# High-skilled Immigrants in the Massachusetts Civilian Labor Force: U.S./Foreign Degrees





Boston Redevelopment Authority Alvaro Lima, Director of Research April 2014

#### **Produced by the BRA Research Division**

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### **Some Definitions:**

Foreign-born Worker: Used interchangeably with "immigrant worker" throughout this presentation to refer to persons born outside the United States, excluding those born abroad to American citizens. Puerto Ricans are U.S. citizens and are not considered immigrants.

Civilian Labor Force: A term used by the U.S. Bureau of Labor Statistics (BLS) to describe the subset of Americans who have jobs or are seeking a job, are at least 16 years old, are not serving in the military and are not institutionalized.

High-Skilled/Mid-Skilled/Low-Skilled Foreign-born Worker: High-skilled is defined as foreign-born persons in the civilian labor force with at least a Bachelor's degree (BA+); Mid-skilled are those with some college or associated degree; Low-skilled are those lacking a high school diploma or less.

Limited English Proficiency (LEP): This term refers to any person age 5 and older who reported speaking English "less than well," as classified by the U.S. Census Bureau.

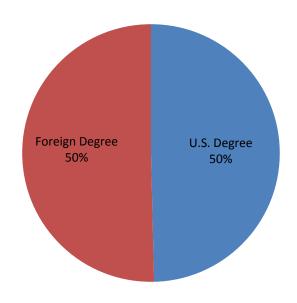
Average Wages: The sum of wages, tips, and the like subject to Federal income taxes as reported by employers on Form W-2.

Foreign Degree: Those with a Bachelor's degree or higher were identified as having a "foreign degree" if they were 25 or older at the time of their entry into the U.S.

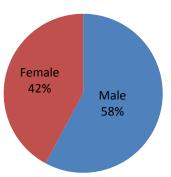
*U.S. Degree:* Those with a Bachelor's degree or higher were identified as having a "U.S. degree" if they were younger than 25 at the time of their entry into the U.S.

- Among high-skilled foreign-born workers, half have a degree from within the U.S. and half have a foreign-degree.
  - o Among those with a foreign-degree, 58% are male and 42% are female.
  - o Among those with a U.S. degree, 52% are male and 48% are female.

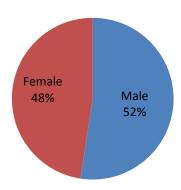
High-skilled Foreign-born Workers by U.S./Foreign degree



**Foreign Degree** 

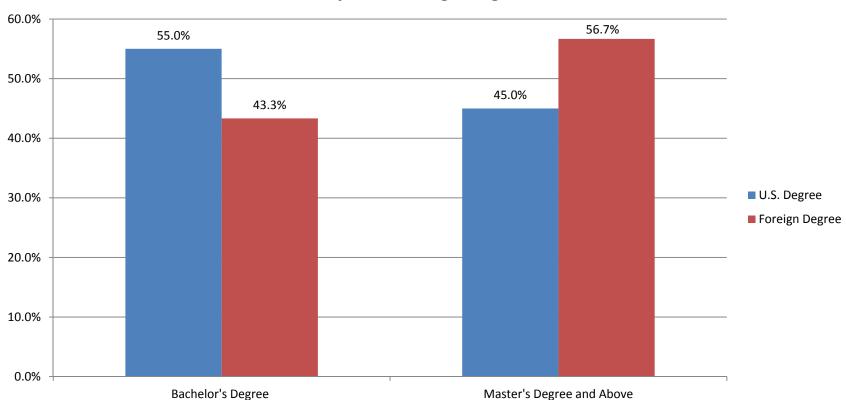


**U.S. Degree** 



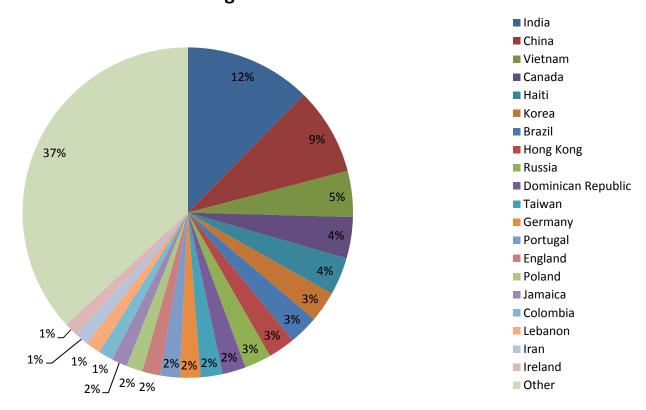
- Among high-skilled foreign-born workers with a foreign degree, the majority earned a graduate degree.
- Of those who earned their degree in the U.S., 55% earned a Bachelor's degree.





