



The Economic Impact of International Students in Hawaii – 2019 Update



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October 2019
Department of Business, Economic Development & Tourism
Research and Economic Analysis Division

Table of Contents

I.	INTRODUCTION	1
II.	2019 HAWAII INTERNATIONAL EDUCATION SURVEY–ECONOMIC IMPACT ANALYSIS	2
	Data Collection and Sources	2
	Methodology	2
	1. Direct Economic Impact.....	3
	2. Total Economic Impacts.....	4
III.	OUTCOMES OF THE 2019 INTERNATIONAL EDUCATION SURVEY	6
	<i>Data comparisons</i>	6
	<i>Spending per student</i>	7
	<i>Financial aid to International students and net spending per student</i>	8
	<i>Countries and places of origin of international students in Hawaii</i>	9
IV.	CONCLUSIONS.....	10
	APPENDIX I: 2019 Hawaii International Education Survey	11
	APPENDIX II: 2019 Hawaii International Education Survey	15
	APPENDIX III: Total Economic Impact of International Students within the University of Hawaii System on the State’s Economy	19
	1. Direct Economic Impact.....	19
	2. Total Economic Impact and Number of Jobs Supported.....	20

This report was produced by the Research and Economic Analysis Division (READ) of the Department of Business, Economic Development & Tourism (DBEDT) in collaboration with the Study Educational Hawaii Consortium. This report was produced under the direction of the Economic Research Administrator Dr. Eugene Tian by Joseph Roos, Naomi Akamine, and Sunny Ajala.

EXECUTIVE SUMMARY

The *2019 Hawaii International Education Survey* (IES) collected data for the calendar year of 2018 regarding the number of international students, the program length and expenditure amounts of these students and estimated the contribution to the state's economy. This report also examined the country of origin of international students and their relative ranking.

This report is an update of previous reports published in 2009, 2015, 2016, 2017, and 2018. The 2009 report had 24 responses from educational institutions, representing a total of approximately 13,000 international students. The 2015 report had 35 responses, representing approximately 10,100 international students. The 2016 report had 31 responses, representing a total of nearly 12,200 students. The 2017 report had 27 responses, representing 10,800 international students. The 2018 report had 34 responses, representing 12,916 international students. The 2019 IES received responses from 41 of Hawaii's educational institutions, covering data for the 2018 calendar year. The responding institutions for the current survey represented 14,300 international students. Caution should be used when comparing this year's survey with previous years due to a varying number of responses and methodology.

The 2018 direct spending of international students in the State of Hawaii was an estimated \$216.9 million. This amount included tuition and fees plus living expenses. Based on this direct impact, the total economic impacts of international student expenditures for 2018 were as follows:

- \$446.7 million in economic output generated, including direct, indirect, and induced effects;
- \$34.3 million in state taxes generated;
- \$197.3 million in household income generated; and
- 4,576 jobs were supported by international student spending.

The average annual spending per student was \$15,165, including living expenses and tuition and fees across all programs for calendar year 2018.

Hawaii's educational institutions hosted a diverse group of students from all over the globe. Japan remains the top country of origin for Hawaii's international students, comprising 25.8 percent of the total. Japan was followed by the South Korea with 10.7 percent, China with 5.5 percent (including Hong Kong and Macao), Switzerland with 4.6 percent, and the Philippines with 1.9 percent.

It is important to note that the economic impact estimates do not include contributions from educational travel to Hawaii from foreign-based educational institutions. The estimates also do not include educational travel covering school excursions and other types of education-related travel from Japan, China, Taiwan, and South Korea, and its economic impact. Finally, the estimates do not include contributions from exchange students attending Hawaii's public schools under the Hawaii Department of Education.

I. INTRODUCTION

This report is based on the annual *Hawaii International Education Survey* (IES), which is a collaboration between the Study Hawaii Consortium and the State of Hawaii's Department of Business, Economic Development, & Tourism (DBEDT). The goal is to provide an annual benchmark to measure the economic impact and number of international students studying in Hawaii. This annual survey is sent to schools in Hawaii that host international students.

As with previous surveys, the current 2019 IES was conducted online and requested Hawaii's educational institutions to provide the following data:

- The number of international students enrolled in various programs during the 2018 calendar year.
- The length of academic programs for international students.
- The tuition and fees paid by international students.
- The cost of living paid by international students.
- The country of origin for the international student population.

The questionnaire is listed in Appendix I.

This report is divided into four sections: Section II examines the direct, indirect, and induced impacts of international student spending on Hawaii's economy and the results of the 2019 IES; Section III analyzes outcomes of the 2019 IES, such as specifics on student spending, financial aid, and countries of origin and provides a summary of results from previous surveys; finally, Section IV concludes by summarizing the survey results.

II. 2019 HAWAII INTERNATIONAL EDUCATION SURVEY–ECONOMIC IMPACT ANALYSIS

The estimate of the economic impact of international students studying in the State of Hawaii was calculated based on the results of the 2019 IES, conducted in the second quarter of 2019. Caution should be used when comparing the current survey results with previous survey results due to variation in the survey respondents and methodology.

