

# The Economic Impact of International Students in Hawaii – Calendar Year 2022





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

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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 authored by Joseph Roos, Ph.D. under the direction of the Economic Research Administrator Eugene Tian, Ph.D. Edits by Laura Viso, Senior Economist and Karl Ekroth, Economist.

#### **EXECUTIVE SUMMARY**

The 2023 Hawaii International Education Survey (IES) collected data for the calendar year of 2022 regarding the number of international students, the program length, expenditure amounts, and the estimated contribution to the state's economy. This year's results show a significant increase over the previous year for both student numbers and student expenditures. The report also examined the countries of origin for international students and their relative rankings for student numbers. The top three countries were Japan (24.8 percent), South Korea (9.1 percent), and Switzerland (8.3 percent). This report is an update of previous reports published in various years between 2009 and 2023.

This year 44 institutions responded, with 9 indicating that they did not have any international students for calendar year 2022. The total number of students reported by the respondents was 7,682 students, with long-term programs at 3,666 students and short-term programs at 4,016 students. In 2022, long-term students recovered to pre-pandemic levels, slightly exceeding the 2019 student number. On the other hand, short-term programs such as English language study, continue to recover with only 40 percent of the 2019 student number.

For calendar year 2022, the direct spending of international students in the State of Hawaii was an estimated \$189.4 million. This amount included tuition and fees plus living expenses. Based on this direct impact, the total economic impacts of international student expenditures for calendar year 2022 were as follows:

- \$373.2 million in economic output generated, including direct, indirect, and induced effects.
- \$26.3 million in state taxes generated.
- \$162.9 million in household income generated.
- 4,792 jobs supported by international student spending.

The average 2022 total spending per student was \$36,818 for long-term students and \$13,558 for short-term students, including living expenses and tuition with fees.

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 24.8 percent of the total. Japan was followed by South Korea with 9.1 percent, Switzerland with 8.3 China (including Hong Kong and Macao) with 7.3 percent, and the Philippines and Germany each with 5.3 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 that are not officially registered at a Hawaii based educational institution. For example, school excursions and other types of education-related travel from foreign countries.

#### I. INTRODUCTION

This report is based on the annual *Hawaii International Education Survey* (IES), which is a collaboration between the Study Hawaii Educational Consortium and the State of Hawaii's Department of Business, Economic Development, & Tourism (DBEDT). The survey provides an annual benchmark to estimate the economic impact and number of international students studying in Hawaii and is sent to schools in Hawaii that host international students. This year's report covers the calendar year of 2022, which includes the impacts of the COVID-19 pandemic.

As with previous surveys, the current 2023 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 2022 calendar year.
- The length of academic programs for international students.
- The tuition and fees paid by international students.
- The cost-of-living expenditures incurred by international students.
- The country of origin for international students studying in Hawaii.

The survey questionnaire is listed in Appendix I.

This report is divided into four sections; after the first section introduction, the second section examines the direct, indirect, and induced impacts of international student spending on Hawaii's economy and the results of the 2023 IES. The third section analyzes the results of the 2023 IES, including student spending, financial aid, and countries of origin. This section also provides a summary of results from previous surveys. The fourth section covers summaries and conclusions.

# II. 2022 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 2023 IES, conducted in the second quarter of 2022. 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 current survey was administered online. The sampling frame consisted of educational institutions located in Hawaii and was identified by the U.S. Department of Homeland Security's (DHS) database called SEVIS (Student and Exchange Visitor Information System). The questions in 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 2022. The educational institutions were also asked the level and type of study programs for international students (e.g., middle and high school students, undergraduate students, non-degree seeking students, etc.).

Responses were received from 44 educational institutions in Hawaii, for a response rate of 63.8 percent. Of the 44 institutions, 9 indicated that they did not have any international students for calendar year 2022. The institutions responding to the 2023 IES accounted for 7,682 international students for the 2022 calendar year, representing a majority of Hawaii's international students.