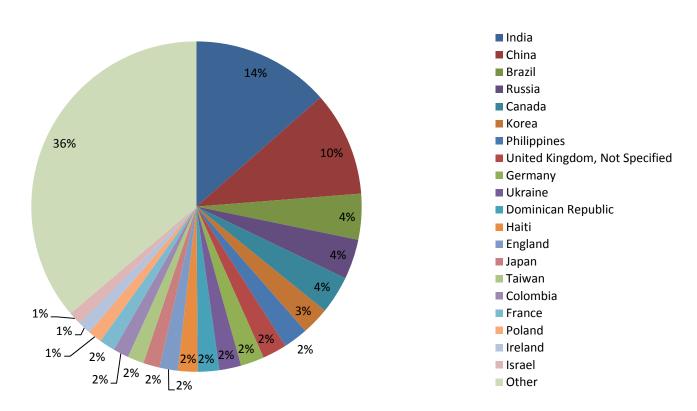
 The top five countries of origin among high-skilled foreign-born workers with a U.S. degree are India, China, Vietnam, Canada and Haiti.

Top 20 Countries of Birth of High-skilled Foreign-born Workers, U.S. Degree

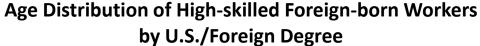


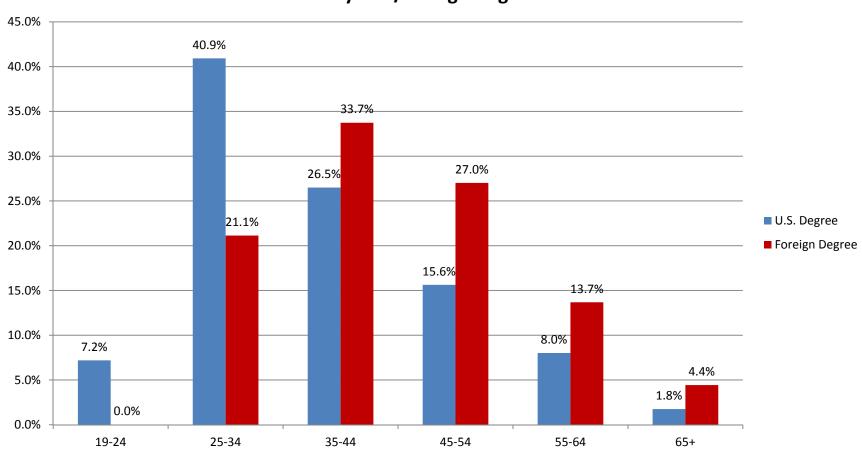
■ The top five countries of origin among high-skilled foreign-born workers holding a foreign degree are India, China, Brazil, Russia and Canada.

Top 20 Countries of Birth of High-skilled Foreign-born Workers, Foreign Degree



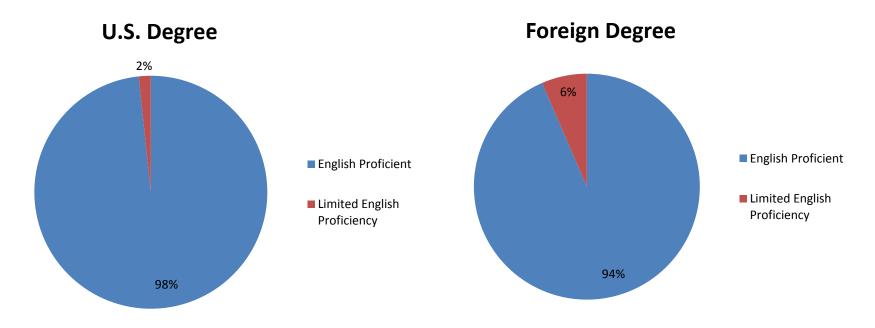
 High-skilled foreign-born workers with a foreign degree tend to be older than those with a U.S. degree.



