

**Global Portland**  
**Trends from Greater Portland Pulse**  
Institute of Portland Metropolitan Studies  
www.portlandpulse.org  
March, 2015



**Introduction**

Global Portland measures Greater Portland's\* ties to the rest of the world. The data we use to quantify these ties include the following:

- **Exports**, which tell us the extent to which Greater Portland's businesses are selling goods and services to countries outside of the United States;
- **Foreign direct investment**, which quantifies the extent of economic activity in Greater Portland due to investors from other countries;
- **Foreign visitors**, which describes the number of people who visit Greater Portland from other countries and estimates the amount of money they spend while they are here;
- **Foreign-born residents**, quantifying the number of people living in Greater Portland who have moved here from another country; and
- **Foreign students**, which quantifies the number of college students studying in Greater Portland from abroad and their retention in the workforce.

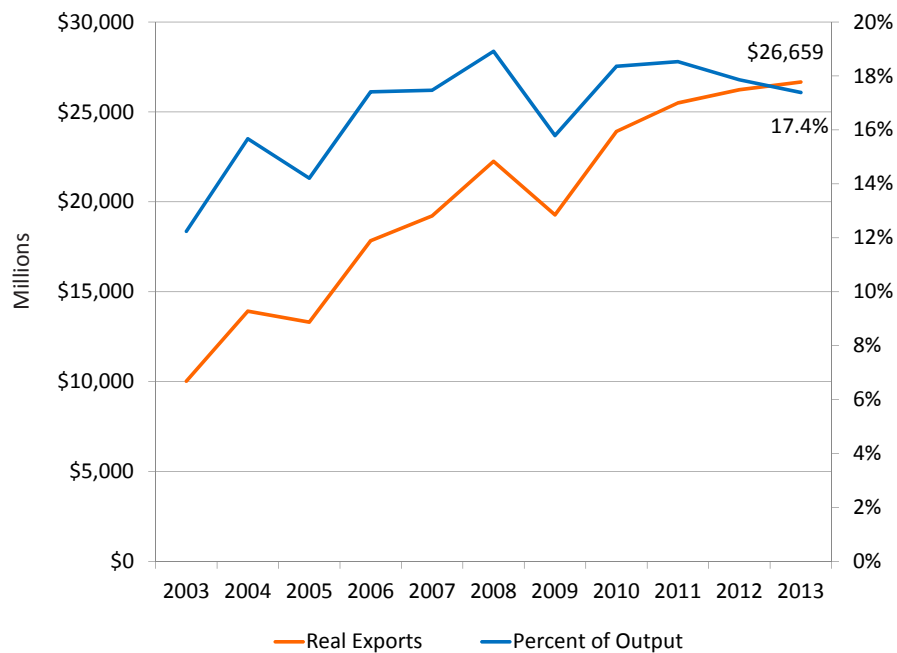
International ties are important because they help the region access the global economy. That access expands markets and generally improves opportunity for citizens and businesses. Foreign visitors and students not only bring money to Greater Portland from outside the country, they also give Greater Portland international exposure that can increase investment and exports in the future. And foreign-born residents bring with them knowledge of and connections to countries that represent growing markets and demand for Greater Portland's goods and services.

**Summary of Greater Portland Data and Trends**

- **Metropolitan exports comprised about 17 percent of Greater Portland's total output** (total value of goods and services produced) in 2013. These exports were, by far, concentrated in a single industry: computers and electronics. This industry has also contributed a substantial share of the growth in exports since 2008.
- **Employment in foreign owned enterprises (FOE) totaled just over \$40 thousand in 2011**—about five percent of total employment. This employment is concentrated in manufacturing and about one-third is in advanced industries—industries with a high concentration of research and development and science, technology, engineering, and math skills.
- **Greater Portland is home to about 292,000 residents born outside the United States**—about 13 percent of the total population. This percentage is comparable to the foreign born concentration in the U.S. overall. By far, the greatest number of foreign born are from Mexico, which supplies almost 30 percent of the total.
- **Greater Portland welcomed about 1.2 million international visitors in 2013**—a slight increase from 2012. These visitors, overwhelmingly from Canada but also many from Japan, China, and European countries, spent a total of \$280 million in 2013—about \$240 per visitor. Chinese visitors spent the most per visitor.
- **During the five-year period of 2008—2012, universities in Greater Portland educated almost 5,000 students from abroad on F-1 visas.** Portland has a relatively high rate of retention for these students—almost sixty percent stay in the region to work under the Optional Practical Training program, a temporary work arrangement for foreign students.

\* Greater Portland refers to the Portland-Vancouver metropolitan statistical area unless noted otherwise.

**Total value of real exports; export share of total output, Greater Portland, \$millions, 2003—2013**



Source: Brookings Institution

### Why are exports important?

Exports accounted for almost 40 percent of post-recession growth of US GDP (from 2009 to 2012), and over 54 percent for the nation’s 100 largest metropolitan areas. Thus, exports played an important role in the nation’s recovery.<sup>1</sup> Almost 80 percent of global purchasing power resides outside the United States.<sup>2</sup>

Export growth is important to the future growth in the United States and its metropolitan areas because the majority of growth in the coming decades is expected to occur in emerging markets outside the United States, such as Brazil, India, and China. Tapping those markets means growing the export capacity of metropolitan regions such as Portland’s.<sup>3</sup>