**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.

If an international student is telecommuting from out-of-state, the amount paid for rent, food, and other living expenses does not contribute to the state's economic impact. Therefore, the living expense amount was reduced by the estimated percentage of students that telecommuted from out-of-state as indicated in the surveys.

**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:

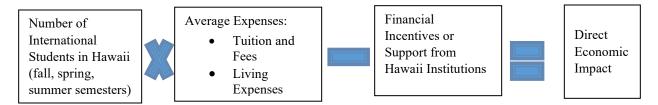


Table 1 presents a summary account of the different types of international students in Hawaii and the amount spent on tuition and fees plus living expenses. These categories show the direct economic impact of international student spending on the state's economy.

The long-term category included students enrolled full-time for at least one semester (spring, summer, or fall), and tuition and living expenses were calculated for each semester and summed to an annual total. In addition to university level, this category also included international students enrolled full-time at the middle and high school level. Long-term student numbers were calculated based on the highest enrollment semester of the calendar year. The number of long-term students was 3,666, which comprised about 48 percent of total international students reported in the survey results. These students generated \$135.0 million in direct spending, which accounted for 71 percent of the total spending.

The short-term category includes non-degree university students, training programs, camps, and visiting scholars. The number of short-term students was 4,016 or 52 percent of the total. These students generated \$54.4 million in direct spending, which comprised 29 percent of international student total spending for 2022.

Table 1: Direct Economic Impact of International Students in Hawaii for Calendar Year 2022

			International ents on	
Category	Number of Students	Tuition & Fees	Living Expenses*	Total
<b>Long-Term Students</b>	3,666	\$63,454,091	\$71,519,912	\$134,974,002
Middle/high school students	378	\$5,895,390	\$5,483,065	\$11,378,454
Degree-seeking undergraduate students	2,611	\$35,781,153	\$53,882,795	\$89,663,948
Degree-seeking graduate students	677	\$21,777,548	\$12,154,052	\$33,931,600
<b>Short-Term Students</b>	4,016	\$20,565,373	\$33,883,313	\$54,448,686
Non-degree-seeking undergraduate students	1,549	\$12,642,436	\$11,080,383	\$23,722,819
Non-degree-seeking graduate students	81	\$1,158,728	\$903,538	\$2,055,265
Short-term training program students/professionals	1,799	\$5,973,255	\$8,148,718	\$14,121,973
Students in summer/winter camps	402	\$797,954	\$766,717	\$1,564,671
Visiting scholars/teachers	185	\$0	\$12,983,957	\$12,983,957
Total	7,682	\$84,019,463	\$105,403,225	\$189,422,688

Source: DBEDT, 2023 IES

**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:* 2017 Benchmark Report.<sup>1</sup> Type II final demand multipliers were used, which include direct, indirect, and induced effects.

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 2022:

Direct Economic Impact



Derived Multipliers for the Industry (Colleges, Universities, and Professional Schools)



- -- Total Economic Output
- -- Total Household Income
- -- State Tax Impact
- -- Number of Jobs Supported

<sup>\*</sup>Living expenses are calculated based on the estimated percentage of international students who were living in-state.

<sup>&</sup>lt;sup>1</sup> DBEDT, 2022. The Hawaii State Input-Output Study: 2017 Benchmark Report. March.

Table 2 summarizes the economic impact of international students studying in Hawaii by the following categories:

**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 2022 was an estimated \$373.2 million.

**Total household income generated** is an estimate of household earnings that can be attributed to international students studying in the state. Hawaii households earned an estimated total of \$162.9 million generated from international students for calendar year 2022.

**Total state taxes generated** is an estimate of state tax revenue that can be attributed to international students studying in Hawaii. An estimated \$26.3 million in state taxes was generated by international student spending in the state for calendar year 2022.

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 \$189.4 million for calendar year 2022, 4,792 jobs were supported. As noted above, these estimates are based on the Type II multiplier, which includes direct, indirect, and induced effects.