Data Collection and Sources. The 2019 survey was administered online. The sampling frame consisted of educational institutions located in Hawaii and identified by the U.S. Department of Homeland Security’s (DHS) database called SEVIS (Student and Exchange Visitor Information System). The questions of the online survey are available in Appendix I and the list of the institutions the survey was sent to is in Appendix II.

The survey asked educational institutions to report the number of international students and the estimated expenses for tuition/fees and living expenses incurred by international students for calendar year 2018. The educational institutions were also asked the level and type of study programs for international students (e.g. middle and high schools students, undergraduate students, non-degree seeking students, etc.).

Responses were received from 41 educational institutions in Hawaii, for a response rate of 61 percent. The institutions responding to the 2019 IES accounted for 14,300 international students for the 2018 calendar year, representing a majority of Hawaii’s international students. Generally, the schools that did not reply to the survey were either trade schools, with a very low number of international students, or institutions which did not host international students for the current survey year.

Methodology. The analysis presents two different estimates:

- 1) **Direct Impact:** This is an estimate of the direct dollar amount spent in Hawaii by international students including tuition, fees, and living expenses.
- 2) **Direct + Indirect + Induced Impact:** This is the direct impact plus the indirect and induced impacts, including the ripple effects of international student expenditures on output, household income, state tax revenue, and jobs.

1. Direct Economic Impact

The methodology to measure the direct impact of international students studying in Hawaii was based on the reported data provided by each respective institution. The calculation aggregated the tuition/fees plus living expenses minus the financial assistance awarded for all the institutions that responded to the survey. Non-responses were not included in the total and, therefore, the estimates are on the conservative side. The formula for calculating the direct economic impact of international students studying in Hawaii is:

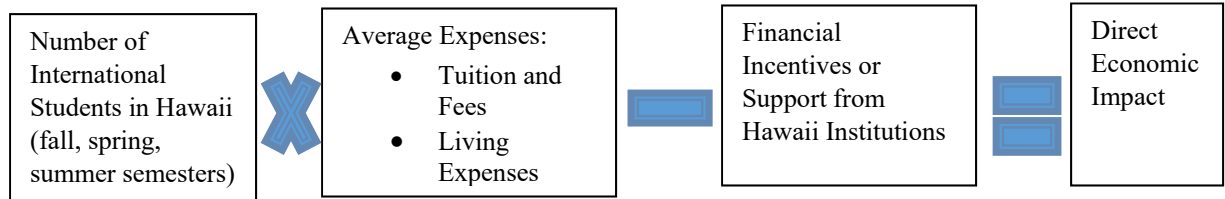


Table 1 presents a summary account of the different types of international students in Hawaii and the amount spent on tuition and fees plus living expenses. These categories show the direct economic impact of international student spending on the state’s economy.

Similar to previous surveys, the 2019 IES showed that the majority of international students came to Hawaii to enroll in short-term academic programs, English language programs, or other academic exchange programs at the undergraduate level or lower. The number of short-term international students was 10,155 or 71 percent of the total. Generally, students enrolled in these short-term programs were not working towards a degree. The long-term category included students enrolled full-time for at least one semester (spring, summer, or fall); tuition and living expenses were calculated on a semester by semester basis. In addition to the university level, this category also includes international students enrolled full-time at the middle and high school level. The number of long-term students was 4,145, which comprised about 29 percent of all international students reported in the survey results.

International students directly contributed \$216.9 million to the Hawaii economy in the form of tuition/fees and living expenses. Despite making up 71 percent of total international students, short-term international students contributed 40 percent of international student spending, or \$87.5 million. Long-term international students directly contributed \$129.4 million to the Hawaii Economy; most of this came from degree-seeking undergraduate students.

**Table 1: Direct Economic Impact of International Students in Hawaii – Summary
Results of the 2019 Hawaii International Education Survey**

Category	Number of Students	Spending by International Students on		Total
		Tuition & Fees*	Living Expenses	
Long-Term Students	4,145	\$59,363,517	\$70,008,614	\$129,372,131
Middle/high school students	543	\$6,389,437	\$6,615,599	\$13,005,036
Degree-seeking undergraduate students	2,933	\$37,163,869	\$51,385,752	\$88,549,621
Degree-seeking graduate students	669	\$15,810,211	\$12,007,263	\$27,817,474
Short-Term Students	10,155	\$32,964,989	\$54,528,727	\$87,493,716
Non-degree-seeking undergraduate students	2,010	\$12,431,248	\$17,583,831	\$30,015,079
Non-degree-seeking graduate students	85	\$1,769,012	\$887,400	\$2,656,412
Short-term training program students/professionals	6,279	\$16,956,399	\$28,763,303	\$45,719,702
Students in summer/winter camps	1,252	\$1,808,330	\$1,675,510	\$3,483,840
Visiting scholars/teachers	529	\$0	\$5,618,683	\$5,618,683
Total**	14,300	\$92,328,506	\$124,537,341	\$216,865,847

Source: DBEDT, 2019 IES

* student financial aid amount is subtracted from tuition

**category sums vary slightly from totals due to rounding

2. Total Economic Impacts

The total economic impacts for the state included the direct, indirect and induced impacts. The multipliers used for this calculation are from *The Hawaii State Input-Output Study: 2012 Benchmark Report*.¹ Type II final demand multipliers were used, which include direct, indirect, and induced effects.

