MASSACHUSETTS

A State Report on High-Skilled Immigration, the Skills Gap, and Technology

State Appeal

Massachusetts is one of the country's most productive states as it pertains to technology and STEM. Ranked first since 2002 on the Milken Institute's biannual "State Technology and Science Index," Massachusetts has maintained its tech output despite the pandemic economic difficulties, creating new jobs and improving wages in various high-tech industries.[1] Other prominent sectors within the state include healthcare, education, and infrastructure; the reliance of each of these spheres on technology growth and innovation further underscores the importance of providing dynamic STEM solutions to best support overall economic growth.[2]

Despite the state's prominence as a key technology-driven economy, Massachusetts employers have historically struggled to locate workers with the appropriate skill sets. According to a 2015 survey by the Mass Business Alliance for Education, approximately two-thirds of employers in the state found it difficult to locate employees with the necessary skills.[3] Furthermore, more than 70% of all Massachusetts jobs will require post-secondary education experience, emphasizing the importance of expanding the state's skilled workforce.[4] To best mitigate this skills gap, it is critical to supplement U.S.-born workers in Massachusetts through high-skilled immigration.

Immigrants — accounting for 776,782 members of the workforce in 2018, $2.3 billion in revenue, $15 billion in taxes, and over $30 billion in spending power — are already indispensable economic actors in Massachusetts, and increased high-skilled immigration would allow them to further stimulate the economy.[5, 6] In particular, the state's STEM ecosystem is powered by immigrants, with 29.6% of all STEM workers identifying as an immigrant (nearly double their share of the population). Increased high-skilled immigration has the potential to produce American jobs: if the state's 3,600 immigrant STEM graduates were able to access visas to remain in the U.S. post-graduation, Massachusetts would gain nearly 10,000 jobs for U.S.-born workers.[7]

Pursuing immigration reform will prove a valuable advantage for Massachusetts as it continues to strengthen its tech sector and economy at large. Expanding high-skilled immigration will not only help remedy the skills gap and promote the speedy creation of new tech jobs but will also broaden the tax base and encourage a diversity of ideas and innovation throughout the state.

[1] Kaia Hubbard, "Massachusetts Earns Top Marks for Technology-Focused Economy," U.S. News & World Report, November 12, 2020, https://www.usnews.com/news/best-states/articles/2020-11-12/massachusetts-keeps-top-spot-in-milken-state-technology-and-science-index.
[2] "Massachusetts," U.S. News & World Report, 2019, https://www.usnews.com/news/best-states/massachusetts.
[3] "Skills Gap in Massachusetts: A Perfect Storm," The Workforce Solutions Group, http://skill-works.org/documents/SkillstoSucceedInfographic.pdf.
[4] Ibid.
[5] "Immigrants in Massachusetts," American Immigration Council, August 6, 2020, https://www.americanimmigrationcouncil.org/research/immigrants-in-massachusetts?__cf_chl_jschl_tk__=pmd_126ffe1757f52a57e230addc09c591c6c67cf6d1-1627631858-0-gqNtZGzNAijjcnBszRIO.
[6] "Take a Look: How Immigrants Drive the Economy in Massachusetts," New American Economy, 2021, https://www.newamericaneconomy.org/locations/massachusetts/.
[7] "The Contributions of New Americans in Massachusetts," New American Economy, August 2016, https://research.newamericaneconomy.org/wp-content/uploads/2017/02/nae-ma-report.pdf.

Technology

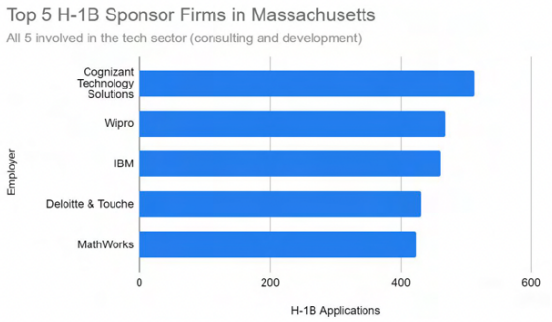
- **Tech Contribution to Gross State Product (GSP) (2020)**[1]: $97.1 billion (5th in the U.S.)
- **Tech Employment (2020)**[1]: 450,548 (12.1% of total workforce), 6th in the U.S.
- **Tech Job Gains (2020)**[1]: +2,456
- **Tech Job Postings (2020)**[1]: 130,178
- **CS Bachelor's Degrees (2019)**[2]: 3,542 (5.74% of total degrees)

In 2020, Massachusetts ranked 9th in net tech employment jobs added and is expected to experience a 12% increase in tech occupation growth (job postings) between 2020 and 2030. Hirings must grow by at least 18.8% in order to maintain current tech employment levels.[1]

[1] "Cyberstates 2021," CompTIA, March 2021, https://www.cyberstates.org/pdf/CompTIA_Cyberstates_2021.pdf.
[2] "Digest of Education Statistics, 2018-2019," National Center for Education Statistics, 2020, https://nces.ed.gov/programs/digest/d20/tables/dt20_319.30.asp?current=yes.

Immigration

- **Total Immigrant Population**[1, 2]: 1,148,900 (2.6% of all U.S. immigrants; 17.3% of total population)
- **Immigration and Employment**[2, 3]: 29.6% of STEM workforce; 20.5% of overall employment
- **H-1B Visa Applications (per million people)**[4]: 3,654
  - **Admission Statistics for Boston**[5]: 1.482% admitted, with 61% holding advanced degrees
- **Average Salary of H-1B Visa Recipients**[4]: $101,584



[1] "U.S. Immigrant Population by State and County," Migration Policy Institute, February 14, 2020, https://www.migrationpolicy.org/programs/data-hub/charts/us-immigrant-population-state-and-county.
[2] "Immigrant Share of the U.S. Population and Civilian Labor Force, 1980 - Present," Migration Policy Institute, February 15, 2021, https://www.migrationpolicy.org/programs/data-hub/charts/immigrant-share-us-population-and-civilian-labor-force.
[3] "Foreign-Born STEM Workers in the United States," American Immigration Council, June 2017, https://www.americanimmigrationcouncil.org/sites/default/files/research/foreign-born_stem_workers_in_the_united_states_final.pdf.
[4] "2020 H1B Visa Report: Top H1B Visa Work State," My Visa Jobs, 2021, https://www.myvisajobs.com/Reports/2020-H1B-Visa-Category.aspx?T=WS.
[5] "Where Most H-1B Visa Workers Are Located In The U.S.," Pew Research Center, 2018, https://www.pewresearch.org/fact-tank/2018/03/29/h-1b-visa-approvals-by-us-metro-area/.