### Trends:

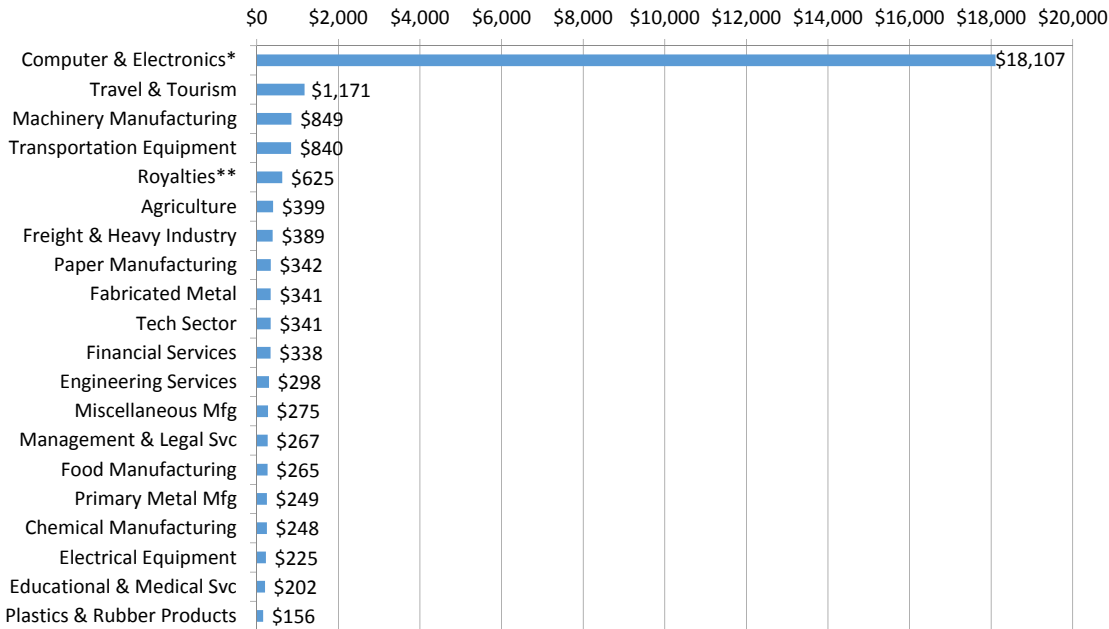
Exports comprised about 17 percent of output in Greater Portland in 2013. This compares to a national share of 12 percent and was just slightly higher than the Seattle metro share. In 2013, Portland ranked 13th among the top 100 Metros in terms of export share of total output. The value of real exports grew by an annualized rate of 5.3 percent before the recession (2003—2008) and about 8.4 percent post recession (2009 to 2013)—over double the rate of output growth during this period.

<sup>1</sup> McDearman, Brad, Ryan Donahue, and Nick Marchio. 2014. “Export Nation 2013.” The Brookings Institution. <http://www.brookings.edu/research/interactives/export-nation>.

<sup>2</sup> Lee, Jessica, and Kati Suominen. 2015. “How States Can Help Small- and Mid-Sized Firms Become Exporters.” The Brookings Institution. <http://www.brookings.edu/blogs/the-avenue/posts/2015/01/12-states-small-mid-sized-firms-exporters-lee-suominen>.

<sup>3</sup> Istrate, Emilia, Bruce Katz, and Jonathan Rothwell. 2010. “How Metropolitan Areas Can Lead National Export Growth.” The Brookings Institution. <http://www.brookings.edu/research/reports/2010/07/26-exports-istrate-rothwell-katz>.

### Nominal value of annual exports, by industry, top 20 industries, Greater Portland, \$millions, 2013



\*Includes royalties from computer and electronics.

\*\*Does not include computer and electronics royalties.

Source: Brookings Institution

#### Why is this Important?

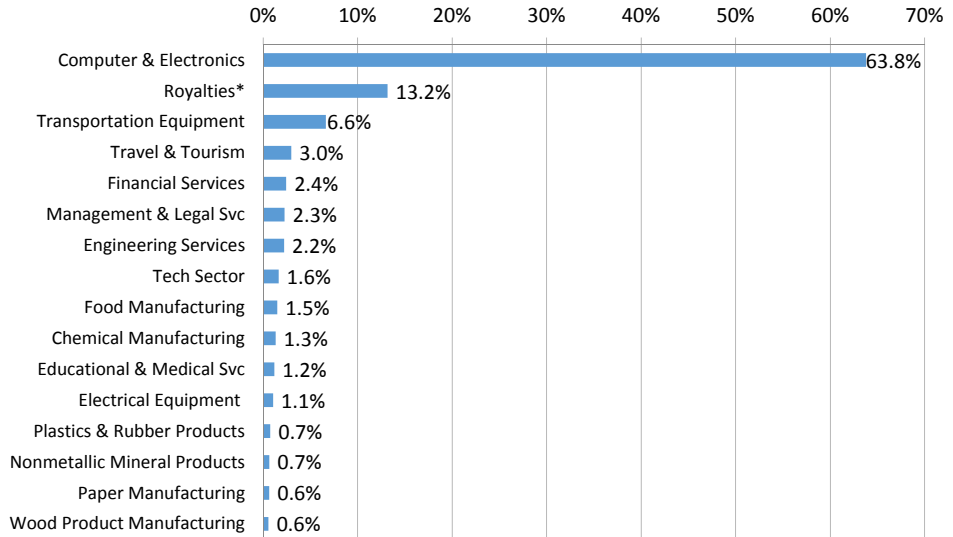
Many metropolitan areas with high export intensity (exports as a percentage of output) are highly specialized in certain industries. Greater Portland is a prime example with 68 percent of its export value in computer and electronic products. The challenge is to leverage the existing export infrastructure to encourage greater exports by other industries, thereby decreasing the economy's vulnerability to the global business cycle of a single industry.<sup>4</sup>

#### Trends:

Computer and electronic products comprised about two-thirds of the total value of exports from the Portland region in 2013. Annualized export growth in this industry was about 13 percent from 2003 to 2013. Machinery and transportation equipment are also important exporters. Travel and tourism contributes the greatest export value among service industries.

<sup>4</sup> McDearman, Donahue, and Marchio, 2014.

**Industry contribution to export growth, Greater Portland, 2008—2013**



\*Includes royalties from computer and electronics.  
Source: Brookings Institution

**EXPORTS**

**Why is this Important?**

Exports were responsible for a large share of post recession growth in the United States. Among the 100 largest metropolitan areas, exports accounted for 54 percent of output growth from 2009 to 2012.

