

Immigration Policy and the International Supply and Demand for STEM Workers

November 2, 2007

B. Lindsay Lowell
Institute for the Study of International Migration
Georgetown University
lowellbl@georgetown.edu

Presentation at the conference “Can We Compete? Trends in America’s Scientific and Technical Workforce,” hosted by the Commission on Professionals in Science and Technology, Washington, D.C., November 2007.



A Half-Century Snapshot of the STEM Workforce, 1950 to 2000

STEM Workforce Data Project: White Paper No. 1
B.L. Lowell and M. Regets

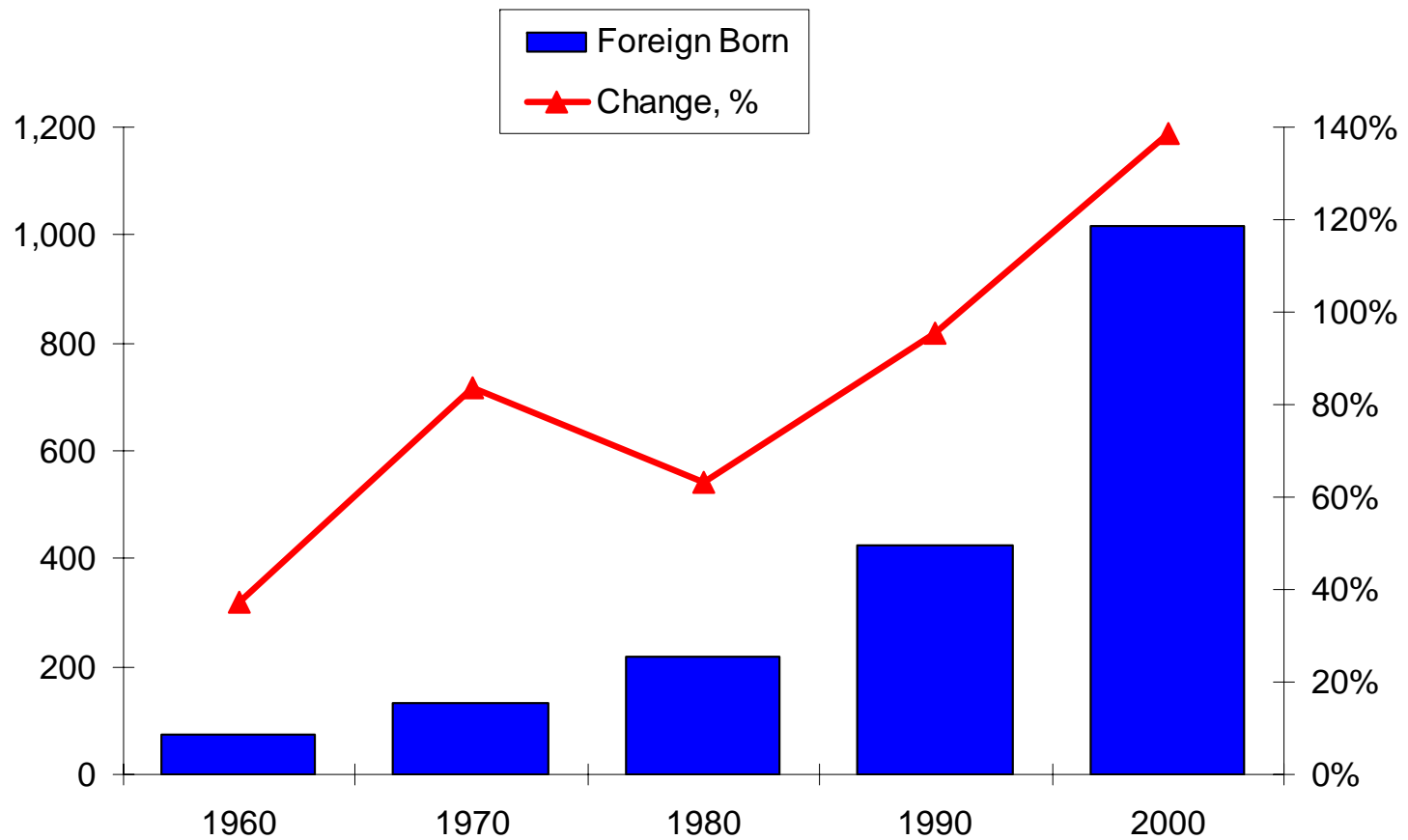
The Foreign Born in Science and Technology STEM Workforce Data Project: Report No. 4