¹ DBEDT. 2016. The Hawaii State Input-Output Study: 2012 Benchmark Report. August.

The following formula was used to calculate the total economic impact and the number of jobs supported by international students in Hawaii for calendar year 2018:

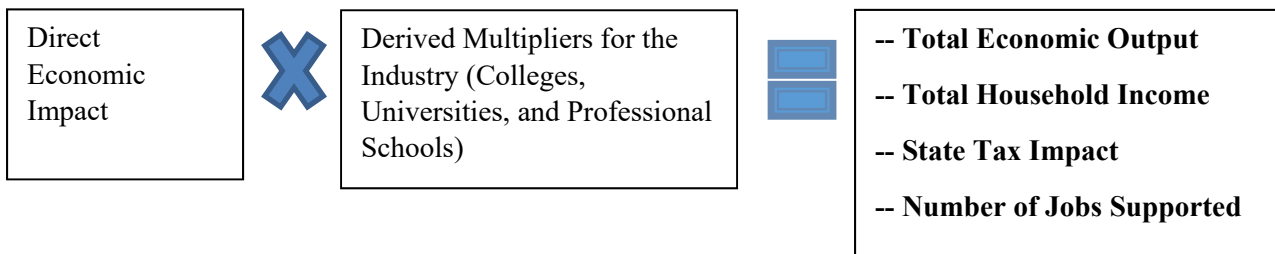


Table 2 summarizes the findings and shows the economic impact of international students studying in Hawaii.

Table 2: Total Economic Impact of International Students in Hawaii, 2018

Direct Spending (from Table 1)		\$216,865,847
	Final Demand Multiplier (Type II)	Economic Impact (Type II)
Total Output Generated	2.06	\$446,743,645
Total Household Income Generated	0.91	\$197,347,921
Total State Taxes Generated	0.158	\$34,264,804
Total Jobs Supported	21.1 (per \$million)	4,576

Source: DBEDT, calculations are based on the *Hawaii State Input-Output Study: 2012 Benchmark Report* (August 2016)

The ***total output generated*** is an estimate of the total dollar change in output for all industries in the state, resulting from the inflow of money spent by international students in Hawaii. Based on this analysis, the total output generated by international student spending for calendar year 2018 was an estimated \$446.8 million.

Total household income generated refers to the estimated household earnings that can be attributed to international students studying in the state. Hawaii households earned an estimated total of \$197.3 million generated from international students for calendar year 2018.

The ***total state taxes generated*** line shows the estimated state tax revenue that can be attributed to international students studying in Hawaii. An estimated \$34.3 million in state taxes was generated by international student spending in the state for calendar year 2018.

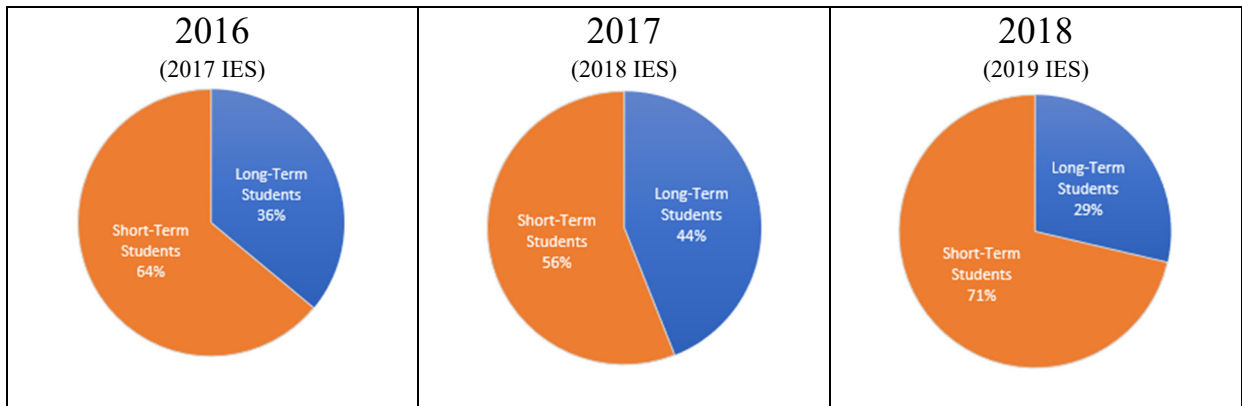
The last line of the table shows the ***total number of jobs supported*** by international students studying in Hawaii. Given an estimated direct economic impact of \$216.9 million for calendar year 2018, 4,576 jobs were supported. As noted above, these estimates are based on the Type II multiplier, which includes direct, indirect, and induced effects.

III. OUTCOMES OF THE 2019 INTERNATIONAL EDUCATION SURVEY

Data comparisons

Figure 1 below highlights the results of the 2019 IES by the program length and compares these with the two previous survey results. It is important to note that the data was collected for the previous year of the survey year. The 2019 IES measured 2018 data and showed a higher share of students enrolled in short-term programs, with 71 percent compared with 56 percent and 64 percent for the two previous respective surveys. This is partially due to more short-term institutions responding to the 2019 IES.