Table 2: Total Economic Impact of International Students in Hawaii, 2022

Direct Spending (from Table 1)		\$189,422,688
	Final Demand Multiplier (Type II)	Economic Impact (Type II)
<b>Total Output Generated</b>	1.97	\$373,162,695
<b>Total Household Income Generated</b>	0.86	\$162,903,512
<b>Total State Taxes Generated</b>	0.139	\$26,329,754
Total Jobs Supported	25.3 (per \$million)	4,792

Source: DBEDT, 2022. Hawaii State Input-Output Study: 2017 Benchmark Report. March.

#### III. 2022 INTERNATIONAL EDUCATION SURVEY ANALYSIS

### **Data Comparisons**

Figure 1 below highlights the results of the 2023 IES by the program length and compares these with the two previous survey results. The results show a higher percentage of students enrolled in short-term programs compared with long-term programs, comprising 48 percent and 52 percent respectively. This shows a return to the pre-pandemic pattern, with a majority of Hawaii's international students enrolled in non-degree-short-term programs, composed mostly of English language schools. During the peak pandemic years of 2020 and 2021, long-term students exceeded short-term students because universities were able to pivot to online classes, thus retaining a majority of their international students. On the other hand, short-term programs such as English language schools, were less successful at pivoting to online classes during the pandemic and students were hesitant to enroll for in-person classes during the 2020 through 2021 period.

2020
(2021 IES)

Short-Term
Students
36%

Long-Term
Students
41%

Long-Term
Students
59%

Short-Term
Students
59%

Long-Term
Students
52%

Long-Term
Students
48%

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. In addition to bringing in more revenue for educational institutions, long-term students have a stronger ripple effect as they pay rent, buy groceries, and spend on other items for a longer period-of-time than short-term students.

As shown in Table 3, the direct impact of long-term students on the local economy was \$135.0 million and the short-term student impact was \$54.4 million for calendar year 2022. While the dollar impact was less, short-term programs are an important part of Hawaii's international education ecosystem, because they serve as a bridge for students to transition into long-term degree programs.

**Spending per student**. The overall average annual spending per student for calendar year 2022 was \$24,658, including both long-term and short-term students. As shown in table 3, the average annual spending for long-term students was \$36,818 (\$19,509 for living expenses and \$17,309 for tuition/fees) and short-term students was \$13,558 (\$8,437 for living expenses and \$5,121 for tuition/fees).

Table 3. Spending by International Students in Hawaii by Program Length for 2022 Calendar Year

Category	Long-Term Programs	Short-Term Programs
Number of Students	3,666	4,016
Total Spending (\$)	\$134,974,002	\$54,448,686
Living Expenses (\$)*	\$71,519,912	\$33,883,313
Tuition and Fees (\$)	\$63,454,091	\$20,565,373
Average Annual Spending Per Student (\$)	\$36,818	\$13,558

Source: DBEDT, 2023 IES

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. The impacts of the COVID-19 pandemic are reflected in calendar years 2020 and 2021. As Hawaii emerged from the pandemic in 2022, the direct spending of international students increased by 79 percent over the previous year, which in turn increased earnings, tax revenues, and employment.

Table 4. Summary of Economic Impacts: 2020, 2021, and 2022

	2020 (2021 IES)	2021 (2022 IES)	2022 (2023 IES)
Total Direct Spending	\$113,180,070	\$105,839,154	\$189,422,688
Output Multiplier	1.97	1.97	1.97
Earnings Multiplier	0.86	0.86	0.86
State Tax Multiplier	0.139	0.139	0.139
Employment Multiplier (jobs per \$m)	26.6	25.9	25.3
Total Output Generated	\$222,964,738	\$208,503,133	\$373,162,695
Total Income Generated	\$97,334,860	\$91,021,672	\$162,903,512
<b>Total State Taxes Generated</b>	\$15,732,030	\$14,711,642	\$26,329,754
Total Jobs Supported	3,011	2,741	4,792

Source: DBEDT, 2022. Hawaii State Input-Output Study: 2017 Benchmark Report. March.

