



**Talking Points for “Filling the Talent Gap”
International Student Retention OPT Data Report Release
July 12, 2016**

Why Are We Here? Why Is this Newsworthy?

- Today the Michigan Global Talent Retention Initiative (GTRI), the nation’s first international student retention program, is releasing its “Filling the Talent Gap” study—a 2016 update to first-of-its-kind analysis of OPT data released in 2013.
- Today, businesses, chambers of commerce, economic development agencies, and immigrant economic development leaders across the Great Lakes region and the nation are joining together to highlight the economic contributions and talent potential of international students.
- Today, approximately two months after graduation, hundreds of thousands of talented international students will return to their home countries—U.S. degree in hand—as current U.S. immigration laws limit their ability to pursue long-term employment in the U.S. This represents an economic loss that is likely in the billions.
- Recent regulations issued by the federal government have extended the length of time that international students receiving degrees in STEM-related fields can work under the Optional Practical Training program of their F-1 student visa—provided their employer uses the federal E-verify system—from 17 additional months to 24 additional months, meaning that such students can work for a total of 36 months before needing a separate work authorization or returning home.

What’s New in the “Filling the Talent Gap” Study? What Does the Study Reveal?

- The study documents tremendous growth in Michigan companies’ hiring of international students from Michigan colleges and universities. Over the past four years, the number of students hired from the seven GTRI universities by Michigan. **In fact, the study chronicles over 80% growth in the number of students hired by Michigan companies while on OPT.**
- The students working under their OPT from these seven GTRI universities are among the world’s most valuable economic asset—talent. In fact, **68% of**

the students working under OPT from these schools received degrees in STEM disciplines and 83% of the students received a graduate (masters or PhD) degree.

- Based upon the data contained in this report, **international students using OPTs are nearly as likely as *in-state* students from Michigan colleges and universities—and three times as likely as *out-of-state* students—to live and work in Michigan after graduating instead of moving to another state.** More than half (56.4 percent) of international students on OPT in the last three years of GTRI data worked in Michigan (and 57.2 percent of such students over the last five years) compared to the most recent estimates that 63 percent of in-state students, and 22 percent of out-of-state students, stay in Michigan after graduation.
- The data in this report suggests that Southeast Michigan is benefitting far more from this talent than other parts of the state. **We estimate that more than three-quarters (75 percent) of the OPTs from our seven target universities working in Michigan are working in the four county (Macomb, Oakland, Washtenaw, and Wayne Counties) target area that defines the Global Detroit footprint.** And, in a typical semester, more than 225 Michigan companies are utilizing recently graduated Michigan international student talent.
- An increasing number of international students are choosing Michigan as a place to study and, hopefully, relocate to pursue the American Dream. **The number of international students in Michigan (now more than 32,000, ranking the state 9th in the nation) has grown over the past decade by nearly 60 percent**, and by over 30 percent over the past five years. The economic contribution (in the form of tuition, rents, and other purchases of Michigan and services) is now estimated to exceed \$1 billion annually. This is properly described as an export (Michigan goods and services purchased by a foreign interest).

Why Is this Issue so Important?

- There is a tremendous talent gap, especially in STEM jobs. According to a 2015 estimate from the Corporate Executive Board (CEB), a publicly-traded corporate advisory specialist, factoring in parameters such as growth and an aging workforce, there will be a gap a STEM employment supply shortfall of 1.3 million by 2020.
- Business Leaders for Michigan in a 2015 report has identified making the state a Global Engineering Village as one of its top six strategies for the state's

economy, noting in 2015 that “engineering services are predicted to grow at a rate that far outpaces that of the economy as a whole.”

- According to the National Science Foundation, the proportion of STEM graduate students enrolled at U.S. colleges and universities that are international students is on the rise.
- According to the Partnership for a New American Economy, more than 60 percent of the STEM PhD graduates in Michigan in recent years are international students, including 60.6 percent of engineering PhDs awarded between 2006-2010.

Civil Engineering	43.7%	6,202
Other Engineering	42.1%	7,279
Chemistry	40.3%	8,059

Source: National Science Foundation, Survey of Graduate Students and Postdoctorates in U.S. Colleges and Universities, 2011-2012. webcaspar.nsf.gov. U.S. students include lawful permanent residents.

Among the findings in this report:

- International students account for 70 percent of the full-time graduate students in electrical engineering, 63 percent in computer science, 60 percent in mechanical engineering, and more than 50 percent in economics, chemical engineering, materials engineering, and physics. These students represent a vital source of talented professionals, researchers, and future employers.
- In electrical engineering, at 145 U.S. universities, representing nearly 90 percent of all school programs with at least 30 students, the majority of full-time graduate students are international students.

- International Students Make Significant Economic Contributions while Studying at U.S. Colleges and Universities. As students and faculty, foreign-born researchers play an important role in the development of cutting-edge research and commercialization of that research. In fact, on 70 of the 95 patents filed by the University of Michigan system in 2011, foreign-born researchers were listed as the inventor or co-inventor. This 73.7 percent ratio is typical of the nation’s top ten leading research universities, where the average was 76 percent.

Examples

- [Possible insertion of Ramssoft and PCI stories, as well as international student profiles, and maybe even successful business owners who came to Detroit as international students]

Concluding Thoughts and Next Steps

- Michigan is an early leader in recognizing the economic value and opportunity that international students present. GTRI is the nation's first international student retention program with full-time staff outside of a university setting to work on international student retention.
- St. Louis and Ohio are forming their own attempts at pursuing similar strategies.
- Michigan Governor Rick Snyder has noted that:

The message to international students who take part in GTRI events is simple. Michigan wants you! . . . Connecting highly skilled international students with employers and giving them the opportunity to work and live in a beautiful, vibrant state will help create a strategic advantage for our state and strengthen the Michigan economy.