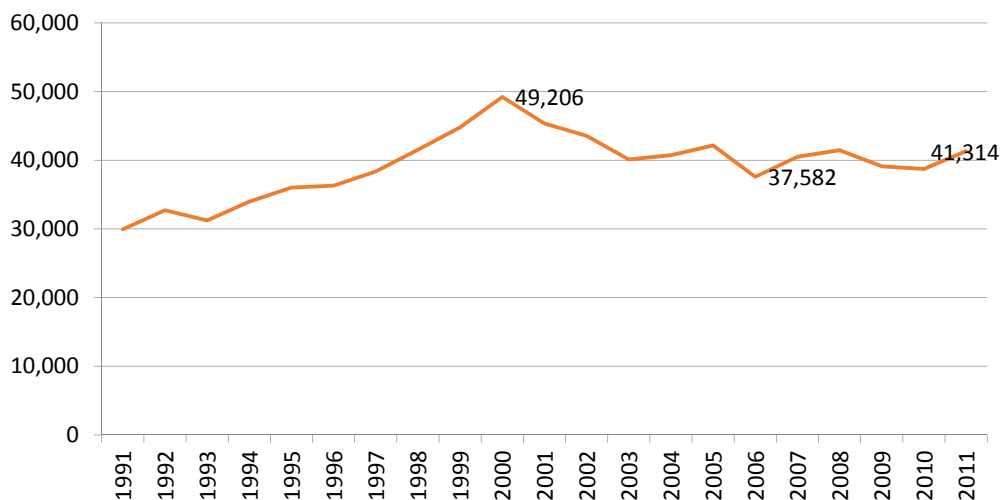
Manufacturing is a core driver of post-recession export growth among the largest 100 metropolitan areas in the United States. Transportation equipment, petroleum and coal products, and computers and electronics accounted for nearly half of export growth among the top 100 metropolitan areas. However, there is significant variation among metropolitan areas in the clusters that drive regional economies.<sup>5</sup>

**Trends:**

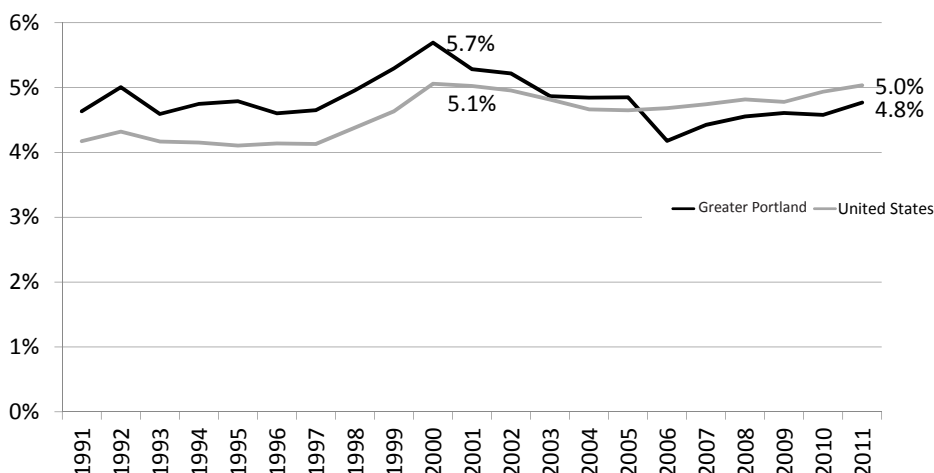
Computer and electronic products contributed 64 percent of the growth in exports in Greater Portland since 2008. The transportation sector also contributed a large share, reflecting Greater Portland’s rebound in manufacturing outside of computer and electronic products. Among services, travel and tourism grew the most, with financial, management and legal, and engineering services close behind. Engineering services include engineering consulting and design, reflecting Greater Portland’s recent dominance in green building and other sustainability engineering services.

<sup>5</sup> McDearman, Donahue, and Marchio, 2014

**Total employment in foreign-owned enterprises, Greater Portland, 1991—2011**



**Foreign share of domestic area employment, Greater Portland and United States, 1991—2011**



Source: Brookings Institution

**Why is foreign direct investment (FDI) important?**

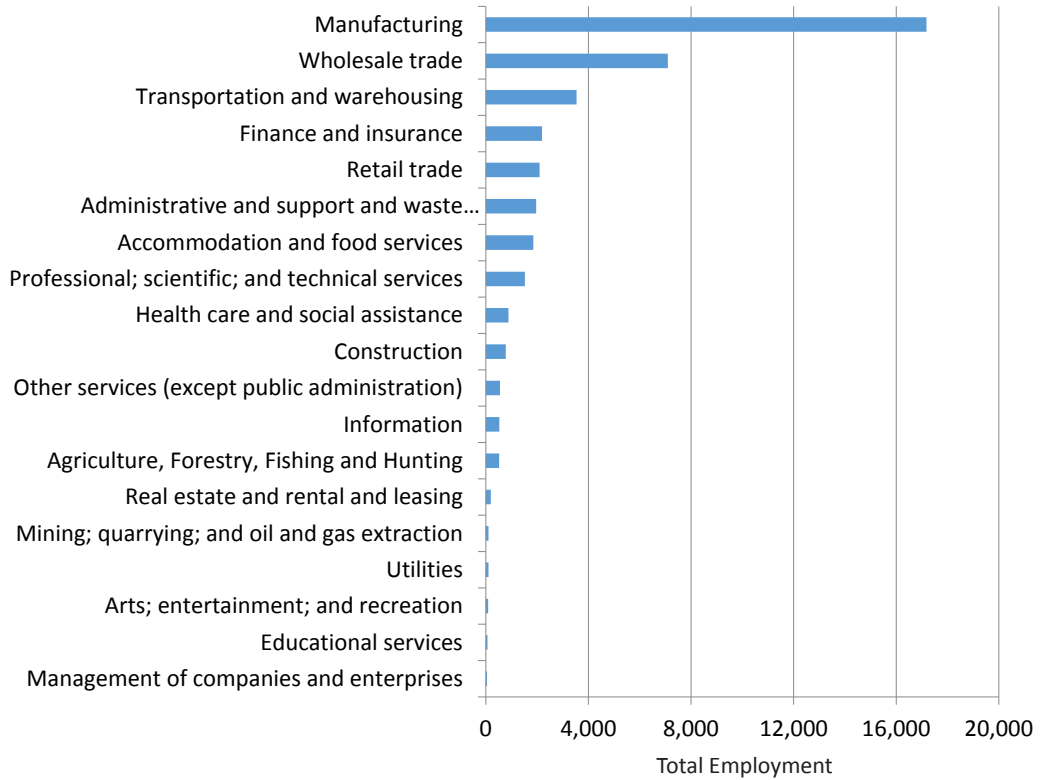
US affiliates of foreign companies employed 5.6 million workers in 2011. These companies are concentrated in manufacturing and advanced technologies. They often have a disproportionate economic impact because they pay above average wages and provide, on average, a higher value of benefits per worker. These firms are also more capital and R&D intensive than average, fueling increases in productivity. They produce more than one-fifth of the nation’s goods exports and account for more than a quarter of goods imports.<sup>6</sup>