In 2022, a majority of students who attended classes remotely from outside of the state in 2021 returned and this increased the related expenditures. For long-term students, the school year average of students attending classes remotely from outside of the state declined from 41.4 percent in 2021 to 1.9 percent in

<sup>\*</sup>Living expenses are calculated based on the estimated percentage of international students who were living in-state.

2022. For short-term students, the school year average of students attending classes remotely from outside the state declined from 21.9 percent in 2021 to 5.0 percent in 2022.

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 estimate for international students was \$7,063,452, which was 26.5 percent above the \$5,583,370 amount for the previous year. 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.

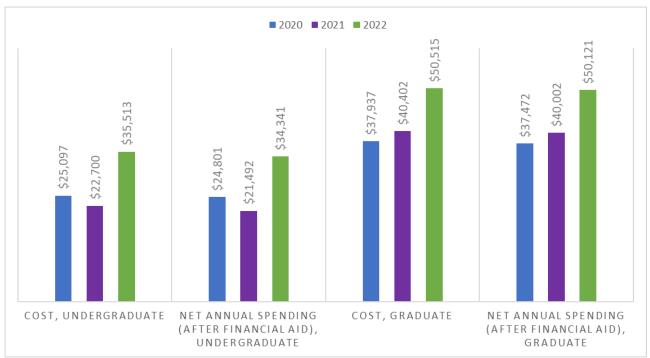
At the *undergraduate level* for calendar year 2022, the average annual expense for tuition and cost of living for a degree-seeking international student in Hawaii was \$34,341. This amount was after the average annual financial assistance was subtracted, which reduced the total cost per student by approximately \$1,172 annually. The average tuition amount included community colleges, which generally had lower tuition than the four-year universities. Figure 2 also shows that the average annual spending for international undergraduate students increased in 2022. If students were out-of-state during the 2020 to 2021 period, they did not have housing costs within the state, and this reduced total housing costs for 2020 and 2021. As students returned to the state in 2022 and moved into housing, this increased the housing spending portion of total expenses.

At the *graduate level* for calendar year 2022, the average annual expense for tuition and cost of living for a degree-seeking graduate in Hawaii was \$50,121. This amount was after the financial assistance was subtracted, which reduced the total cost per student by approximately \$395 annually (this does not include RA/TA assistance).

At the *middle and high school* level for calendar year 2022, the average annual expense for tuition and cost of living was \$30,102 per year after financial assistance was subtracted. The financial aid in this category averaged \$1,581 annually per student.

In addition to promoting Hawaii as an educational destination, increasing financial aid for international students could help the state attract and retain quality students from all over the globe.

Figure 2. Impact of Financial Aid for International University Students



Source: DBEDT: respective years of IES

### Countries of Origin for Hawaii's International Students

Table 5 lists the top countries of origin for Hawaii's international students in 2022. Japan remained the top country of origin in 2022, comprising 24.8 percent of the total. Japan was followed by South Korea with 9.1 percent, Switzerland with 8.3 percent, China (including Hong Kong and Macao) with 7.3 percent, and the Philippines and Germany tied at 5.3 percent.

Table 5. Places of Origin of International Students in Hawaii in 2022

Rank	Country/Place	No. of Students	% of Total
1	Japan	1,494	24.8%
2	South Korea	552	9.1%
3	Switzerland	502	8.3%
4	China (PRC, HK, Macao)	438	7.3%
*5	Philippines	321	5.3%
*5	Germany	321	5.3%
6	Canada	198	3.3%
7	Norway	169	2.8%
8	Taiwan	144	2.4%
9	Tonga	123	2.0%
10	Fiji	93	1.5%
11	India	81	1.3%
12	Mongolia	80	1.3%
13	France	79	1.3%
14	Australia	76	1.3%
15	Thailand	74	1.2%
16	New Zealand	65	1.1%
17	Western Samoa	57	0.9%
18	Brazil	54	0.9%
**19	Vietnam	53	0.9%
**19	Denmark	53	0.9%
20	Indonesia	52	0.9%
21	Malaysia	46	0.8%
22	French Polynesia	45	0.7%
23	Spain	44	0.7%
24	Sweden	38	0.6%
25	United Kingdom	34	0.6%

<sup>\*</sup>Germany and Philippines have equal values.