Figure 1. Categories of International Students in Hawaii



Source: DBEDT: respective years of IES

From an economic development perspective, long-term students have a greater impact on the state's economy because they spend more on an average annual basis than short-term students.² Long-term students, seeking a degree, bring in more revenue for educational institutions; their spending has a stronger ripple effect as these students pay rent, buy groceries, and spend on other items for a longer time than short-term students.

As shown in Table 3, the impact of long-term students on the local economy was higher in 2018 than the impact of short-term students, even though the number of students in short-term programs was higher. However, in addition to spending, short-term programs contribute significantly to Hawaii's economy because they serve as a bridge for students to transition into long-term degree programs. A number of programs reported an increase in short-term students and a decrease in long-term students.

² DBEDT. 2015. The Economic Impact of International Students in Hawaii, 2015

**Table 3. Spending by International Students in Hawaii by Program Length:
2018 Calendar Year**

Category	Long-Term Programs	Short-Term Programs
Number of Students	4,145	10,155
Total Spending (\$)	\$129,372,131	\$87,493,716
Living Expenses (\$)	\$70,008,614	\$54,528,727
Tuition and Fees (\$)	\$59,363,517	\$32,964,989
Average Annual Spending Per Student (\$)	\$31,212	\$8,616

Source: DBEDT, 2019 IES

Spending per student

The overall average annual spending per student for calendar year 2018 was \$15,165, including both long-term and short-term students. As shown in table 3, the average annual spending for long-term students was \$31,212 (\$16,890 for living and \$14,322 for tuition/fees) and short-term students was \$8,616 (\$5,369 for living expenses and \$3,246 for tuition/fees). Table 4 below shows the direct impact (total spending by international students) and total economic impacts on the economy of the State of Hawaii for the current survey and the two previous surveys of the IES.

Table 4. Summary of Economic Impacts: 2016, 2017, and 2018

	2016 (2017 IES)	2017 (2018 IES)	2018 (2019 IES)
Total Direct Spending	\$225,316,831	\$241,490,546	\$216,865,847
Output Multiplier	2.15	2.06	2.06
Earnings Multiplier	0.85	0.91	0.91
State Tax Multiplier	0.143	0.158	0.158
Employment Multiplier (jobs per \$m)	22.6	21.8	21.1
Total Output Generated	\$484,431,187	\$497,470,525	\$446,743,645
Total Income Generated	\$191,519,307	\$219,756,397	\$197,347,921
Total State Taxes Generated	\$32,287,902	\$38,155,506	\$34,264,804
Total Jobs Supported	5,093	5,264	4,576

Source: DBEDT, IES respective years

Financial aid to international students and net spending per student

Financial aid and other resources are used as an incentive to attract international students. The total financial aid for international students for calendar year 2018 was \$2,105,779, which was significantly above the \$679,511 estimate for the previous year. One factor in this large increase was the University of Hawaii Hilo reporting \$619,288 given in financial aid. It is important to note that these are scholarships and grants offered by the institutions and do not include RA/TA assistance. Generally, international students are eligible only for merit aid provided by the host institutions. However, students who are U.S. permanent residents are also eligible for federal financial aid, in addition to any available institutional aid. At most institutions, financial aid is only provided for long-term students, those who are taking classes for credit and are working towards completion of requirements for a degree.

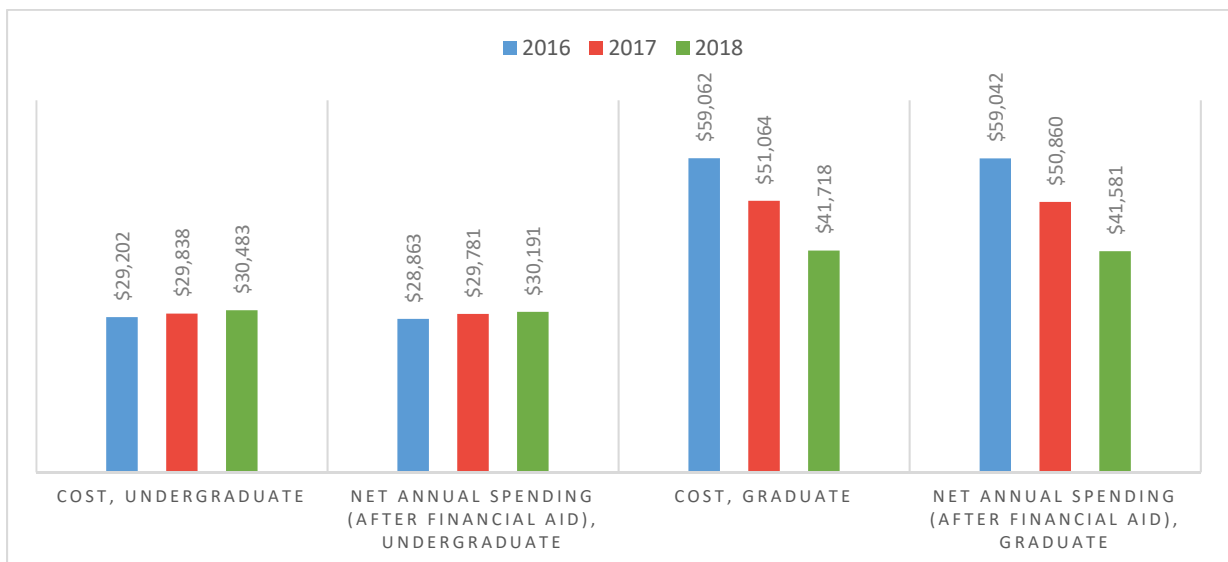
At the ***undergraduate level*** for calendar year 2018, average annual fees for a full-time international student in Hawaii was \$12,671. These figures are after the average annual financial assistance was subtracted, which reduced the total cost per student by approximately \$293 annually (Figure 2). The average tuition amount included community colleges, which generally had lower tuition than the four-year universities.