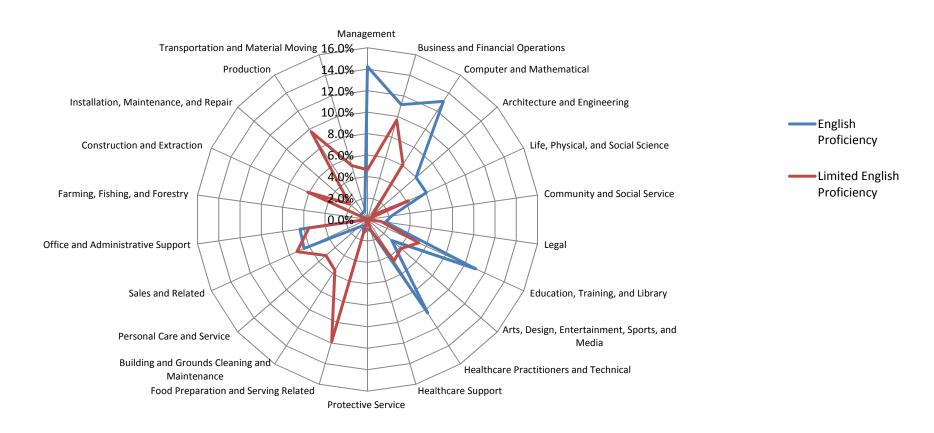


- 98% of those who earned their degree in the U.S. are English Proficient (EP).
- Those with a foreign degree are more likely to be Limited English Proficient (LEP).

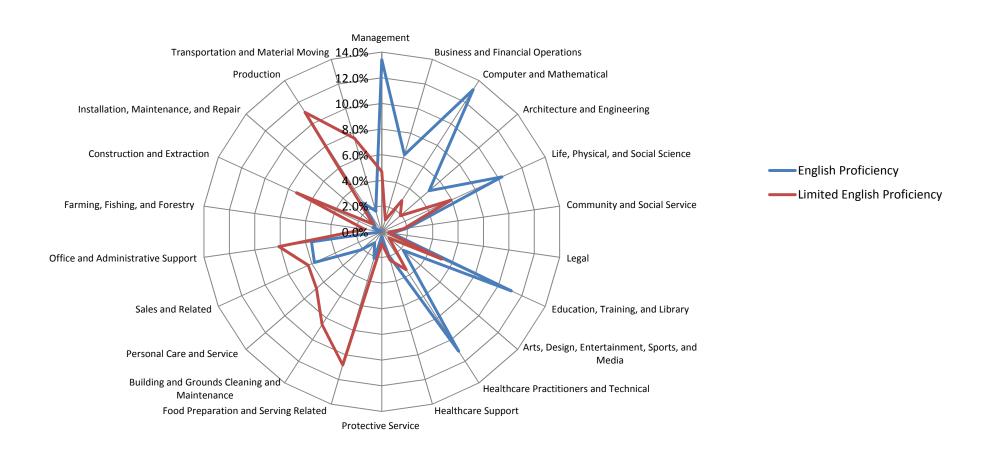
## English Proficiency of High-skilled Foreign-born Workers by U.S./Foreign Degree