Source: DBEDT, 2023 IES

Compared to last year's rankings, the number one and number two rankings remained the same, with Japan in the top position followed by South Korea. Switzerland moved up one position to third, while China dropped from third to fourth. A notable increase in the rankings was India, which went from 23<sup>rd</sup>

<sup>\*\*</sup>Denmark and Vietnam have equal values.

in last year's survey to 11<sup>th</sup> in this year's survey. For the U.S. overall, India is ranked second behind China, and therefore has strong growth potential for Hawaii.<sup>2</sup>

#### IV. CONCLUSIONS

The data presented in this report were the results of the *2022 Hawaii International Education Survey*. DBEDT received responses from 44 of Hawaii's educational institutions with international students for a response rate of 63.8 percent. The total direct economic impact of international students for the 2022 calendar year was an estimated \$189.4 million, including tuition and fees plus living expenses. Of this, \$135.0 million was from long-term programs and \$54.4 million was from short-term programs. These estimates do not include contributions from foreign schools to Hawaii, such as school excursions and other education-related travel. As of this writing, comprehensive data was not available, and the effects of education-related travel is an area for future research.

In addition to the direct impact, other economic benefits of international students for the 2022 calendar year were:

- \$373.2 million in economic output generated, including direct, indirect, and induced effects.
- \$26.3 million in state taxes generated.
- \$162.9 million in household income generated.
- 4,792 jobs supported by international student spending.

The 2022 average annual spending per student for all programs was \$24,658, including tuition and fees plus living expenses. For each respective category, average annual spending for long-term students was \$36,818 and \$13,558 for short-term students.

This year's survey showed strong results over the previous year of 2021, with increases in both student numbers (7,682 versus 5,515) and total spending (\$184.4 million versus \$105.8 million). However, the results were mixed when comparing to the pre-pandemic year of 2019. While the number of long-term international students in Hawaii surpassed 2019 numbers (3,666 versus 3,278), the number of short-term students was still below 2019 numbers (7,682 versus 10,093). Nominally, international student spending for 2022 was above 2019 levels; however, adjusting for inflation, 2022 spending was approximately 10 percent below 2019 spending.

In summary, Hawaii's international students are an important part of Hawaii's economy, and it is expected their numbers will increase and further contribute to Hawaii's economy.

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<sup>&</sup>lt;sup>2</sup> Opendoors. 2023. International Student Data. https://opendoorsdata.org/data/international-students/

# APPENDIX I: 2022 Hawaii International Education Survey (actual survey instrument was online)

### **CONTACT INFORMATION**

* 1. Please fill in your co	ontact information
Name	
Institution	
Address	
Address 2	
City/Town	
ZIP/Postal Code	
Email Address	
Phone Number	





Yes				
No				
(if respond "no" s	urvey ends)			





## ENROLLMENT

3. Please enter the international student enrollment

Middle/High school students	
Degree-seeking undergraduate s	students
Non-degree-seeking undergradu	ate students
Degree-seeking graduate studer	nts
Non-degree-seeking graduate st	udents
during <b>Spring 2022</b> , pleas	
during <b>Spring 2022</b> , pleas percentages for each respe	e enter the estimated ective category below:
during <b>Spring 2022</b> , pleas	e enter the estimated ective category below:
during <b>Spring 2022</b> , pleas percentages for each respendent	e enter the estimated ective category below:
during <b>Spring 2022</b> , pleas percentages for each respe	te enter the estimated sective category below:
during <b>Spring 2022</b> , pleas percentages for each respe % of middle/high school students % of degree-seeking undergradu	e enter the estimated ective category below:

numbers by category for Sum	ner 2022	
Middle/High school students		
Degree-seeking undergraduate stude	ts	
Non-degree-seeking undergraduate	udents	
Degree-seeking graduate students		
Non-degree-seeking graduate studen	;	
6. If any students took online		
during Summer 2022, please		
percentages for each respective	category below:	
% of middle/high school students		
% of degree-seeking undergraduate		
% of non-degree-seeking undergradu	te	
% of degree-seeking graduate studer	5	
% of non-degree-seeking graduate st	dents	
3 33		

