and in computer and mathematical occupations – stood at 3.5% in September 2020, not changed significantly from the 3% unemployment rate in January 2020. It is difficult to argue the current unemployment situation in computer occupations is an “emergency,” particularly when there are over 650,000 job vacancy postings advertised online in October 2020 for jobs in the most common computer occupations that typically require at least a bachelor’s degree.

“In addition, while the DOL rule cites the overall national unemployment rate reaching 14.7% in April 2020, the September 2020 national unemployment rate dropped to 7.9%. DHS justifies making its rule interim final based on outdated unemployment data: “This is particularly urgent given the exceptionally high unemployment rate in the United States – 10.2 percent as of August 7, 2020.” However, that national unemployment rate of 10.2% cited by DHS was for July 2020, two months old at the time DHS issued its H-1B rule, and the U.S. unemployment rate had already declined to 8.4% for August 2020 and 7.9% for September, without any action by the Department of Homeland Security. In addition, the unemployment rate for individuals 25 years and over with a bachelor’s degree or higher declined from 6.7% in July 2020 to 4.8% in September 2020.”

The DHS H-1B rule cited the unemployment rates in the Information sector and the Professional and Business Services sector in its regulation. “It is not valid to use the unemployment rate in the Information sector and Professional and Business Services sector to justify the ‘good cause’ exception to the Administrative Procedure Act to restrict H-1B visas, as DHS does in its rule, since only approximately 10% of the jobs (computer occupations with a B.S. or higher) in these sectors are in occupations similar to professionals in the H-1B category,” according to the NFAP report.

Economic research shows foreign-born individuals do not harm the labor market prospects of Americans. “H-1B visa holders do not adversely affect U.S. workers,” according to a May 2020 National Foundation for American Policy study by Madeline Zavodny, formerly an economist at the Federal Reserve Bank of Atlanta (and Dallas) and a professor of economics at the University of North Florida (UNF) in Jacksonville. “On the contrary, the evidence points to the presence of H-1B visa holders being associated with lower unemployment rates and faster earnings growth among college graduates, including recent college graduates. Further, the results suggest that, if anything, being in a field with more H-1B visa holders makes it more likely that U.S.-born young college graduates work in a job closely related to their college major. The results here should give pause to policymakers considering imposing additional restrictions on the H-1B program. There is little reason to think doing so will help American workers.”

“It is not sensible to make long-term immigration policy by citing short-term employment situations affected by an unprecedented health crisis, particularly since numerous academic studies show foreign-born individuals do not adversely affect U.S. workers,” concludes the NFAP study on employment data for computer occupations. “The latest Bureau of Labor Statistics data show the U.S. unemployment rate in occupations most common for H-1B visa holders did not change significantly between January and September 2020, which undermines the case for emergency measures, particularly when the economic literature argues against new restrictions on high-skilled immigration.”
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