**Trends:**

Total employment under foreign ownership in Greater Portland peaked in 2000 with a total of 49,206, or about 5.7 percent. It fell after 2000, hitting a post-2000 low of 37,582 in 2006. By 2011 it had risen slightly again to 41,314, or about 4.8 percent. Foreign direct investment (FDI) represents a smaller share of total employment in Greater Portland than the United States as a whole. Although Greater Portland is the 23rd largest economy in the U.S., it is 29th in total FDI employment. FDI’s share of employment in the U.S. has been less volatile than in Greater Portland, reflecting the greater concentration of industries for FDI in Greater Portland than nationwide.

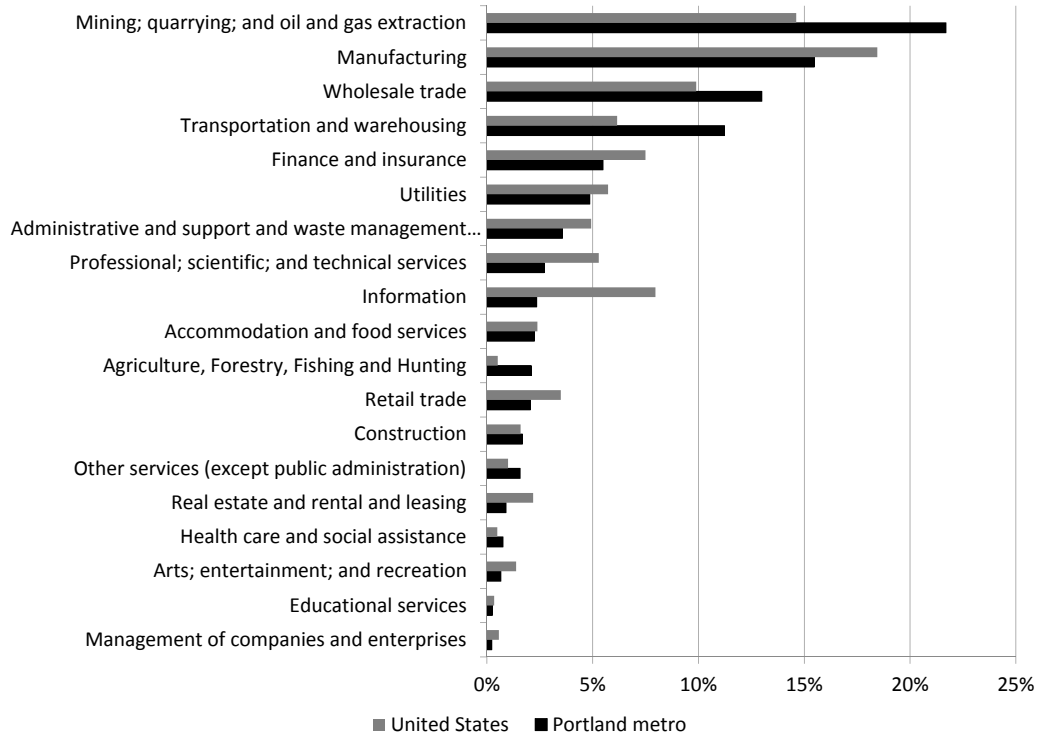
<sup>6</sup> Saha, Devashree, Kenan Fikri, and Nick Marchio. 2014. “FDI in U.S. Metro Areas: The Geography of Jobs in Foreign-Owned Establishments.” The Brookings Institution. <http://www.brookings.edu/research/reports/2014/06/20-fdi-us-metro-areas-saha-fikri-marchio>.

**Employment in foreign owned enterprises, Greater Portland, by industry, 2011**



Source: Brookings Institution

**Foreign share of domestic area employment by industry, Greater Portland and United States, 1991—2011**



Source: Brookings Institution

### Why is this important?

Foreign direct investment contributes to industry specialization in metropolitan areas, which can drive cluster effects such as increased innovation, specialized labor and services, and increased productivity. Jobs in foreign owned enterprises (FOEs) are relatively concentrated in manufacturing and advanced industries. Nationwide, FOEs represent almost 19 percent of employment in manufacturing, and the percentage of FOE jobs in manufacturing is 38 percent.<sup>7</sup>