B.L. Lowell



ISIM

Figure 4. Number of Core-STEM Workers and Percent Growth from Prior Decade

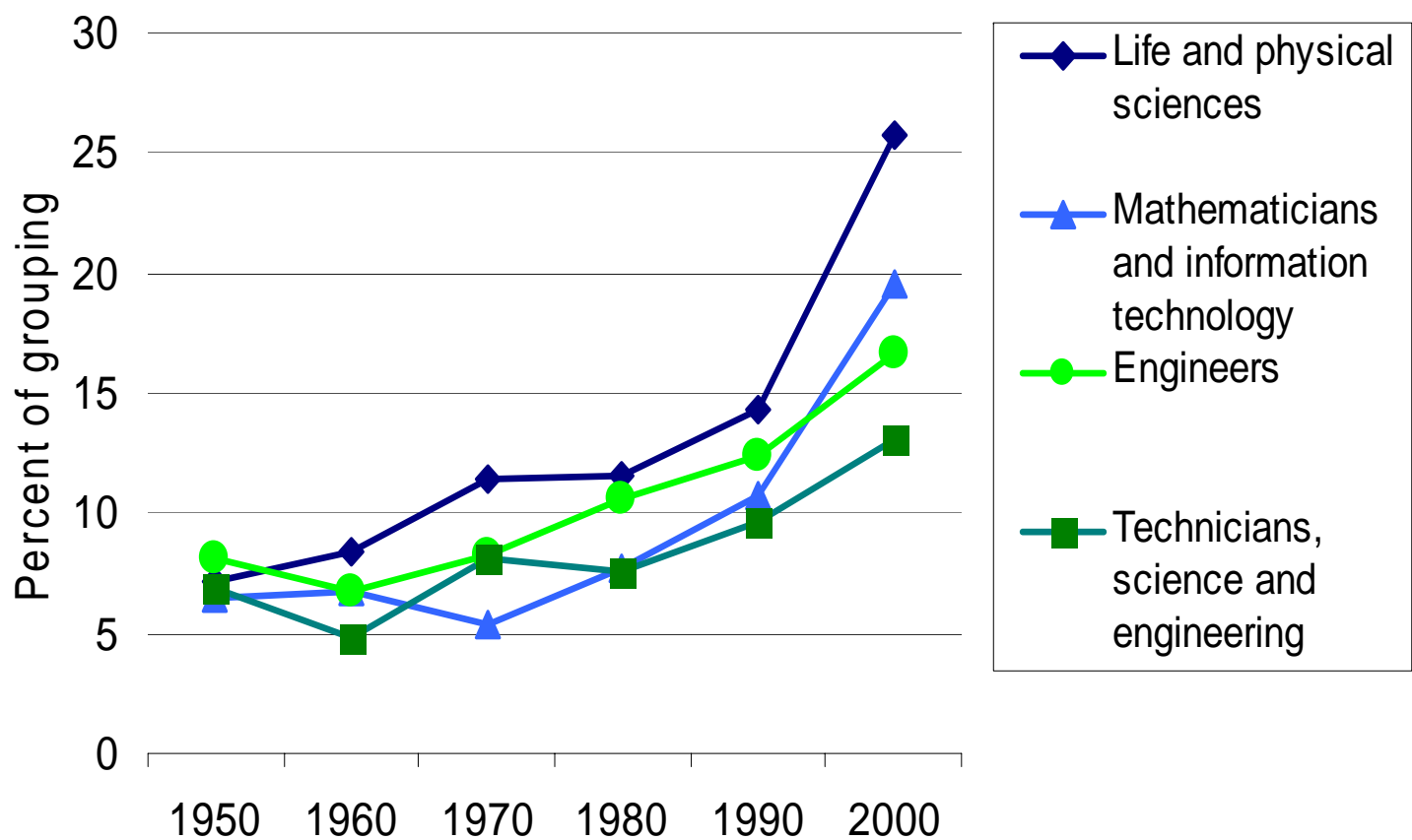


Source: Census microdata (Lowell 2006)