7. Please enter the international student enrollment
numbers by category for Fall 2022
Middle (I Balance) and a standards
Middle/High school students
Degree-seeking undergraduate students
Non-degree-seeking undergraduate students
Degree-seeking graduate students
Non-degree-seeking graduate students
8. If any students took online classes from out-of-state
during Fall 2022, please enter the estimated
percentages for each respective category below:
% of middle/high school students
// Of middle/might sorted stadents
% of degree-seeking undergraduate
% of non-degree-seeking undergraduate
% of degree-seeking graduate students
n or degree seeking graduate statemen
% of non-degree-seeking graduate students
9. Please indicate the international student enrollment numbers for the total calendar year of 2022 (combined
spring, summer, fall) by each of the following categories. Please note these short-term categories are different
from the previous questions (Q3 through Q8).
Students/professionals in short-term training programs
Summer/winter camps
Visiting scholars/teachers

espective category below:	
of students/professionals in training programs	
6 in summer/winter camps	
visiting scholars/teachers	
	ngth in days for calendar year 2022 for each of the following
	s, please report the average number of days for each respective your answers, you may do so in Question 21.
itudents/professionals in hort-term training	godi diiswois, you ilidy do so ili Quosion 211
rograms	
summer/winter camps	
siting scholars/teachers	
etters from your institution).	





### FINANCIAL SUMMARY FOR TUITION AND FEES

13. Please indicate the	e cost of tuition and fees per st	udent for Spring
2022 by the following ca	ategories of international studen	s. Please specify time period (e.g. per week, per month, per x-
week term, per semeste	er, per year).	
Middle/High school students		
Degree-seeking undergraduate students		
Non-degree-seeking undergraduate students		
Degree-seeking graduate students		
Non-degree-seeking graduate students		
14. Please indicate the	e cost of tuition and fees per st	udent for Summer
	-	udent for <b>Summer</b> s. Please specify time period (e.g. per week, per month, per x-
	ategories of international studen	
2022 by the following ca	ategories of international studen	
2022 by the following ca week term, per semeste Middle/High school	ategories of international studen	
2022 by the following ca week term, per semester Middle/High school students Degree-seeking	ategories of international studen	
2022 by the following ca week term, per semester Middle/High school students Degree-seeking undergraduate students Non-degree-seeking	ategories of international studen	
2022 by the following ca week term, per semester Middle/High school students  Degree-seeking undergraduate students  Non-degree-seeking undergraduate students  Degree-seeking graduate	ategories of international studen	

	e cost of tuition and fees per student for Fall
2022 by the following ca	ategories of international students. Please specify time period (e.g. per week, per month, per x-
week term, per semeste	r, per year).
Middle/High school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
	e cost of tuition and fees per student for calendar year 2022 by the following categories ats. Please specify time period (e.g. per day, per week, per month, per program, per year).
programs Summer/winter camps	
Visiting scholars/teachers	





