

ACEC EXPANDING THE TALENT PIPELINE

America's engineering industry needs more engineers in the talent pipeline to design the infrastructure that is essential to a growing economy. Firms are facing serious challenges in meeting their workforce needs.

KEY POINTS



The engineering industry faces an increasing workforce shortage as bachelor's degrees in key fields – mechanical, civil, electrical, civil/environmental, and environmental engineering – dropped from 60,207 in 2019 to 55,155 in 2023 (American Society for Engineering Education), while nearly 27% of A/E/C workers are over the age of 55 and nearing retirement (ACEC Research Institute).



International students are earning the majority of graduate degrees in engineering (American Society for Engineering Education and National Science Foundation).



The engineering workforce is expected to grow by only six percent from 2020 to 2030, a pace that is insufficient to meet demand (Bureau of Labor Statistics).



According to the ACEC Research Institute engineering business sentiment survey for the first quarter of 2025, nine out of ten firms have job openings and the average number of openings is increasing.



H-1B visas have been capped at 85,000 visas annually since 2004, a policy that has failed to keep pace with the needs of a growing economy. In Fiscal Year 2025, there were over 470,000 registrations for the H-1B visa lottery.



There are 140,000 employment-based green cards available each fiscal year, but hundreds of thousands have gone unused over the past 20 years because they were not processed by the end of the applicable fiscal year.

ACEC supports a comprehensive approach to this challenge that includes expanding STEM education investments at the local, state, and federal levels, and better aligning the nation's immigration policies with a pro-growth economic agenda. In addition, as a workforce recruitment and retention measure, the Council is advocating for extension of Section 127 so that engineering firms can assist their employees with student loan repayment. ACEC is also working with industry partners to promote the essentiality of engineering and inspire students to pursue careers in the field.

REQUEST

- 1 Advance high-skilled immigration reform legislation that increases the number of H-1B visas and recaptures unused green cards from prior fiscal years.
- 2 Extend Section 127, allowing employers to provide student loan repayment assistance to their employees tax-free.