

## **Bibliography of Studies**

### **Characteristics of H-1B Workers**

#### ***U.S. Department of Homeland Security***

“Characteristics of Specialty Occupation Workers (H-1B): Fiscal Year 2002,” issued September 2003

*Most recent government report on the makeup of H-1B visa holders and their employers. Finds that applications for education-related services and for health/medical services increased from the last fiscal year, while computer industry-related applications declined during the same time period. Report includes tables, graphs and statistics.*

<http://uscis.gov/graphics/shared/services/employerinfo/FY2002Charact.pdf>

### **Links to Studies on Issues Impacting High-Skill Workforce**

#### ***ACT Policy Report***

“Maintaining a Strong Engineering Workforce,” 2003

*This comprehensive policy report examines twelve-year trends of more than 750,000 ACT test takers to find out why there remains a continual decline in the number of U.S. students planning to obtain science or engineering degrees. The study finds that while overall employment in engineering is expected to increase during the 2000–2010 period, engineering degrees over this same time period are expected to remain stable. The authors make recommendations to policymakers, private industry and educators on ways to increase the U.S. engineering workforce. <http://www.act.org/research/policy/pdf/engineer.pdf>.*

#### ***Building Engineering and Science Talent (BEST)***

“The Quiet Crisis: Falling Short in Producing American Scientific and Technical Talent,” 2002

*BEST is a public-private partnership dedicated to building a stronger, more diverse U.S. workforce in science, engineering and technology by increasing the participation of under-represented groups. Their report asserts that the U.S. is experiencing a “quiet crisis” in the imbalance between supply and demand of technically skilled workers. Naming priorities for government, industry and non-profit groups, this study looks for ways to quell the Quiet Crisis and keep America at the forefront of scientific and technical innovations. [www.bestworkforce.org](http://www.bestworkforce.org)*

**Carnegie-Mellon Software Industry Center**

“Europe in the Creative Age,” February 2004

*This new index finds that a “creative crescent” of northern European countries is challenging the economic power of the United States and other European nations. The growing U.S. trend of discouraging the use of foreign workers has harmed the country’s international reputation, making the U.S. stand to lose its grip on the world’s highest-skilled workers.*

[http://www.creativeclass.org/acrobat/Europe\\_in\\_the\\_Creative\\_Age\\_2004.pdf](http://www.creativeclass.org/acrobat/Europe_in_the_Creative_Age_2004.pdf)

**Committee for Economic Development (CED)**

“Reforming Immigration: Helping Meet America’s Need for a Skilled Workforce,” 2001

*In this statement CED explores “the role that immigration should play in the development of our future workforce and in the continued economic growth and prosperity of our society.” The report concludes that proper, open immigration policies will be of large benefit to meeting the U.S. demand for skilled workers.*

<http://www.ced.org/projects/immigration.shtml>

**Council of Graduate Schools (CGS)**

Survey on International Graduate Student Applications to U.S. Graduate Schools for Fall 2004, published March 2004

*This survey reports on the alarming decline – especially in science studies – of international applicants to U.S. graduate schools. CGS officials express concern over the loss of these applicants “in areas critical to maintaining the scientific enterprise and economic competitiveness of our country.”*

<http://www.cgsnet.org/HotTopics/index.htm>

**GAO – Testimony of Comptroller General of the United States**

“Human Capital: Building the Information Technology Workforce to Achieve Results,” GAO-01-1007T, July 31, 2001

*Testimony focuses on the federal government’s crucial need to hire skilled IT workers: “As is apparent, the need for qualified IT professionals has placed the public sector in direct competition with the private sector for scarce resources. For the second consecutive year, federal CIOs have identified the need for skilled IT workers as their most critical issue.”*

<http://www.gao.gov/docdb/lite/getrpt.php?rptno=GAO-01-1007T>

**Hudson Institute**

“Global Aging and the Global Workforce,” March 2003

*Report finds that aging will exert a “double whammy” effect on supplies of high-skilled workers—removing (due to retirement and death) large numbers of the most experienced workers from the labor force even as the cohort of young and freshly minted university graduates declines due to low birthrates.*

[http://www.hudson.org/index.cfm?fuseaction=publication\\_details&id=2740](http://www.hudson.org/index.cfm?fuseaction=publication_details&id=2740)

**Hudson Institute**

“Beyond Workforce 2020: The Coming (and Present) Market for International Labor”