## Occupations of High-skilled Foreign-born Workers by English Proficiency, U.S. Degree

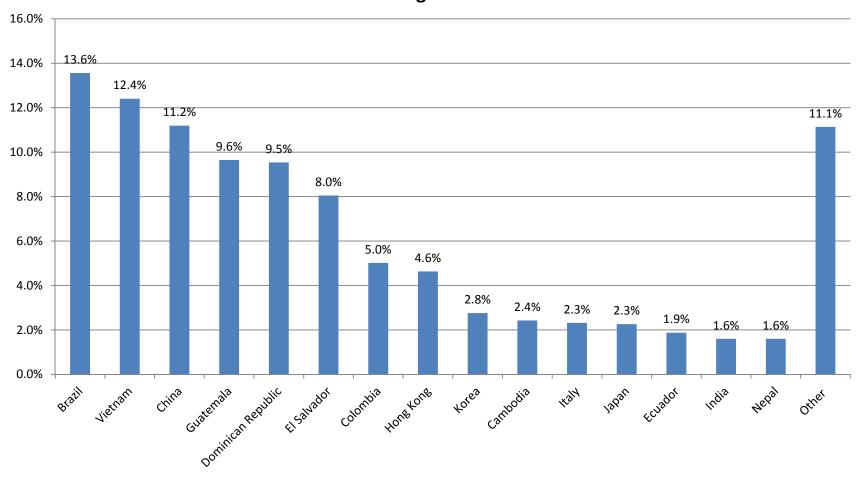


# Occupations of High-skilled Foreign-born Workers by English Proficiency, Foreign Degree



 The top 5 countries of birth among high-skilled foreign-born workers who are LEP with a <u>U.S. degree</u> are Brazil, Vietnam, China, Guatemala, and Dominican Republic.

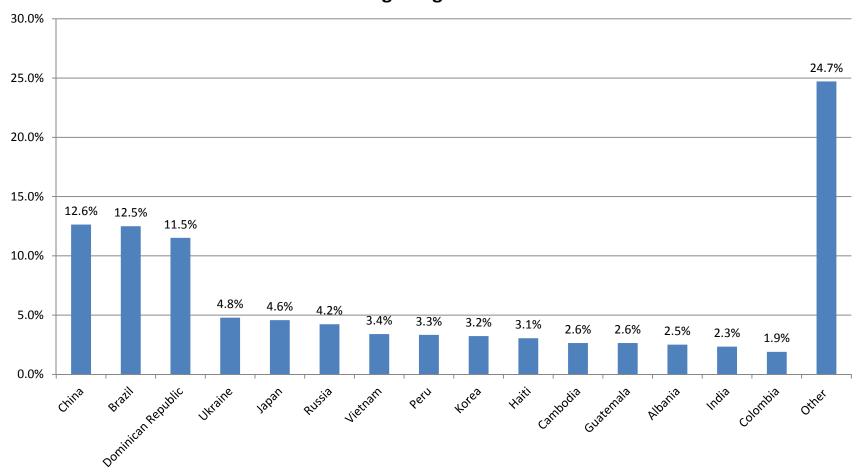
Top 15 Countries of Birth of High-skilled Foreign-born Workers with Limited English Proficiency, U.S. Degree\*



<sup>\*</sup>Note: The total count for High-skilled Foreign-Born Workers with Limited English Proficiency, U.S. Degree is 1,814.

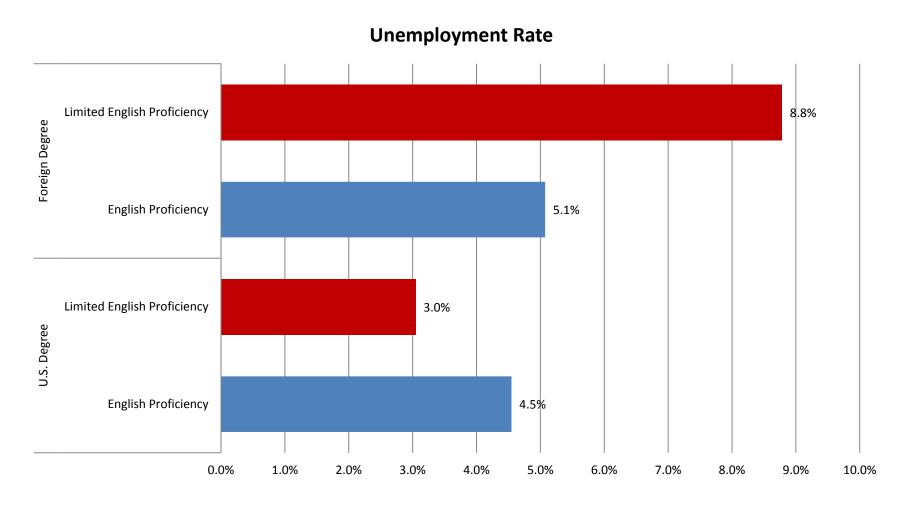
 The top 5 countries of birth among high-skilled foreign-born workers who are LEP with a <u>foreign degree</u> are China, Brazil, Dominican Republic, Ukraine, and Japan.

