

Methodology: How We Compute Economic Impact (November 2012)

We define economic impact as the amount of money that foreign students collectively bring into the United States to pay for their education and to support themselves while they (and in some cases, their families) are here. The goal of our economic impact formula is to use data already collected for other purposes to provide a reasonable estimate of the economic resources that foreign students import to the United States to support their education here each year.

The data sets used for these reports come from two sources:

1. The Institute of International Education's *Open Doors 2012* report, funded by the U.S. Department of State's Bureau of Educational and Cultural Affairs, provides numbers of international students enrolled at colleges and universities throughout the United States during the 2011-12 academic year. In many cases, this data provide separate totals for undergraduate, graduate, and non degree students. (<http://www.iie.org/opendoors>)
2. Wintergreen Orchard House, a major database compiler, provider, and publisher of education data, provides cost figures for tuition, living, and miscellaneous expenses at U.S. colleges and universities for the 2011-12 academic year. (<http://www.wintergreenorchardhouse.com/>)

The extensive data provided by these two sources (which collect it directly from surveys of the institutions involved) allow us to make our estimates sensitive to differences between institutions. However, there are still areas where our estimates and formulas could be improved. For example, we compute economic impact only for students reported in the *Open Doors* report. Colleges and universities that do not provide information to the Institute of International Education are not represented. Also, enrollment reports represent peak enrollment, and not necessarily enrollment levels throughout the year.

Estimating Expenses

Tuition, fees, living expenses, and dollar estimates are derived from Wintergreen Orchard House's data collected on surveys completed by institutions every year. We try to make our calculations sensitive not only to differing costs at institutions, but differing costs for ESL students, undergraduates, graduate students, and students on practical training.

1. Undergraduates and English Language Programs: The number of undergraduate students at an institution is specified by *Open Doors* data. Wintergreen Orchard House's data provide undergraduate tuition and fee amounts, on-campus room and board amounts, and miscellaneous expenses. These categories are sometimes broken down into averages for international, out-of-state, flat rate, and in-state students. When multiple averages are available, we choose averages in the order given above.
2. Graduate Students: The number of graduate students at an institution is specified by *Open Doors* data. Wintergreen Orchard House's data provide graduate tuition and fee amounts, on-campus room and board amounts, and miscellaneous expenses. If there are

no differentiated graduate expenses provided by an institution in the Wintergreen Orchard House's data, then the undergraduate expenses would be applied.

Note: For this cycle, Wintergreen Orchard House was unable to provide updated graduate expenses for the 2011-12 academic year. Therefore an estimated percentage increase was applied based upon the 2010-11 graduate expenses for a derived 2011-12 graduate expense for each institution.

3. Students on Practical Training: We assume these students earn enough in their U.S. jobs to pay living and educational expenses for the year, and so import no funds for their support. Therefore, net economic impact of students in practical training is zero.

Economic impact of an international student equals tuition and fees, plus room and board, plus miscellaneous figured at 50 percent of room and board, less U.S. support. We assume: (a) that spring enrollment figures are the same as the fall figures reported, (b) that all students are enrolled full time for two semesters or three quarters a year, and (c) that students live on campus for the full year. The miscellaneous expenses, enumerated in Wintergreen Orchard House's data, average about 40 percent of room and board expenses. We use a 50 percent figure as an approximation that includes all extra expenses except for travel.

Estimating U.S. Support

The *Open Doors* survey asks schools to report the percentage of their students who are self-funded, the percentage that have U.S. source income, etc. The U.S. support percentage includes funding from a U.S. college or university, the U.S. Government, a U.S. private sponsor or current employment. For this analysis the percentages are calculated based upon the institution's Carnegie classification and the academic career of the student. For example, this process will differentiate the level of support between undergraduates and graduates at a particular research institution while it also differentiates a baccalaureate-classified institution from an associate's-classified institution.

Individual Institution Enrollment Figures

For institutions with fewer than 10 international students enrolled, enrollment totals are suppressed for confidentiality reasons. In the reports, this is indicated by three asterisks (***)

Note about Fluctuations: There may be fluctuations between the overall enrollment and the overall economic impact totals on the national, state, congressional district, or institution level. This is due to several variables that comprise the economic impact amount. For example, an institution could have a slight decrease of international students with a slight increase in tuition and living expenses, resulting in an overall increase in economic impact. Another institution could have an overall increase in their international student population, but with a different mix of undergraduates, graduates, and those on practical training. That mix could result in a lower economic impact, as graduate students generally receive more university funding and those on OPT have a zero impact on the economic impact value. All these variations are accounted for within the overall analysis.