ISIM

Foreign Born of Core-STEM Occupational Groups

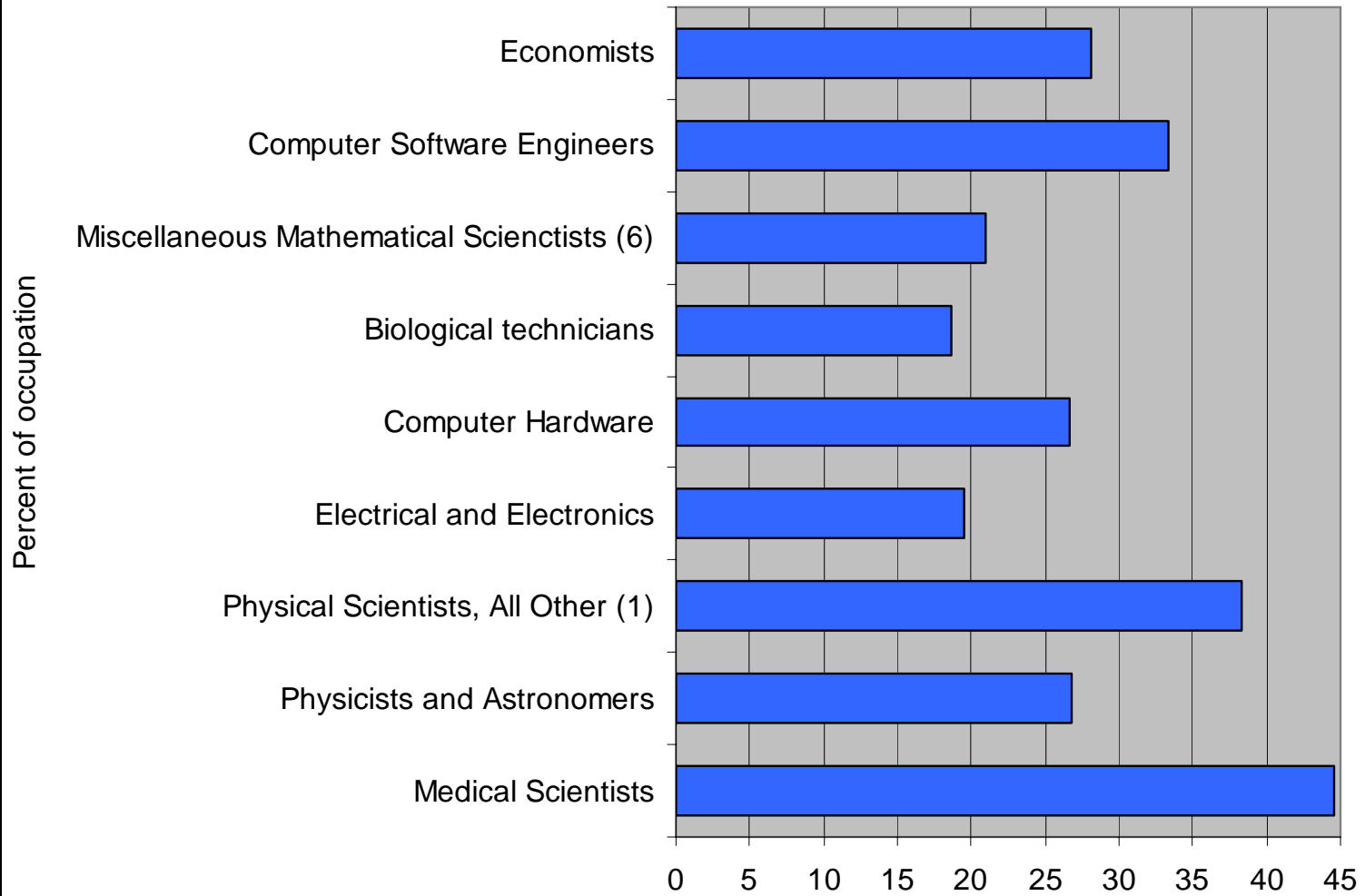


Source: Lowell and Regets, nd, US Census



ISIM

Foreign Born Share of Selected Occupations, 2000

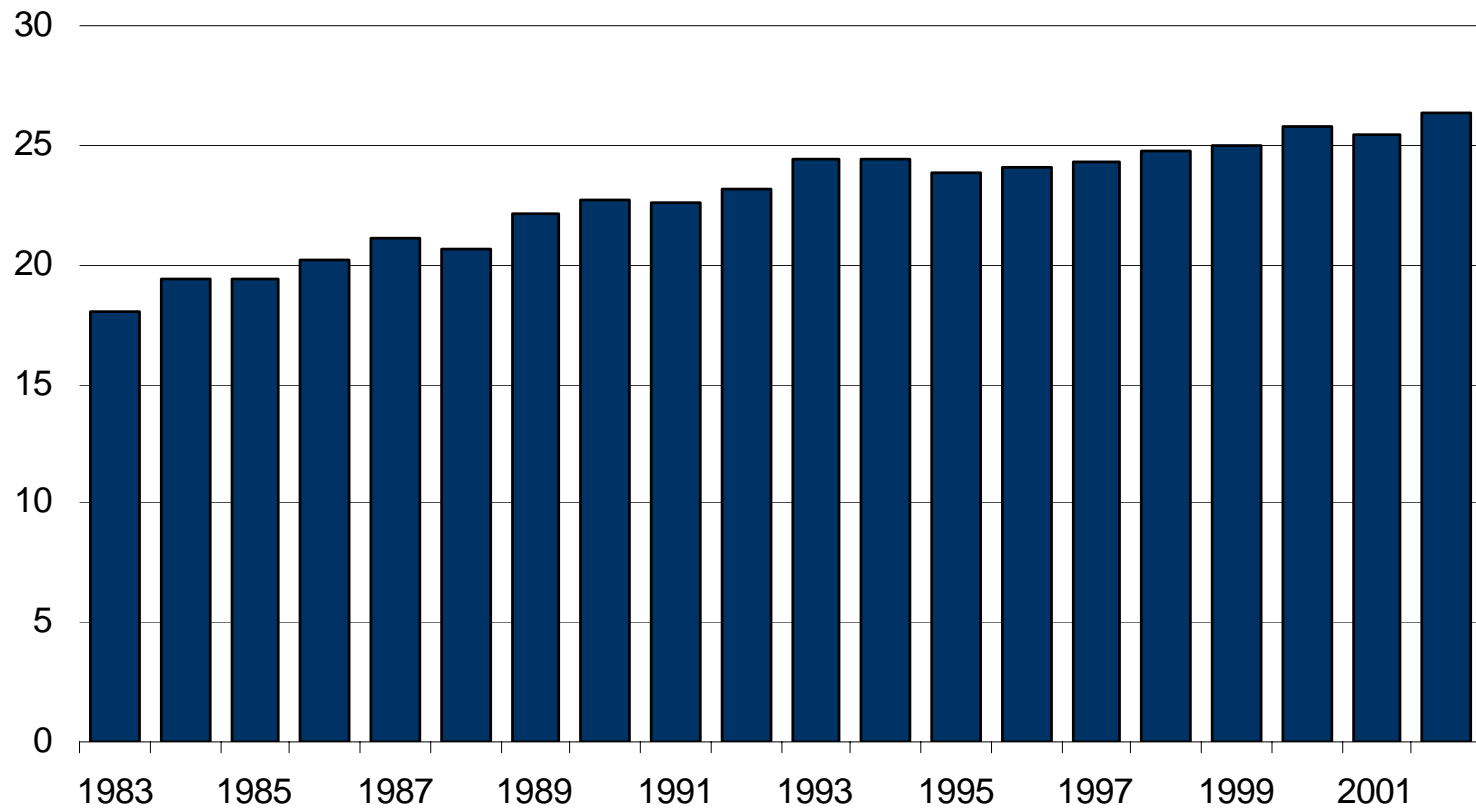