At the ***graduate level*** for calendar year 2018, average annual fees for a full-time graduate or professional international student in Hawaii was \$23,633. These figures were after the financial assistance was subtracted, which reduced the total cost per student by approximately \$137 annually (this does not include RA/TA assistance).

At the ***middle and high school*** level for calendar year 2018, average annual fees averaged \$11,767 per year after financial assistance was subtracted. The total financial aid in this category was \$1,095,070, or an average annual amount of \$2,017 per student.

Increasing financial aid resources could boost competition among educational institutions in attracting international students. In addition to attracting students, financial aid is an effective tool to retain quality students.

Figure 2. Impact of Financial Aid to International Students



Source: DBEDT: respective years of IES

Countries and places of origin of international students in Hawaii

Table 5 lists the top 25 countries and places of origin of international students for 2018. Japan remains the top country of origin for Hawaii's international students, comprising 25.8 percent of the total. Japan was followed by South Korea with 10.7 percent, China (including Hong Kong and Macao) with 5.5 percent, Switzerland with 4.6 percent, and the Philippines with 1.9 percent.

Table 5. Places of Origin of International Students in Hawaii in 2018

Rank	Country/Place	No. of Students	% of Total
1	Japan	3,683	25.8%
2	South Korea	1,527	10.7%
3	China (PRC, HK, Macao)	792	5.5%
4	Switzerland	656	4.6%
5	Philippines	275	1.9%
6	Germany	263	1.8%
7	Canada	252	1.8%
8	Taiwan	214	1.5%
9	Norway	180	1.3%
10	France	166	1.2%
11	Tonga	151	1.1%
12	Brazil	134	0.9%
13	Spain	101	0.7%
14	New Zealand	98	0.7%
15	Sweden	89	0.6%
16	Italy	87	0.6%
17	Western Samoa	82	0.6%
18	Vietnam	78	0.5%
19	Australia	72	0.5%
20	Thailand	70	0.5%
21	Mongolia	67	0.5%
22	Fiji	64	0.4%
23	United Kingdom	58	0.4%
24	Chile	51	0.4%
25	Indonesia	51	0.4%

Source: DBEDT, 2019 IES

In comparing with the 2018 report, the order of the top five positions remained the same: Japan, South Korea, China, Switzerland, and the Philippines. France jumped 7 places from 17th to 10th place in the rankings. French Polynesia no longer made the top 25 list this year and was replaced by Chile. In addition to Japan, the South Korea, China, and the Philippines, other Asian countries including Taiwan, Vietnam, Thailand, and Mongolia maintained firm rankings. Switzerland, Germany, Norway, France, and Spain were the highest-ranking European countries.

IV. CONCLUSIONS

The data presented in this report were the results of the *2019 Hawaii International Education Survey*. DBEDT received responses from 41 of Hawaii's educational institutions with international students. The total direct economic impact of international students for the 2018 calendar year was an estimated \$216.9 million. This amount included tuition and fees plus living expenses.

In addition to the direct impact, other economic benefits of international students for the 2018 calendar year were:

- \$446.7 million added to the state's total economic output, including direct, indirect, and induced effects.
- \$34.3 million in state taxes was generated.
- \$197.3 million in household earnings can be attributed to international students.
- 4,576 jobs were supported by international student spending.

The overall average annual per student spending was \$15,165, including living expenses and tuition and fees across all programs in 2018.

The amounts above do not include contributions from foreign schools to Hawaii, such as school excursions and other education-related travel. These education-related trips from high schools and colleges in Japan, China, Taiwan, and South Korea are an important contribution to Hawaii's economy. However, as of this writing, comprehensive data was not available and the effects of education-related travel is an area for future research. Furthermore, this report did not cover exchange students in Hawaii's public schools under the Hawaii Department of Education.

Hawaii's educational institutions hosted a diverse group of students from all over the globe, with an estimated 14,300 international students. In addition to their annual expenditures, international students are the leaders of tomorrow that will bridge Hawaii with the global economy.