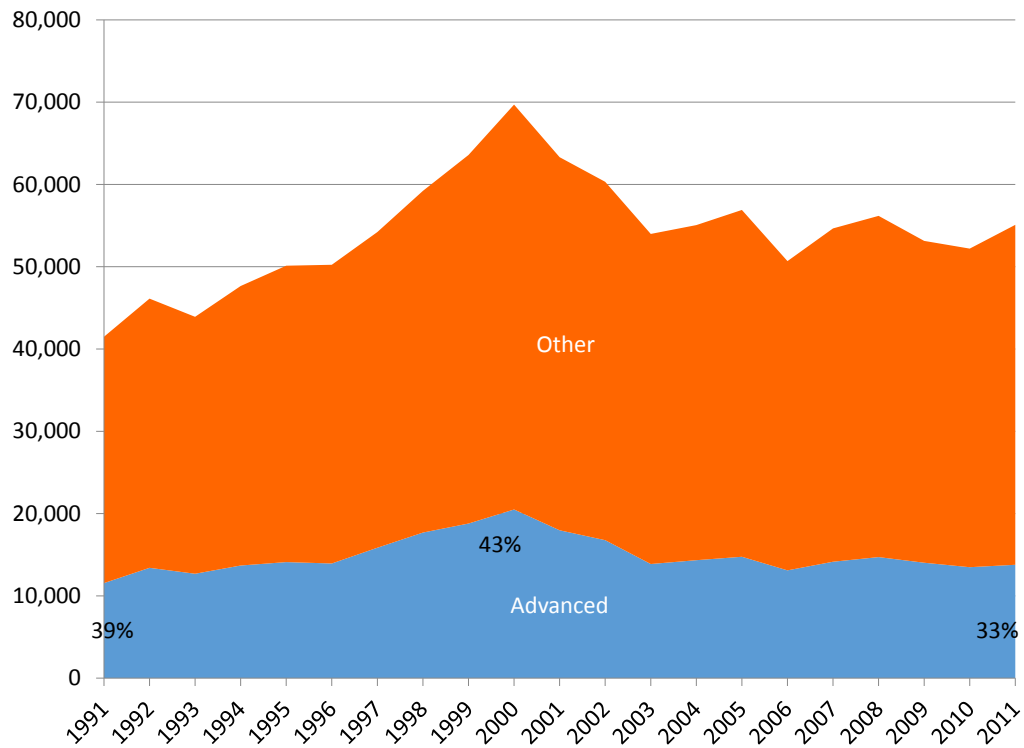
### Trends:

Over 17,000 manufacturing jobs in Greater Portland are in FOEs. This represents about 16 percent of total manufacturing jobs—a smaller share than the nationwide average of 19 percent. Wholesale trade represents the second highest number of jobs due to FOEs, and the share, at 13 percent, is higher than the US average. While there are only 3,600 FOE jobs in transportation and warehousing, those jobs represent over 10 percent of the total transportation and warehousing jobs—much higher than the national average of 6 percent.

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<sup>7</sup> Devashree, Fikri, and Marchio, 2014.

Foreign employment in advanced vs. other industries, Greater Portland, 1991—2011



Source: Brookings Institution

**Why is this important?**

The advanced industries sector, as defined by the Brookings Institution, encompasses a mix of both manufacturing and services industries important to technology development and diffusion and is therefore a key driver of technological advancement in the economy. The Brookings Institution identifies advanced industries by their R&D intensity (R&D spending per worker) and by the technological capacity of their workforce (the degree to which STEM knowledge is required).<sup>8</sup>

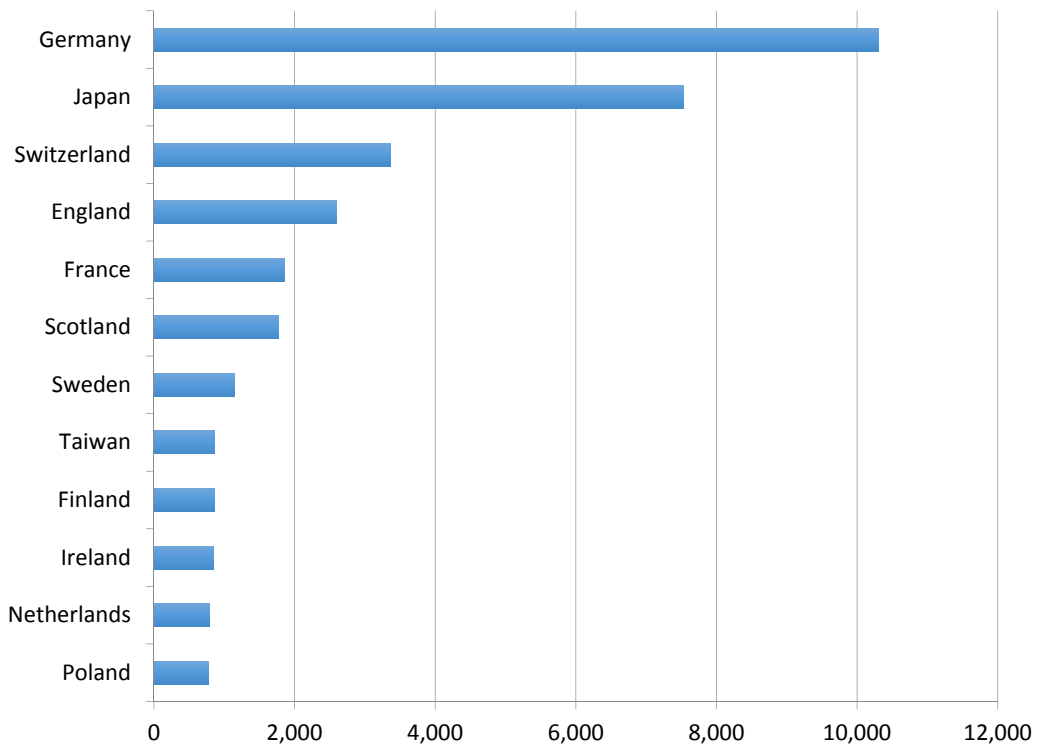
**Trends:**

In 1991, advanced industries represented about 39 percent of employment in FIEs in Greater Portland. It peaked in 1998 with about 43 percent, then fell to about 33 percent by 2011.

<sup>8</sup> For more detail, see Saha, Fikri, and Marchio, 2014 p. 34



**Total employment in foreign-owned enterprises for top twelve countries  
Greater Portland, 2011**



Source: Brookings Institution

**Why is this important?**

Nationwide, the over 115 different countries are investing in the United States. However, companies from a small number of countries are responsible for most of this investment. Western European countries, Canada, and Japan are the largest sources of investment into the United States. Their US investments reflect their own industry specializations.