Source: Lowell and Regets, US Census Data



ISIM

Percent of STEM Workers who are Female

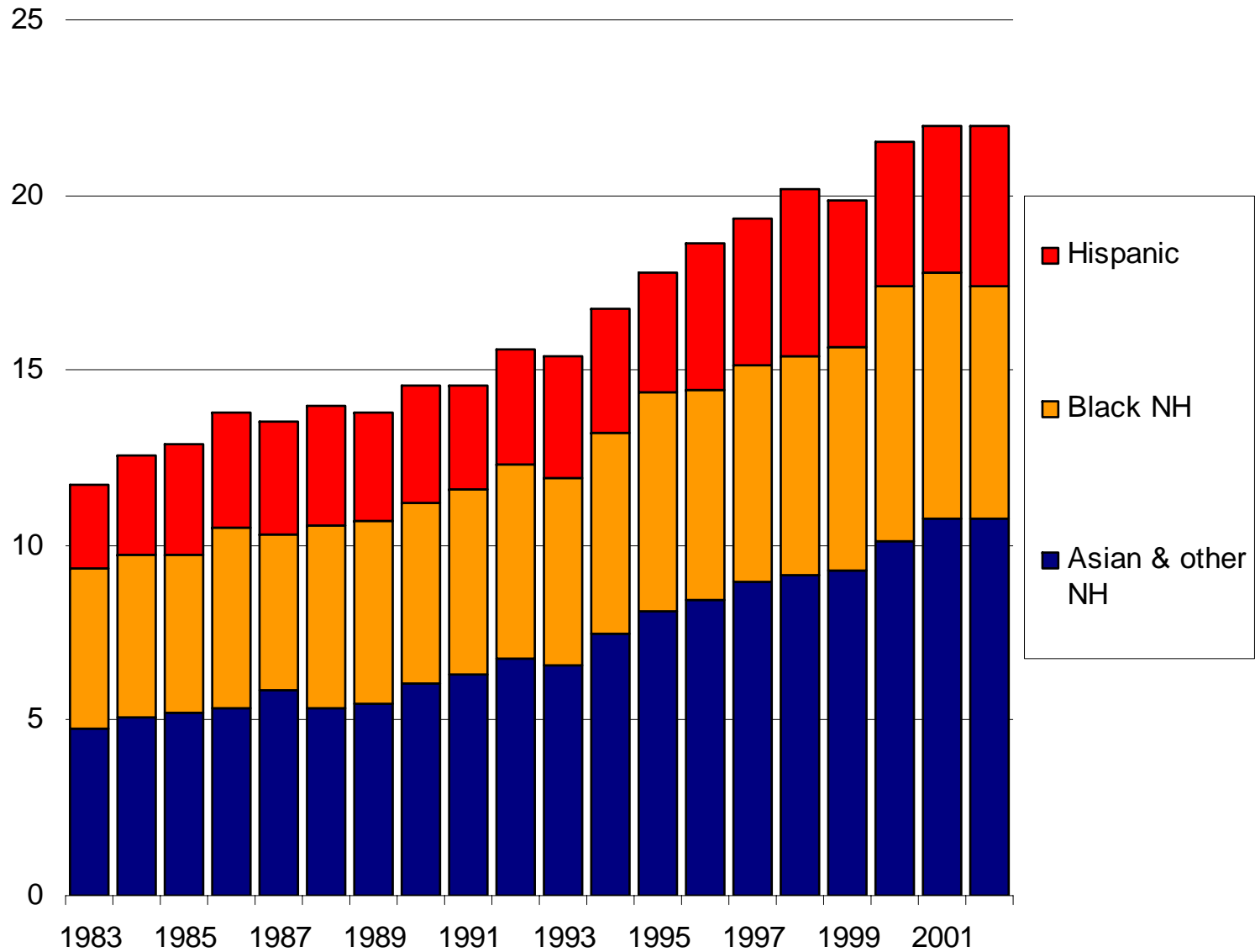


Source: Merged CPS microdata



ISIM

Percent of STEM Workers by Race and Ethnicity

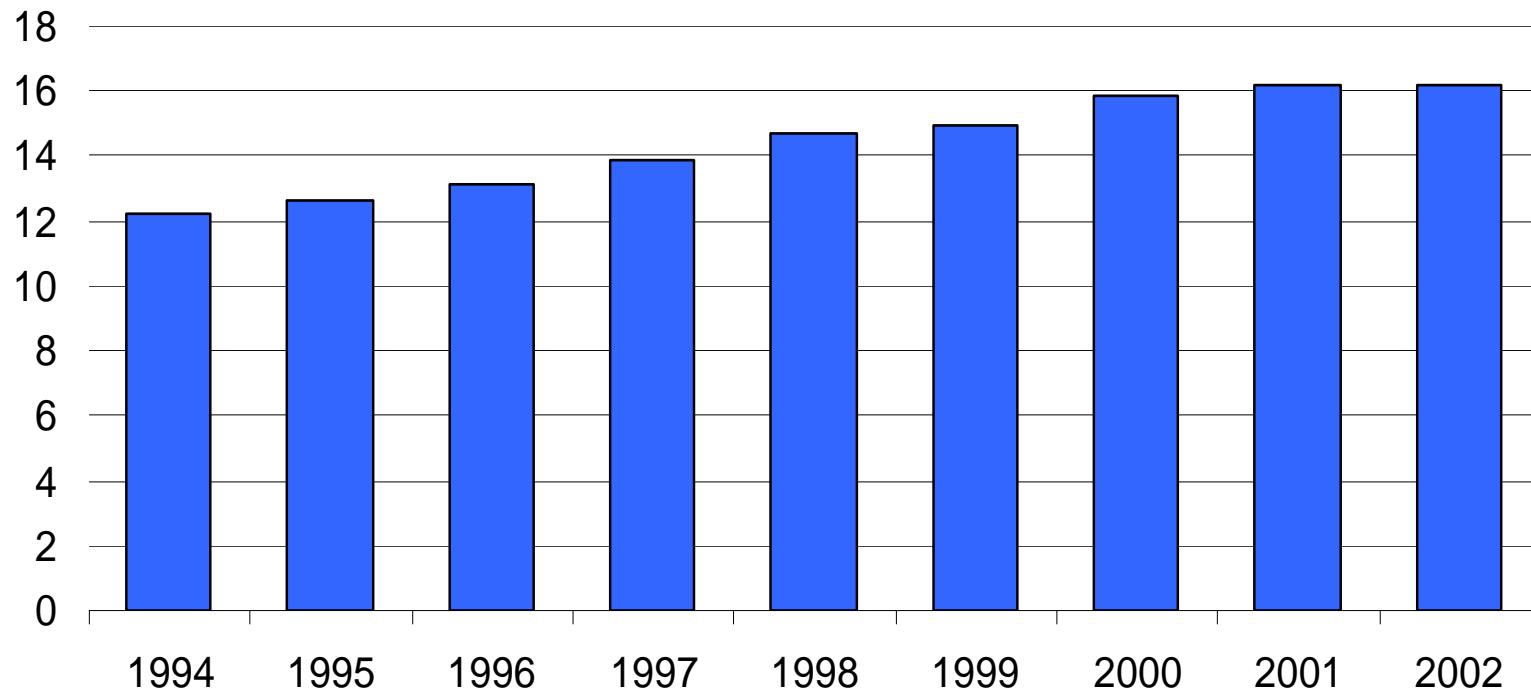


Source: Merged CPS microdata