APPENDIX I: 2019 Hawaii International Education Survey
(calendar year 2018 data)

International Education Online Survey

Department of Business, Economic Development & Tourism

1. CONTACT INFORMATION

Name

Institution

Address

City/Town

Zip Code/Postal Code

Email Address

Phone Number

2 through 4. ENROLLMENT

Please choose the most applicable category or categories, then provide the number of enrollment:

	Spring 2018	Summer 2018	Fall 2018
Total enrollment			
INTERNATIONAL Students			
Middle/high school students			
Degree-seeking undergraduate students			
Non-degree-seeking undergraduate students			
Degree-seeking graduate students			
Non-degree-seeking graduate students			

5 & 6. Please indicate the international student enrollment numbers for the total calendar year of 2018 (combined spring, summer, fall) by each of the following categories. Please indicate the average program length in days for calendar year 2018 for each of the following categories (if there were multiple programs, please report the average number of days for each respective program category). If you need to clarify your answers, you may do so in Question 21.

	Number of enrollment	Length of Program (days)
Short-term training program students/professionals		
Students in summer/winter camps		
Visiting scholars/trainees		

7. Please indicate the number of family members accompanying international students/trainees (via invitation letter from your institution). _____

8 through 11. TUITION AND FEES: Please indicate the cost of tuition and fees for the following categories of international students & scholars (Spring, Summer, Fall for long-term; calendar year for short-term programs). Please specify the time period (e.g. per week, per month, per x-week term, per year).

	Cost of tuition & fees
Middle/high school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
Short-term training program students/professionals	
Students in summer/winter camps	
Visiting scholars/teachers	

12 through 15. COST OF LIVING: Please indicate the cost of living for the following categories of international students & scholars (Spring, Summer, Fall for long-term; calendar year for short-term programs). Please specify the time period (e.g. per week, per month, per x-week term, per year).

	Cost of living
Middle/high school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
Short-term training program students/professionals	
Students in summer/winter camps	
Visiting scholars/teachers	

16. FINANCIAL ASSISTANCE: For calendar year 2018 (January through December), please indicate the lump sum amount of financial assistance through tuition waivers, scholarships, and any other financial assistance to INTERNATIONAL students/scholars in US dollars (i.e. add up all the financial support given to students in that category and report the amount).

	Dollar amount
Middle/high school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
Short-term training program students/professionals	
Students in summer/winter camps	
Visiting scholars/teachers	

17 through 19. PLACE OF ORIGIN (for Spring, Summer, Fall)

Number of students

American Samoa
Argentina
Australia
Belgium
Brazil
Cambodia
Canada
Chile
China, PRC
China, Hong Kong
China, Macao
Colombia
Costa Rica
Czech Republic
Denmark
Ecuador
Egypt
Fiji
Finland
France
French Polynesia
Germany
Greece
Hungary
India
Indonesia
Iraq
Ireland
Israel
Italy
Japan
Jordan
Kazakhstan
Kenya
Kiribati
South Korea
Laos
Lebanon
Lithuania
Malaysia
Marshall Islands
Mexico
Micronesia
Mongolia
Morocco
Nepal
Netherlands
New Zealand

- Nicaragua
- Norway
- Pakistan
- Palau
- Peru
- Philippines
- Poland
- Portugal
- Romania
- Russia
- Saudi Arabia
- Singapore
- Slovakia
- South Africa
- Spain
- Sri Lanka
- Sweden
- Switzerland
- Taiwan
- Thailand
- Tonga
- Turkey
- Ukraine
- United Kingdom
- Uruguay
- Venezuela
- Vietnam
- Western Samoa
- Other (Please Specify)

APPENDIX II: 2019 Hawaii International Education Survey (calendar year 2018 data). List of the Educational Institutions Surveyed

The list is based on the US Department of Homeland Security's (DHS) database called SEVIS (Student and Exchange Visitor Information System):

Flight Schools		
1. Mauna Loa Helicopters	Flight School	73-310 Uu Street Kailua-Kona, HI, 96740
2. George's Aviation Services	Flight School	18 Lagoon Drive Honolulu, HI, 96819
3. Barbers Point Flight School	Flight School	91-1259 Midway Road Hangar 110 Kapolei, HI, 96707
Language Schools		
4. Academia Language School	Language School	1600 Kapiolani Blvd. Suite 1215 Honolulu, HI, 96814
5. EF International Language Schools, Inc.	Language Schools	EF International Language Schools, Inc. Honolulu, HI, 96815
6. ELS Language Centers/Honolulu	Language Schools	Hawaii Pacific University Honolulu, HI, 96813
7. Institute of Intensive English, Ltd.	Language School	2155 Kalakaua Avenue, Suite 700 Honolulu, HI, 96815
8. Intercultural Communications College	Language Schools	810 Richards Street Honolulu, HI, 96813
9. Hawaii English Language Program	Language School	1395 Lower Campus Road, MC 13-1 Honolulu, HI, 96822
10. Global Village Hawaii	Language Schools	1440 Kapiolani Blvd. Honolulu, HI, 96814
11. Maui Language Institute	Language School	310 W Kaahumanu Avenue Kahului, HI 96732
Massage/Beauty/Cosmetology/Alternative Medicine		
12. Hawaii Massage Academy	Massage School	1750 Kalakaua Avenue Suite 3004 Honolulu, HI, 96826
13. Institute of Clinical Acupuncture and Oriental Medicine	Alternative Medicine	100 N Beretania Street, Suite 203 B Honolulu, HI, 96817
14. Makana Esthetics Wellness Academy	Beauty School	560 N Nimitz Hwy Ste 125D Honolulu, HI, 96817
15. Med-Assist School of Hawaii	Alternative Medicine	345 Queen Street Honolulu, HI, 96813
Primary/Secondary Schools		
16. Asia Pacific International School	Secondary School	54-230 Kamehameha Hwy Hauula, HI, 96717
17. Haleakala Waldorf School	Secondary School	4160 Lower Kula Road Kula, HI, 96790
18. Hanalani Schools	Secondary School	Admissions Office Mililani, HI, 96789