**Trends:**

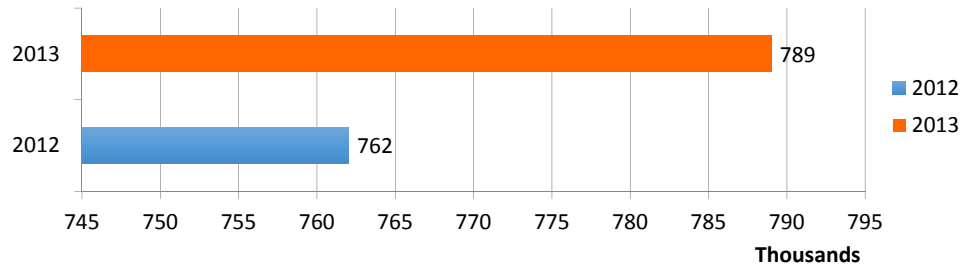
Although England represents the largest source of jobs in FOEs in the United States, Germany dominates employment in FOEs in Greater Portland, followed by Japan and Switzerland.

**Total arrivals by country (except Canada), Greater Portland, 2012 and 2013**



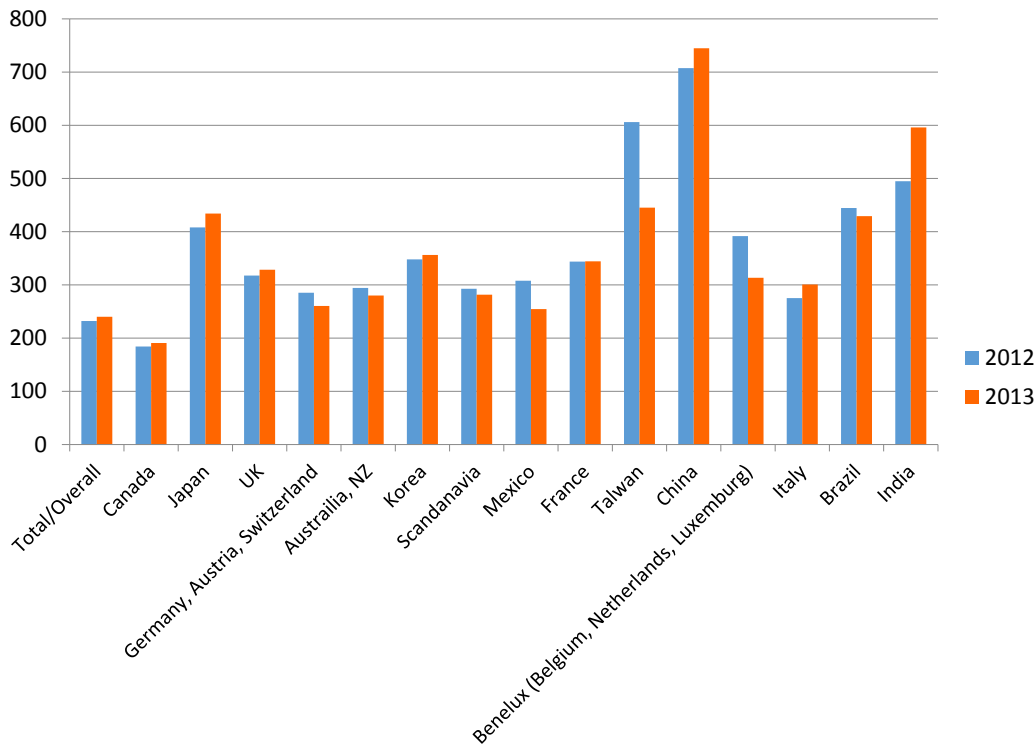
Source: Central Oregon Research Services and U.S. Department of Commerce

**Total arrivals from Canada, Greater Portland, 2012 and 2013**



Source: Central Oregon Research Services and U.S. Department of Commerce

**Annual spending per visitor, Greater Portland (Oregon counties only), 2012 and 2013**



Source: Source: Central Oregon Research Services and Visa Vue®

**Why are foreign visitors important?**

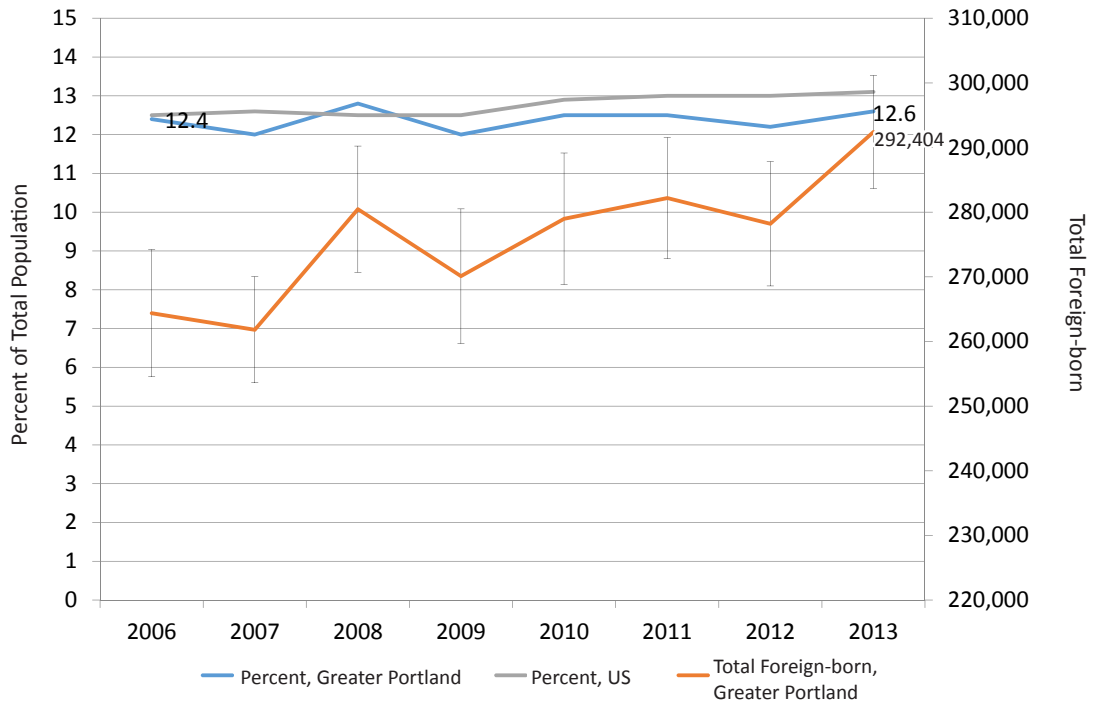
International tourism is an important traded sector, bringing money from other countries into Greater Portland. It also provides important international exposure that can lead to foreign direct investment and exports.