*A follow-up to the Hudson Institute’s economic and demographic study,*

*“Workforce 2000,” this white paper seeks to examine current trends. One major finding is that the fiscal impacts of aging, along with its demographic effects on declining population and workforce growth, will further heighten the need for foreign labor in the advanced economies of the world.*

[http://irlcjr.hudson.org/index.cfm?fuseaction=publication\\_list&pubType=IRLCJR\\_Reports](http://irlcjr.hudson.org/index.cfm?fuseaction=publication_list&pubType=IRLCJR_Reports)

**National Education Association (NEA)**

Report on Trends in Foreign Teacher Recruitment, June 2003

*The U.S. faces substantially teacher shortages each year in areas of math, science, foreign languages and special education, as well as in schools located in “less-desirable” locations. Therefore, public school systems throughout the country are utilizing the services of perhaps as many as 10,000 foreign teachers in primary and secondary schools on “nonimmigrant” work or cultural exchange visas, according to this study.*

<http://www.nea.org/teachershortage/0306foreignteacher.html>

**National Science Board/National Science Foundation**

“Science and Engineering Indicators 2004,” May 2004

*While the U.S. remains the global leader in scientific research and development, along with high technology exports, the future is uncertain, indicates this latest report from the NSB. The biennial study concludes that the shrinking U.S. science and engineering labor force is an “emerging and critical problem” for the U.S., along with competition from other nations that place a priority on science education. For example, the study shows that the United States now ranks 17<sup>th</sup> among nations surveyed in the proportion of its 18-24-year-olds earning natural science and engineering degrees. In 1975, the United States ranked third.*

<http://www.nsf.gov/sbe/srs/seind04/>

**National Science Board/National Science Foundation**

“The Science and Engineering Workforce: Realizing America’s Potential,” August 2003

*This report names two major long-term trends imperiling the U.S. scientific and engineering workforce: 1) The intensifying global competition for S&E talent, such that the United States may not be able to rely on the international S&E labor market to fill unmet skill needs; 2) The decline in the number of native born S&E graduates entering the workforce. NSB/NSF recommends that the U.S. intervene to improve success in educating S&E students from all demographic groups, especially those that have been underrepresented in S&E careers.*

<http://www.nsf.gov/nsb/documents/2003/nsb0369/nsb0369.pdf>

***President's Council of Advisors on Science and Technology (PCAST)***

“Assessing the U.S. R&D Development,” October 2002

*Report to the U.S. President on the “chronic issue” of the human resources inadequacies in science and engineering. Finds that foreign students are a key component of maintaining and improving this scientific workforce.*

<http://www.ostp.gov/PCAST/FINAL%20R&D%20REPORT%20WITH%20LETTERS.pdf>

***RAND***

“Federal Investment in R&D,” September 2002

*Prepared for the President's Council of Advisors on Science and Technology (PCAST), this extensive report looks at trends in Federal investment in research and development since 1975. The report takes an in-depth look at the changes in U.S. science and engineering education, along with the science, education and technological workforce, finding that federal investment in R&D has increased – but at too slow a pace compared to international competitors. In-depth charts and graphs included in report.*

<http://www.rand.org/publications/MR/MR1639.0/MR1639.0.pdf>

***RAND***

“Is there a Shortage of Scientists and Engineers?” 2003

*This study uses comparative data of U.S. and foreign students in the science fields to determine that there is a shortage of scientists and engineers, especially due to the lack of emphasis the U.S. places on science education in comparison to other countries.*

<http://www.rand.org/publications/IP/IP241/IP241.pdf>

***U.S. Commission on National Security/21<sup>st</sup> Century***

Phase III Report: “Road Map for National Security: Imperative for Change,” February 15, 2001

*As part of their report on making significant change in the U.S. national security apparatus, the Commission recommends increased funding for research and development, as well as increased emphasis on science education in the U.S. The Commission also recommends that U.S. immigration policy be formulated to ensure that the best and brightest foreign nationals stay in the U.S., as competition for these students from all over the world is greater than ever before.*

<http://www.nssg.gov/PhaseIIIFR.pdf>

## **Facts about L Visas**

### ***Congressional Research Report for Congress***

“Immigration Policy for Intracompany Transfers (L Visas): Issues and Legislation,”

June 12, 2003

*This report to Congress gives an overview of the temporary visa program, focusing on the L visa and its legislative history. Using the latest U.S. Department of State data, the report gives an assessment of the trends in issuance of L visas and the company procedures for hiring an L-visa holder.*

*To order a copy of this study, visit:*

<http://www.pennyhill.com/immigration/rs21543.html>