19. Hawaii Baptist Academy	Secondary School	2429 Pali Highway Honolulu, HI, 96817
20. Hawaii Preparatory Academy	Primary/Secondary School	65-1692 Kohala Mountain Road Kamuela, HI, 96743
21. Hawaiian Mission Academy	Primary/Secondary School	1415 Makiki Street Honolulu, HI, 96814
22. Hongwanji Mission School	Secondary School	1728 Pali Highway Honolulu, HI, 96813
23. Honolulu Waldorf School	Primary/Secondary School	350 Ulua Street Honolulu, HI, 96821
24. Iolani School	Secondary School	563 Kamoku Street Honolulu, HI, 96826
25. Island Pacific Academy – Upper School	Secondary School	909 Haumea Street Kapolei, HI, 96707
26. Island School	Secondary School	3-1875 Kaumualii Hwy Lihue, HI, 96766
27. Kaimuki Christian School	Secondary School	1117 Koko Head Avenue Honolulu, HI
28. La Pietra Hawaii School for Girls	Secondary School	2933 Poni Moi Road Honolulu, HI, 96815
29. Makua Lani Christian Academy	Secondary School	74-4966 Kealakaa Street Kailua-Kona, HI, 96740
30. Maryknoll School	Secondary School	1526 Alexander Street Honolulu, HI, 96822
31. Maui Preparatory Academy	Secondary School	4910 Honoapiilani Highway Lahaina, HI, 96761
32. Le Jardin Academy	Secondary School	917 Kalanianaʻole Highway Kailua, HI, 96734
33. Punahou School	Primary/Secondary School	1601 Punahou Street Honolulu, HI, 96822
34. Sacred Hearts Academy	Secondary School	3253 Waialae Avenue Honolulu, HI, 96816
35. Saint Francis School	Secondary School	2707 Pamoia Road Honolulu, HI, 96822
36. Saint Louis School	Secondary School	3142 Waialae Avenue Honolulu, HI, 96816
37. Seabury Hall	Secondary School	480 Olinda Road Makawao, HI, 96768
38. St. Joseph School of Hilo	Secondary School	1000 Ululani Street Hilo, HI, 96720
39. Star of the Sea	Primary/Secondary School	4469 Malia Street Honolulu, HI, 96821
40. The St. Andrew's Schools	Secondary School	224 Queen Emma Square Honolulu, HI, 96813
41. Trinity Christian School	Secondary School	1110 A Kailua Road Kailua, HI, 96734
42. Mid-Pacific Institute	Primary/Secondary School	2445 Kaala Street Honolulu, HI, 96822

Post-secondary Institutions – University/College		
43. Brigham Young University-Hawaii	University/College	55-220 Kulanui Street Laie, HI, 96762
44. Central Pacific College	University/College	1833 Kalakaua Avenue Suite 510 Honolulu, HI, 96815
45. Chaminade University of Honolulu	University/College	3140 Waiialae Avenue Honolulu, HI, 96816
46. Hawaii Pacific University	University/College	1164 Bishop Street Honolulu, HI, 96813
47. Hawaii Tokai International College	University/College	91-971 Farrington Highway Kapolei, HI, 96707
48. International Mid Pac College	University/College	1311 Kapiolani Blvd. 200-5 Honolulu, HI, 96814
49. University of the Nations, Kona	University/College	75-5851 Kuakini Highway Kailua-Kona, HI, 96740
50. Wayland Baptist University – HI	University/College	95-1091 Ainamakua Drive Mililani, HI, 96789
University of Hawaii System		
51. Hawaii Community College	University/College	200 W. Kawili Street Hilo, HI, 96720
52. UH Center at West Hawaii	University/College	81-964 Halekii Street Kealahou, HI, 96750
53. Kapiolani Community College	University/College	4303 Diamond Head Road Honolulu, HI, 96816
54. Kauai Community College - University of Hawaii	University/College	Kauai Community College - University of Hawaii Lihue, HI, 96766
55. Leeward Community College	University/College	96-045 Ala Ike Pearl City, HI, 96782
56. University of Hawaii--West Oahu	University/College	91-1001 Farrington Highway Kapolei, HI, 96707
57. Honolulu Community College	University/College	874 Dillingham Blvd. Honolulu, HI, 96817
58. University of Hawaii at Hilo	University/College	University of Hawaii at Hilo Hilo, HI, 96720
59. University of Hawaii at Manoa	University/College	University of Hawaii at Manoa, OVCAA/OIEP/ISS Honolulu, HI, 96822
60. University of Hawaii at Manoa - Outreach College-UHM	University/College	Outreach College Honolulu, HI, 96822
61. University of Hawaii Maui College	University/College	University of Hawaii Maui College Kahului, HI, 96732
62. Windward Community College	University/College	45-720 Kealahala Road Kaneohe, HI, 96744
63. University of Hawaii Shidler College of Business	Business School	2404 Maile Way Honolulu, HI, 96822
64. University of Hawaii William S. Richardson School of Law	Law School	2515 Dole Street Honolulu, HI, 96822