ISIM

Foreign Born STEM Workers, Percent of Total

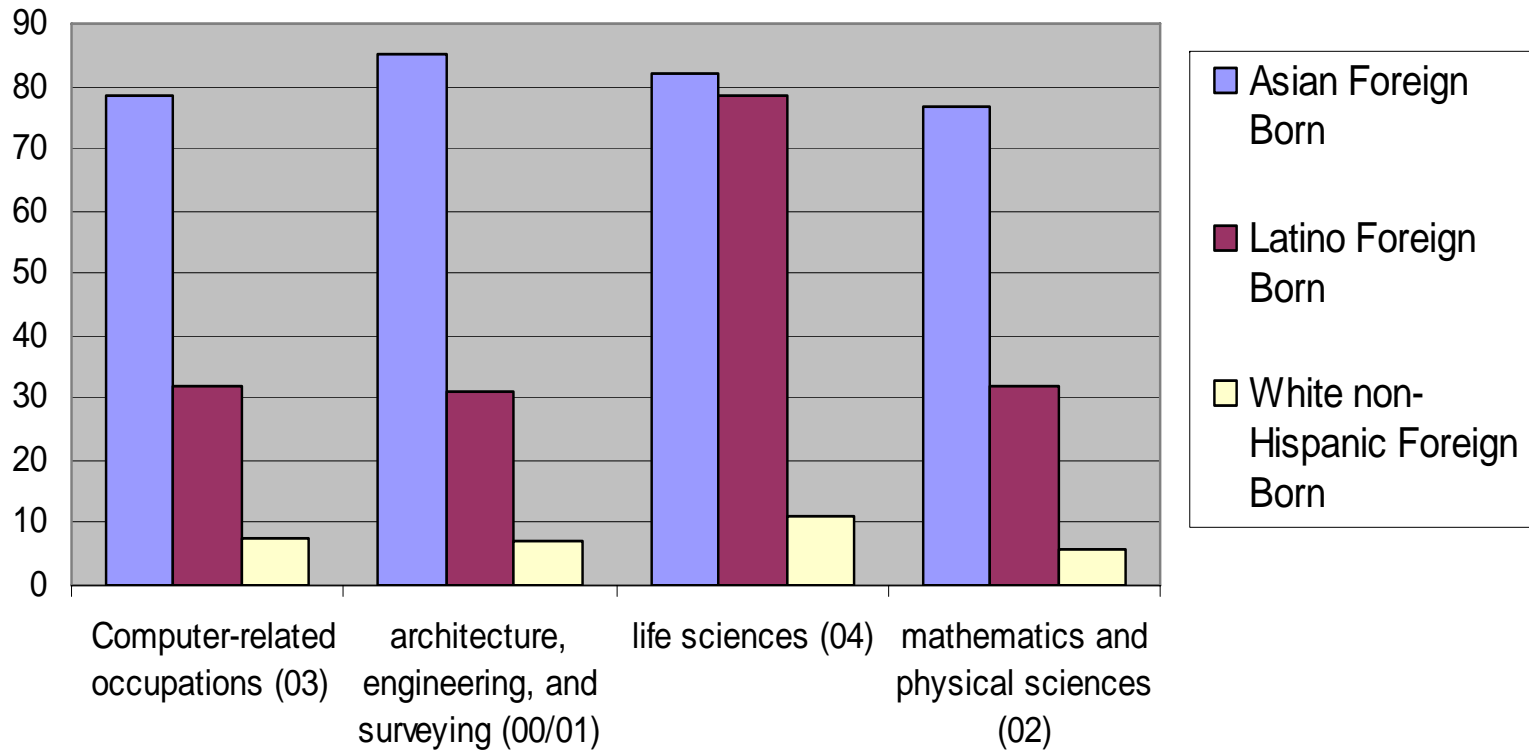


Source: Lowell, tabulations of MORG/CPS



ISIM

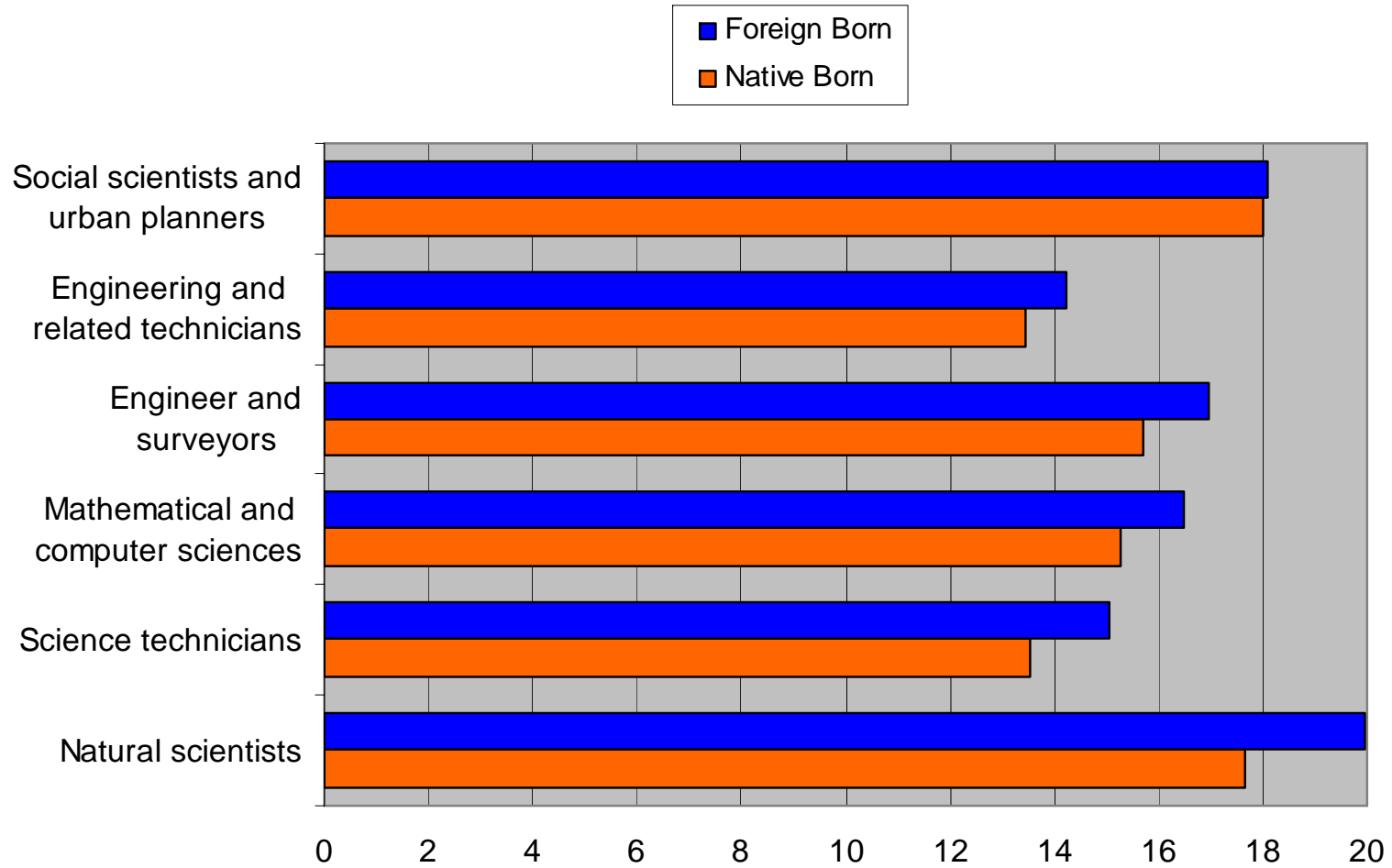
Foreign-Born Share of Core-STEM Co-Ethnic Workforce, 2002