**Trends:**

Greater Portland welcomed about 1.2 million international visitors in 2013—a slight increase from 2012.

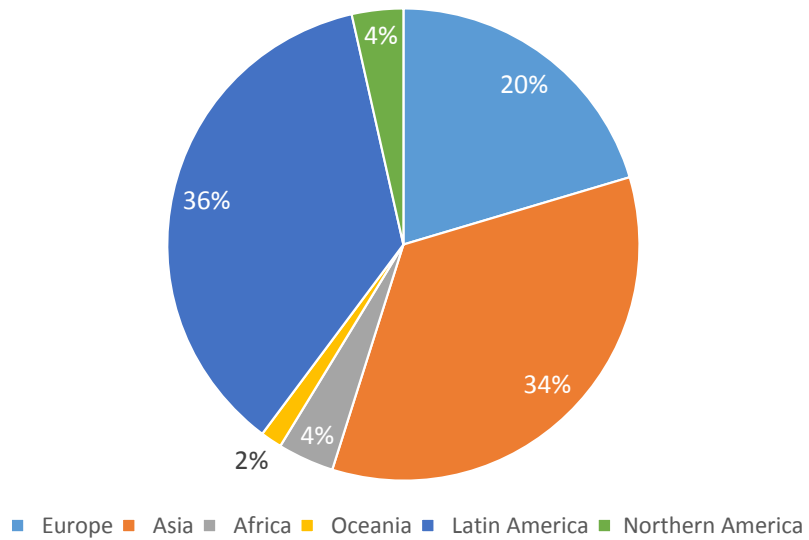
These visitors, overwhelmingly from Canada but also many from Japan, China, and European countries, spent a total of \$280 million in 2013—about \$240 per visitor. Chinese visitors spent the most money per visitor.

**Foreign-born persons, total and percent of total population, Greater Portland and United States, 2006—2013**



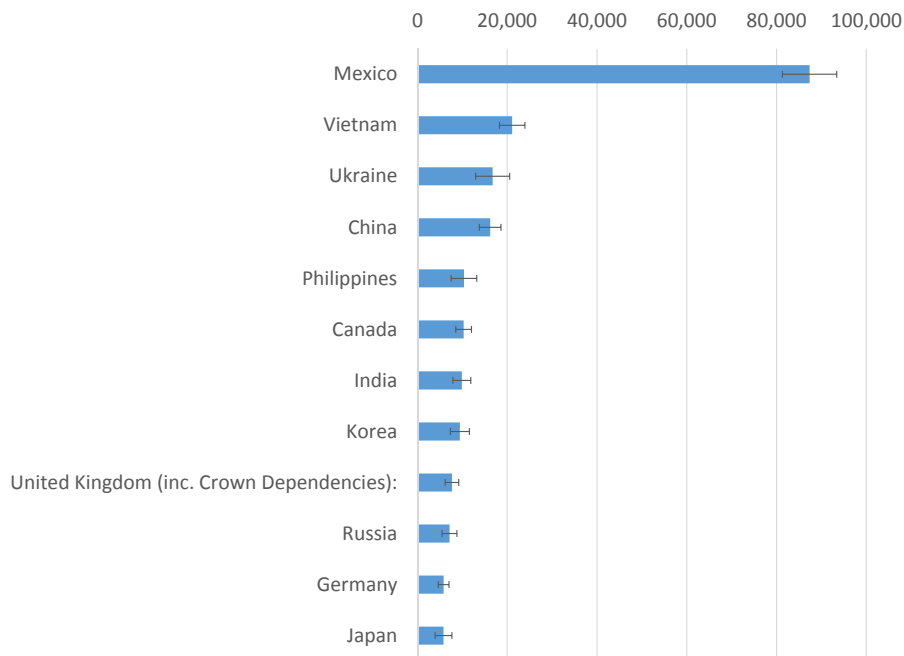
Source: Source: U.S. Census American community survey 1-year estimates.  
Error bars are used to indicate the error, or uncertainty, in a reported measurement.