Top 15 Countries of Birth of High-skilled Foreign-born Workers with Limited English Proficiency, Foreign Degree\*



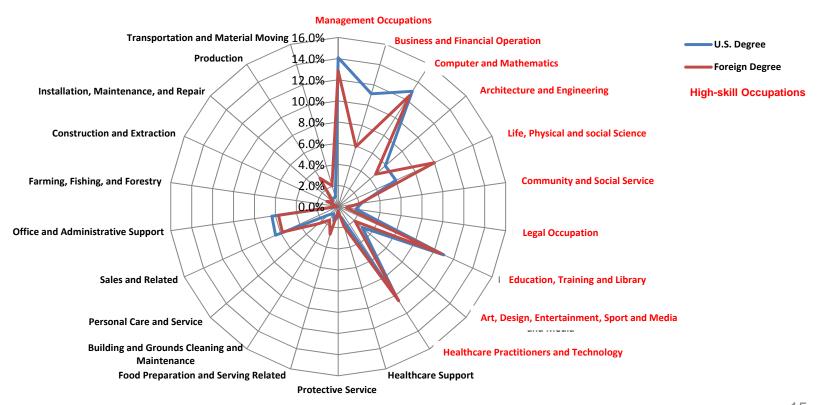
<sup>\*</sup>Note: The total count for High-skilled Foreign-Born Workers with Limited English Proficiency, Foreign Degree is Degree is 7,146.

- High-skilled foreign-born workers who are LEP and have a foreign degree have the highest unemployment rate, at 8.8%.
  - Those who are LEP and have a U.S. degree have the lowest unemployment rate, at 3%.



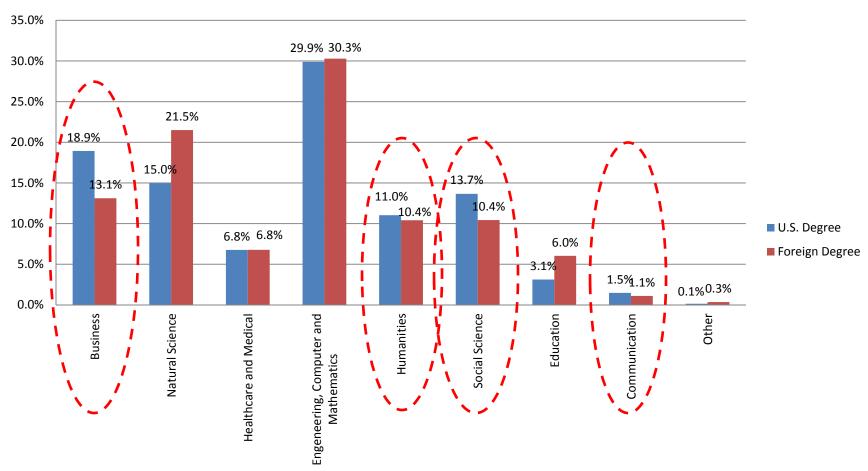
- Most high-skilled foreign-born workers (independent of the origin of their degree) work in high-skilled occupations.
- Those with a U.S. degree have a small advantage in Management; Business and Financial Operations; and Architecture and Engineering.

## Occupations of High-skilled Foreign-Born Workers by U.S./Foreign Degree



 High-skilled foreign-born workers, regardless of where they obtained their degrees, are over-represented in the fields of Business, Humanities, Social Science and Communications.

Field of Study of High-skilled Foreign-born Workers by U.S./Foreign Degree



## Among low-paid high-skilled foreign-born workers:

- Those with a U.S. degree are most likely to work in Education, Training, and Library; Sales and Related; and Office and Administrative, regardless of their English proficiency.
- Those with a foreign degree who are EP predominantly work in Food Preparation and Serving;
  Personal Care and Service; Sales and Related; and Transportation and Material Moving.
- Those with a foreign degree who are LEP predominantly work in Food Preparation and Serving;
  Building and Grounds Cleaning and Maintenance; Production; and Transportation and Material Moving.