Source: Lowell, MORG/CPS



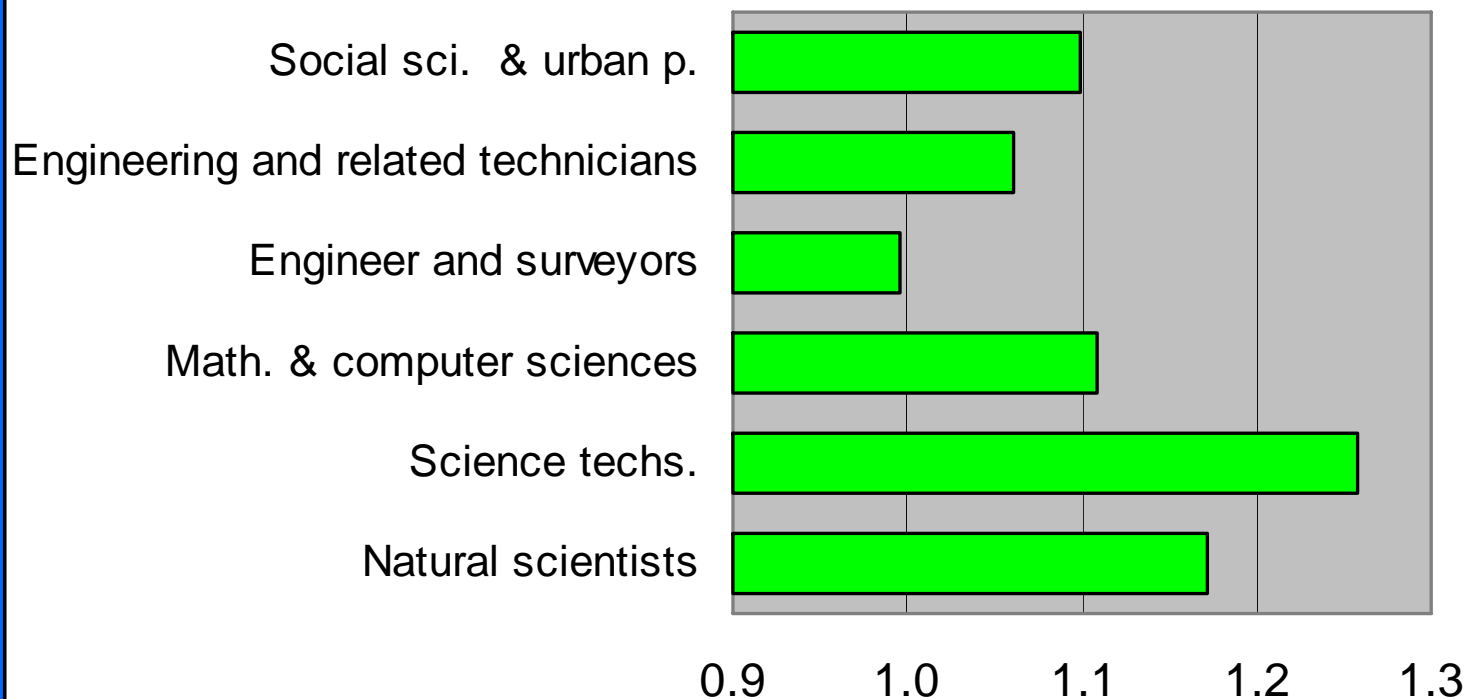
Average Years of Education by Nativity, 2002



Source: Lowell MORG/CPS



Ratio of Foreign Born to Native Earnings: Full Time Males with BA+, Avg 1994-2002

