COVID-19 Impacts on Geoscience Business Staffing, January – August 2021

Between January and August 2021, most businesses did not expect to make changes in permanent staffing, continuing the trend from 2020. In general, the percentage of employers expecting to increase permanent staffing increased between January and July 2021, but this percentage contracted sharply in August 2021, coinciding with the impact of the Delta variant. Importantly, the proportion of businesses decreasing staffing remained flat over the entire timeframe.

So far in 2021, temporary and contract staffing have been more variable than permanent staffing plans with no distinct trend over the course of the year.

Most employers reported COVID-19 not having an impact on staffing. Active hiring began in earnest in April 2021, but faded with the increasing impacts of the Delta variant. Interestingly, benefit and salary reductions spiked at the beginning of 2021, but rapidly decreased by April 2021. This timing aligns with the end of PPP loan coverage for many employers and these adjustments may reflect necessary cost reductions.

Travel and Workplace Policies

The percentage of businesses reporting that their employees were either on travel or working in the field slowly increased between January and August 2021, with a distinct liberalization of constraint on destinations. At the same time, institutional and government prohibitions on travel declined from 28% to 18% between February and August 2021.
Work location

Workplace policies available to employees have shifted towards a split mode of in-office and remote work. By August 2021, over half of employers allowed at least some in-office attendance, over two-thirds offered limited remote work, and nearly half of employers offered permanent remote work policies to employees. Furthermore, three-quarters of employers allowed fieldwork activities and site visits, and just over one-third offered policies allowing access to lab facility access.

Between March and July 2021, employees shifted from primarily remote work with limited in-person time to a much more diverse portfolio of work environments, with remote work and full-time office being the top work locations.

Hiring

The percentage of employers with active job openings was generally around 40% through July 2021, but contracting sharply to 20% in August 2021. Actual hiring lagged job openings by a few months, with hiring peaking between May and July 2021 at 64% to 67% of employers reporting hiring geoscience talent. Employers reported primarily hiring full-time geoscientists, with geoscience interns being hired during late Spring through the summer months. Fewer than 20% of employers reported hiring of geoscience contractors in June and July 2021.
Challenges in hiring talent has been widely reported across the economy. This applied to the geosciences, especially through the first half of 2021. Beginning in July 2021, more than half of employers reported no challenges to hiring. Recruitment was consistently cited as the biggest challenge, with between 25% and 33% of employers citing a lack of talent available to fill vacancies. Onboarding new staff has also remained a challenge especially into a remote working environment. Changes to new hire training and onboarding included a shift to virtual training by 42% of employers. Funding and budget constraints related to hiring were more prevalent issues in the first and second quarter of 2021 than in July and August.

The top skills required by employers were field skills and data visualization and mapping software, required by 33% and 27% of employers respectively. Project management skills were the most preferred skillset followed by database management, programming, and data visualization and mapping software. Machine learning, artificial intelligence, and data science was considered not applicable by most employers, even though 55% of employers noted that it is of increasing importance to the profession. Other skills employers mentioned they would like to see candidates possess included critical thinking skills, experience with specific software applications, and experience with managing and curating physical samples.

We will continue to provide current snapshots on the impacts of COVID-19 on the geoscience enterprise throughout the year. For more information, and to participate in the study, please visit: https://www.americangeosciences.org/workforce/covid19

Funding for this project is provided by the National Science Foundation (Award #2029570). The results and interpretation of the survey are the views of the American Geosciences Institute and not those of the National Science Foundation.

When asked about the skills and educational backgrounds of potential new hires, 80% of employers indicated they hired geoscience bachelor's graduates, 87% hired geoscience master's graduates, and 60% hired geoscience doctorates.