## Low-paid High-skilled Foreign-born Workers by Occupation, U.S./Foreign Degree, and English Proficiency

	U.S. Degree				Foreign Degree				
Occupations	English Proficiency	9/	Limited English	0/	English Proficiency	9/	Limited English	9/	
Occupations		%	Proficiency	<u>%</u>	Proficiency	%		<u>%</u>	
Management	1,064	6.3%	935	5.1%	0	0.0%	41	1.1%	
Business and Financial Operations	1,028	6.1%	707	3.8%	0	0.0%	57	1.6%	
Computer and Mathematical	821	4.9%	682	3.7%	0	0.0%	0	0.0%	
Architecture and Engineering	219	1.3%	226	1.2%	0	0.0%	0	0.0%	
Life, Physical, and Social Science	788	4.7%	663	3.6%	10		42	1.2%	
Community and Social Service	388	2.3%	525	2.9%	0	0.0%	62	1.7%	
Legal	103	0.6%	100	0.5%	0	0.0%	19	0.5%	
Education, Training, and Library	3,563	21.1%	3,271	17.8%	68		158	4.4%	
Arts, Design, Entertainment, Sports, and Media	800	4.7%	593	3.2%	0	0.0%	11	0.3%	
Healthcare Practitioners and Technical	1,123	6.6%	821	4.5%	10	1.4%	70	2.0%	
Healthcare Support	524	3.1%	857	4.7%	0	0.0%	88	2.5%	
Protective Service	156	0.9%	150	0.8%	0	0.0%	53	1.5%	
Food Preparation and Serving Related	785	4.6%	1,108	6.0%	131	17.8%	506	14.2%	
Building and Grounds Cleaning and Maintenance	381	2.3%	667	3.6%	73	9.9%	409	11.5%	
Personal Care and Service	569	3.4%	1,027	5.6%	93	12.6%	348	9.7%	
Sales and Related	2,098	12.4%	2,360	12.8%	80	10.9%	317	8.9%	
Office and Administrative Support	1,543	9.1%	1,666	9.1%	42	5.7%	339	9.5%	
Farming, Fishing, and Forestry	26	0.2%	0	0.0%	0	0.0%	97	2.7%	
Construction and Extraction	317	1.9%	198	1.1%	61	8.3%	182	5.1%	
Installation, Maintenance, and Repair	65	0.4%	56	0.3%	40	5.4%	13	0.4%	
Production	188	1.1%	940	5.1%	50	6.8%	372	10.4%	
Transportation and Material Moving	363	2.1%	843	4.6%	78	10.6%	388	10.9%	
Total	16,912	100.0%	18,395	100.0%	736	100.0%	3,572	100.0%	

- Among high-skilled foreign-born workers with a U.S. degree:
  - Those who are EP are largely studied Engineering, Computers and Mathematics.
  - Those who are LEP are concentrated in the Humanities.
- Among high-skilled foreign-born workers with a foreign degree:
  - o Those who are both EP and LEP studied Engineering, Computers and Mathematics.

## High-skilled Foreign-born Workers by Field of Study, U.S./Foreign Degree and English Proficiency

		U.S. Degree				Foreign Degree			
Field of Study	English Proficiency	%	Limited English Proficiency		English Proficiency		Limited English Proficiency		
Business	20,548	18.9%	382	23.7%	13,648	12.8%	1,272	18.1%	
Natural Science	16,383	15.0%	170	10.6%	23,176	21.7%	1,279	18.2%	
Healthcare and Medical	7,389	6.8%	83	5.2%	7,415	7.0%	287	4.1%	
Engineering, Computer and Mathematics	32,759	30.1%	289	17.9%	32,717	30.7%	1,729	24.6%	
Humanities	11,862	10.9%	327	20.3%	11,082	10.4%	759	10.8%	
Social Science	14,879	13.7%	221	13.7%	11,019	10.3%	841	11.9%	
Education	3,336	3.1%	116	7.2%	6,057	5.7%	802	11.4%	
Communication	1,608	1.5%	23	1.4%	1,178	1.1%	70	1.0%	
Other	153	0.1%	0	0.0%	392	0.4%	0	0.0%	
Total	108,917	100.0%	1,611	100.0%	106,684	100.0%	7,039	100.0%	