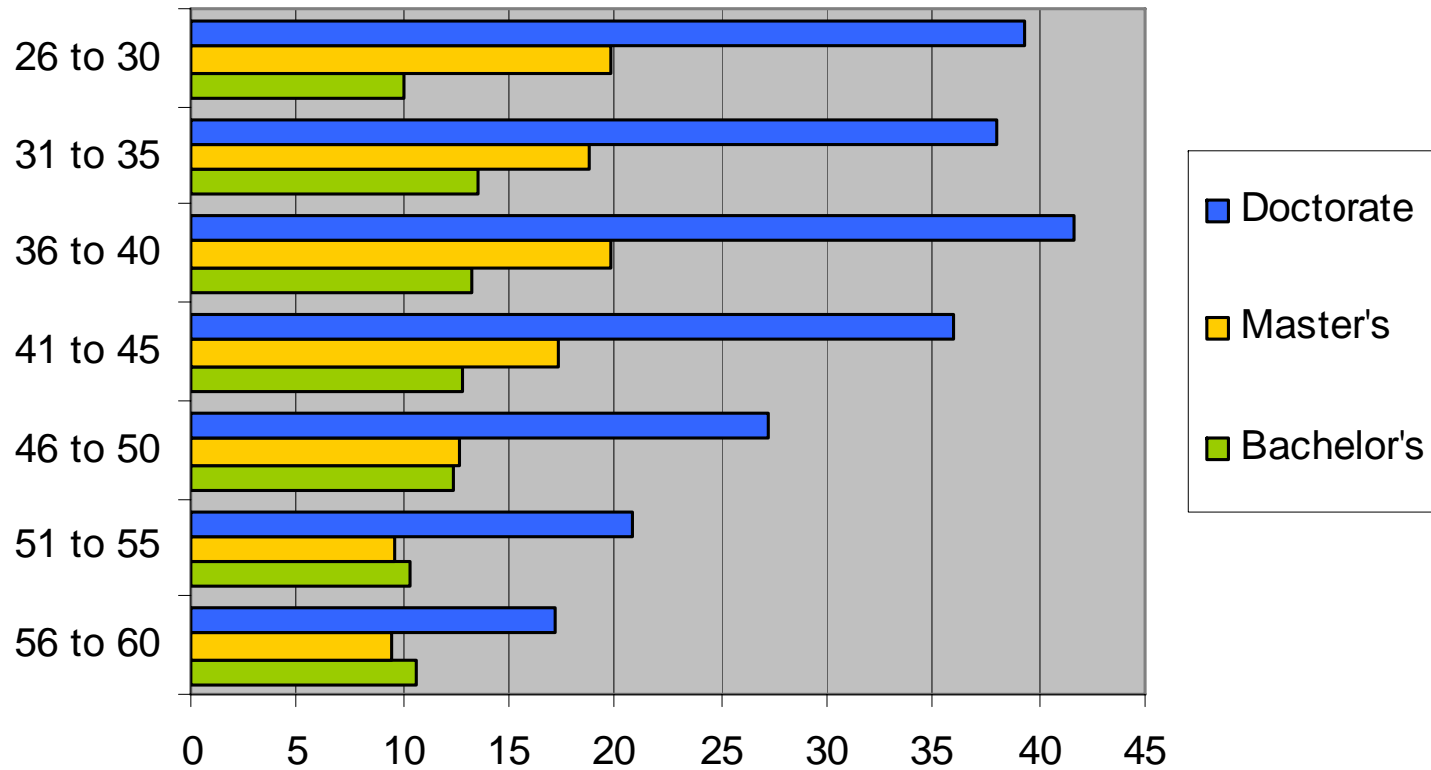


Source: Lowell MORG/CPS



ISIM

Foreign Born by Age Group, Percentage 2003

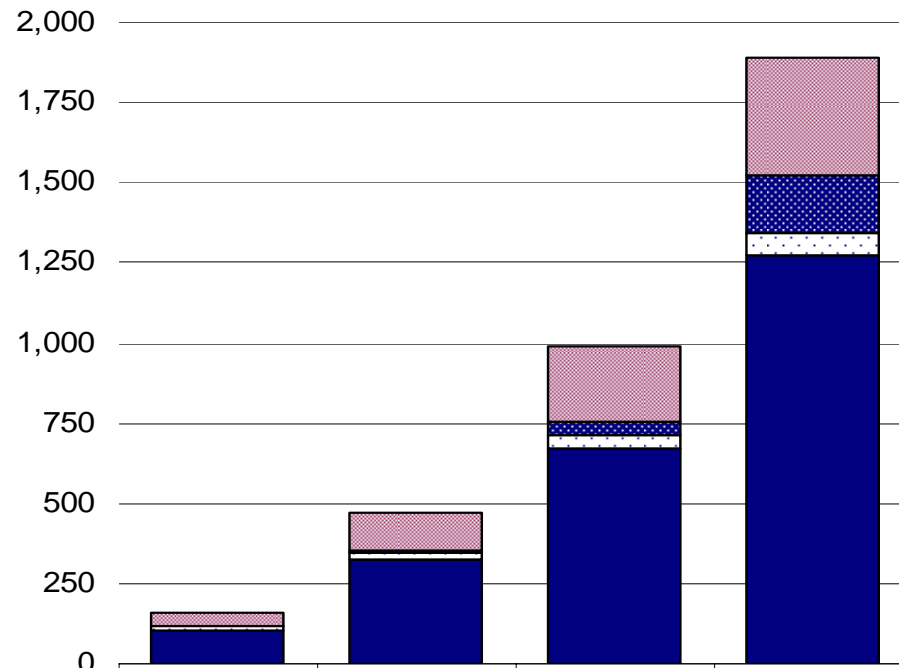


Source: Lowell, NSCG 2003



ISIM

Figure 2. Projections of the Cumulative Number of New Computing and Engineering Immigrants Who Could be Admitted Under Senate S.2611 by Visa Class (1,000s)