**Foreign-born persons by continent of origin, Greater Portland 2013**



Source: Source: U.S. Census American Community Survey 1-year estimates

## Foreign-born persons by country of origin (top 12 only), Greater Portland, 2013



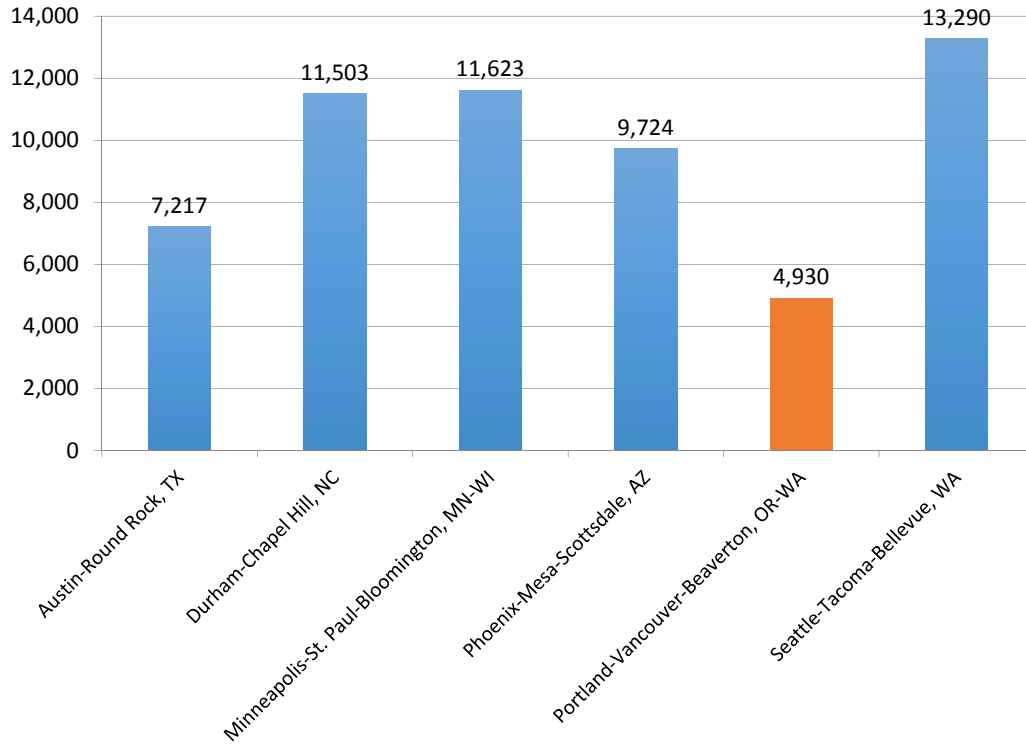
Source: U.S. Census American Community Survey 1-year estimates.  
Error bars are used to indicate the error, or uncertainty, in a reported measurement.

### Trends:

In the Portland region, foreign-born residents comprise about 13 percent of the population, totaling about 292,000 residents. This percentage is comparable to the share of foreign-born population of the United States and has been fairly steady since 2006.

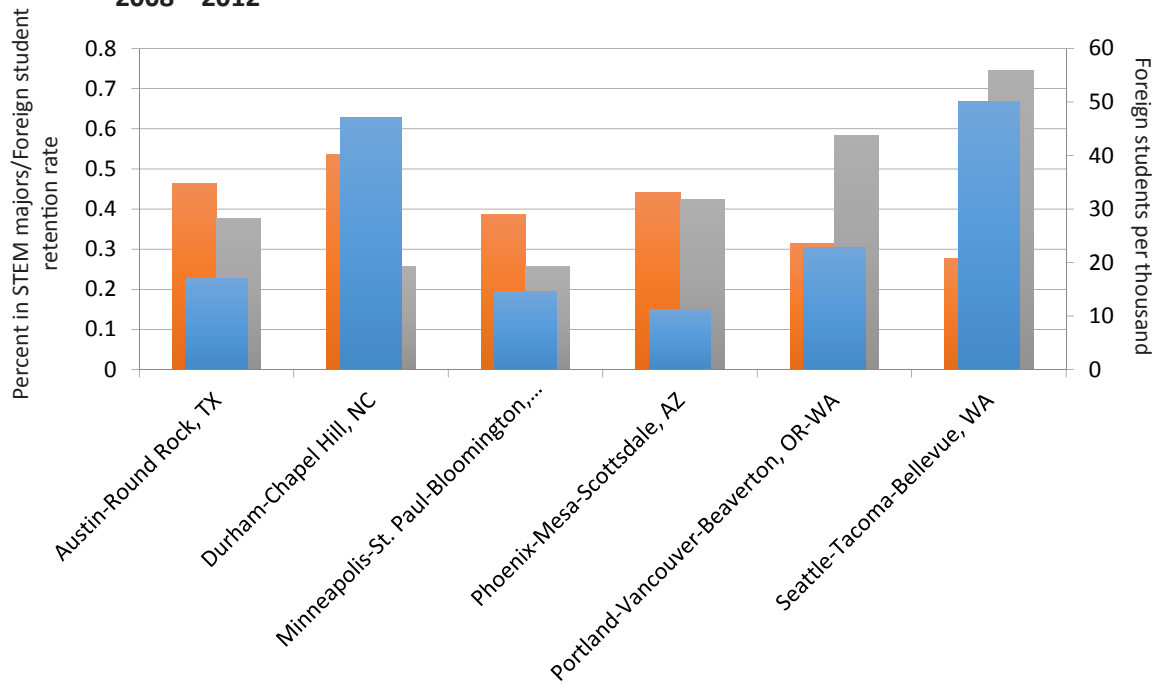
Foreign-born residents are split fairly equally among Asian and Latin American countries, with a smaller percentage from European countries. By far, the most common country of origin among the foreign born is Mexico, followed by Vietnam, Ukraine, and China.

Number of foreign students, Greater Portland and comparators, 2008—2012



Source: Brookings Institution

Number of foreign students per thousand students, percent of foreign students in STEM fields, and foreign student retention, Portland metro and comparators, 2008—2012



■ Percent in Stem majors ■ Foreign Student Retention ■ Number of Foreign Students per 1000 students

Source: Brookings Institution

### **Why are international students important?**

Foreign students disproportionately study STEM and business fields. About 45 percent of these foreign student graduates extend their visas to work in the same metropolitan area as their college or university. These graduates add to the pool of highly trained, well paid workers. They also provide a bridge to their home cities, increasing the profile of these metropolitan areas and the companies employed by the students.<sup>9</sup>

### **Trends:**

During the five-year period of 2008—2012, universities in Greater Portland educated almost 5,000 students from abroad on F-1 visas. Portland has a relatively high rate of retention for these students—almost 60 percent stay in the region to work under the Optional Practical Training program.

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<sup>9</sup> Ruiz, Neil G. 2015. "The Geography of Foreign Students in U.S. Higher Education: Origins and Destinations." The Brookings Institution. <http://www.brookings.edu/research/interactives/2014/geography-of-foreign-students>.



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