65. University of Hawaii John A. Burns School of Medicine	Medical School	651 Ilalo Street Honolulu, HI, 96813
Educational Exchange Programs		
66. Japan-America Institute of Management Science (JAAMS)	Educational Exchange	JAAMS 6660 Hawaii Kai Drive Honolulu, HI, 96825
67. Travel Institute of the Pacific	Educational Exchange	1314 South King Street, Suite 1164 Honolulu, HI, 96814

APPENDIX III: Total Economic Impact of International Students within the University of Hawaii System on the State's Economy

1. **Direct Economic Impact.** Table AIII.1 presents a summary of the direct impact of University of Hawaii's international students to the state's economy. It is based on international student expenditures for tuition/fees and living expenses. The table includes the contributions of long-term and short-term students and is categorized by the type of program. Caution should be used when comparing this year's survey with previous years due to differing methodology.

Table AIII.1: Direct Economic Impact of International Students for the University of Hawaii System, 2018

Category of International Students	Number of Students	Spending by International Students:		Total
		Tuition & Fees	Living Expenses	
<i>Long-Term Students</i>	1,756	\$33,590,494	\$30,419,177	\$64,009,671
Middle/high school students	27	\$51,318	\$71,354	\$122,672
Degree-seeking undergraduate students	1,146	\$19,334,115	\$19,818,644	\$39,152,759
Degree-seeking graduate students	583	\$14,205,061	\$10,529,179	\$24,734,240
<i>Short-Term Students</i>	3,159	\$10,576,739	\$16,994,064	\$27,570,802
Non-degree seeking undergraduate students	736	\$6,658,897	\$6,554,568	\$13,213,464
Non-degree seeking graduate students	15	\$352,372	\$256,600	\$608,972
Short-term training program students/professionals	1,790	\$3,345,470	\$4,404,313	\$7,749,783
Students in summer/winter camps	200	\$220,000	\$240,000	\$460,000
Visiting scholars/teachers	418	\$0	\$5,538,583	\$5,538,583
Total*	4,915	\$44,167,233	\$47,413,241	\$91,580,473

Source: DBEDT, 2019 Hawaii IES

*category sums vary slightly from totals due to rounding

The above figures are aggregated from the following University of Hawaii related institutions: Hawaii Community College, Honolulu Community College, Kapiolani Community College, Kauai Community College, Leeward Community College, Maui Language Institute at Maui College, UH-HELP, UH-Hilo, UH-Manoa, UH-Outreach, UH-West Oahu, John A. Burns School of Medicine, Shidler College of Business, and William S. Richardson School of Law.

2. Total Economic Impact and Number of Jobs Supported. The total economic impact for the state included both the direct, indirect and induced impacts. The multipliers used for this calculation are taken from *The Hawaii State Input-Output Study: 2012 Benchmark Report* (August 2016). Type II final demand multipliers were used, which include direct, indirect, and induced effects.

Tables AIII.2 summarizes the results and shows the economic impact of international students studying at various campuses across the University of Hawaii System. The ***total output generated*** is an estimate of the total dollar change in output in all industries in the state, resulting from international student expenditures (living expenses and tuition/fees) attending the University of Hawaii. For calendar year 2018, the total output generated by international students for the University of Hawaii System was estimated at \$188.7 million (Type II multiplier).

Table AIII.2: Economic Impact of International Students within the University of Hawaii System on the State’s Economy

	Final Demand Multiplier (Type II)	Economic Impact (Type II)
Total Output Generated	2.06	\$188,655,774
Total Household Income Generated	0.91	\$83,338,230
Total State Taxes Generated	0.158	\$14,469,714
Total Number of Jobs (2018)	21.1 (per \$million)	1,932

Source: DBEDT, calculations are based on the Hawaii State Input-Output Study: 2012 Benchmark Report (August 2016)

Total household income generated refers to the estimated household earnings that can be attributed to international students studying within the University of Hawaii system. Hawaii households earned an estimated \$83.3 million generated from University of Hawaii’s international students for calendar year 2018.

The ***total state taxes generated*** line shows the estimated tax revenue that can be attributed to international students studying within the University of Hawaii system. An estimated \$14.5 million in state taxes was generated by University of Hawaii’s international student spending for calendar year 2018.

The last line of the table shows the ***total number of jobs supported*** by international students studying within the University of Hawaii system. Given an estimated direct economic impact of \$91.6 million for calendar year 2018, 1,932 jobs were supported. As noted above, these estimates are based on the Type II multiplier, which includes direct, indirect, and induced effects.