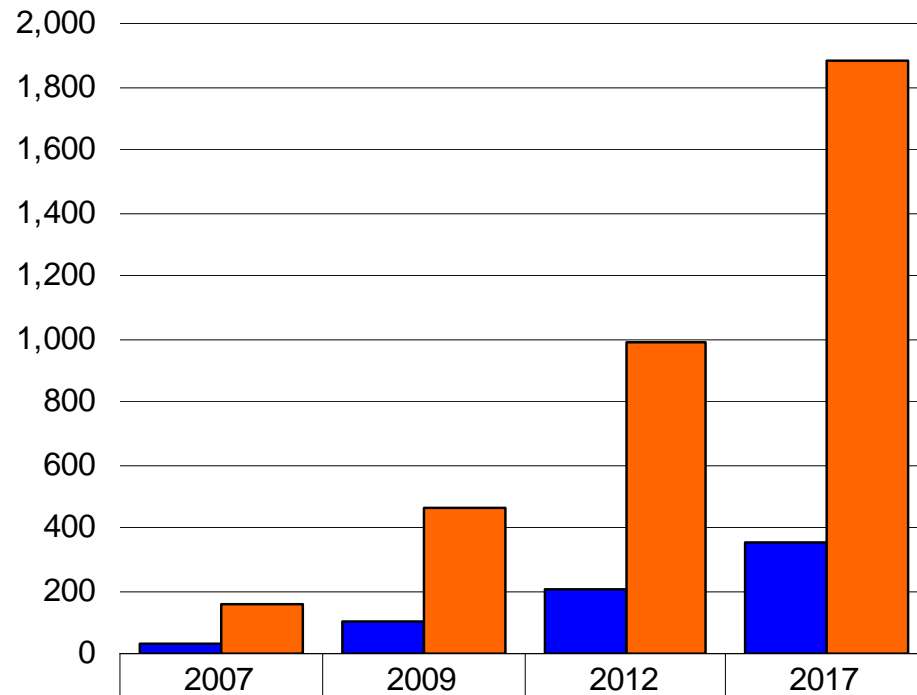


	2007	2009	2012	2017
■ Temporary H-1B workers	45	120	235	365
■ Adjusting foreign educated H-1Bs	0	5	45	180
□ Adjusting foreign S&E students	10	20	40	75
■ Legal Permanent Residents	105	325	670	1,270

Source: estimates by author, see text.



Figure 2. Projections of Newly Admitted Foreign-Born C&E Workers at Today's Levels and Under S.2611



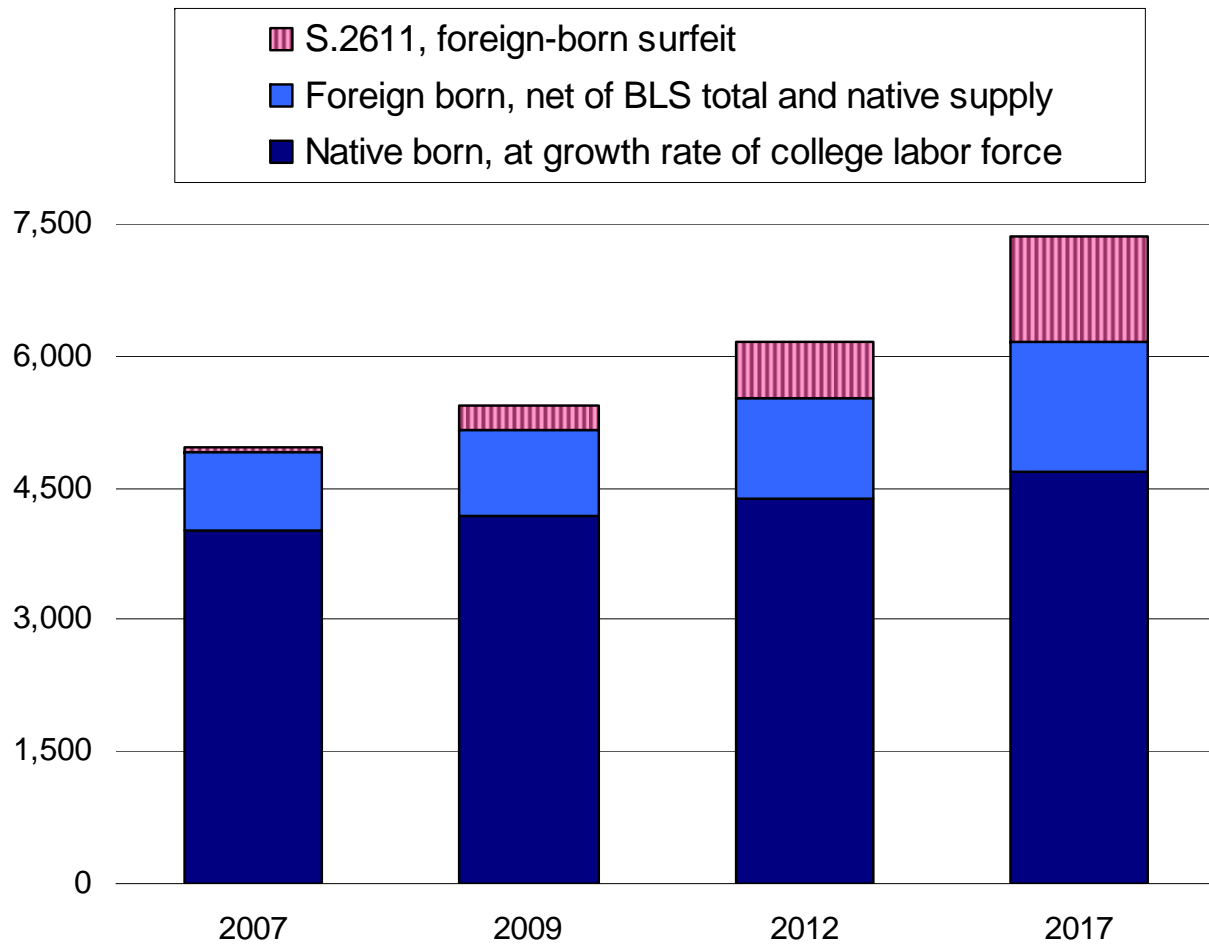
■ New Immigrants at Today's Admission Levels	35	105	205	355
■ New Immigrants at S.2611 Admission Levels	155	465	990	1,885

Source: Lowell 2006.



ISIM

Figure 4. Projection of Total C&E Workers Consistent with BLS Projections and Estimated Surfeit of Foreign Born Under S.2611 (1,000s)



Source: BLS occupational projections and author's estimates