### FINANCIAL SUMMARY FOR COST OF LIVING

17. Please indicate the	e cost of living per student for <b>Spring 2022</b> by the following categories of international
students. Please specif	fy time period (e.g. per week, per month, per x-week term, per semester, per year).
Middle/High school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
18. Please indicate the	e cost of living per student for Summer 2022 by the following categories of international
students. Please specif	fy time period (e.g. per week, per month, per x-week term, per semester, per year).
Middle/High school students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	

uuenis. Piease specif	y time period (e.g. per	week, per month	, per x-week term, p	er semester, per year	J·
liddle/High school audents					
egree-seeking ndergraduate students					
on-degree-seeking ndergraduate students					
egree-seeking graduate udents					
on-degree-seeking raduate students					
	cost of living per stud				
nternational students.	Please specify time po	eriod (e.g. per day	, per week, per mon	th, per program, per	year).
tudents/professionals in nort-term training rograms					
ummer/winter camps					
isiting scholars/teachers					





### FINANCIAL ASSISTANCE

21. For **calendar year 2022** (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 U.S. dollars (i.e. add up all the financial support given to students in that category and report the amount).

Middle/High school	
students	
Degree-seeking undergraduate students	
Non-degree-seeking undergraduate students	
Degree-seeking graduate students	
Non-degree-seeking graduate students	
Students/professionals in short-term training	
programs	
Summer/winter camps	
Visiting scholars/teachers	





### PLACE OF ORIGIN FOR 2022

22. Please indicate the number of international students from each country during **Spring**, **Summer**, and **Fall for 2022**.

American Samoa	
Argentina	
Australia	
Belgium	
Brazil	
Cambodia	
Canada	
Chile	
China, PRC	
China, Hong Kon	g
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	
Korea, South	
Laos	
Lebanon	
Lithuania	
Malaysia	
Marshall Islands	
Mexico	
Micronesia	
Mongolia	
Morocco	
Nepal	
Netherlands	
New Zealand	
Nicaragua	
Norway	

Γ	
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 (specify)	
l l	

# APPENDIX II: List of the Educational Institutions Surveyed *(calendar year 2022 data).*

Table All.1: The list is based on the U.S. Department of Homeland Security's (DHS) database called SEVIS (Student and Exchange Visitor Information System):

Flight Schools							
Mauna Loa Helicopters	Flight School	73-310 Uu Street Kailua-Kona, HI, 96740					
	Language Schools						
Academia Language School	Language School	1600 Kapiolani Blvd. Suite 1215 Honolulu, HI, 96814					
EF International Language Schools, Inc.	Language Schools	EF International Language Schools, Inc. Honolulu, HI, 96815					
Institute of Intensive English, Ltd.	Language School	2155 Kalakaua Avenue, Suite 700 Honolulu, HI, 96815					
Intercultural Communications College	Language Schools	810 Richards Street Honolulu, HI, 96813					
Hawaii English Language Program	Language School	1395 Lower Campus Road, MC 13-1 Honolulu, HI, 96822					
Global Village Hawaii	Language Schools	1440 Kapiolani Blvd. Honolulu, HI, 96814					
Maui Language Institute	Language School	310 W Kaahumanu Avenue Kahului, HI 96732					
Massage/Beau	ity/Cosmetology/A	Alternative Medicine					
Aisen Shiatsu Chiryo Doin	Massage School	1314 South King Street, Suite 601, Honolulu, HI 96814					
Hawaii Massage Academy	Massage School	1750 Kalakaua Avenue Suite 3004 Honolulu, HI, 96826					
Institute of Clinical Acupuncture and Oriental Medicine	Alternative Medicine	100 N Beretania Street, Suite 203 B Honolulu, HI, 96817					
Makana Esthetics Wellness Academy	Beauty School	560 N Nimitz Hwy Ste 125D Honolulu, HI, 96817					
Pi	rimary/Secondary	Schools					
American Renaissance Academy	Primary/Secondary School	300 Franklin Ave Kapolei, HI 96707					
Asia Pacific International School	Secondary School	54-230 Kamehameha Hwy Hauula, HI, 96717					
Haleakala Waldorf School	Secondary School	4160 Lower Kula Road Kula, HI, 96790					
Hanahauoli School	Primary School	1922 Makiki St, Honolulu, HI 96822					
Hanalani Schools	Secondary School	Admissions Office Mililani, HI, 96789					

Hawaii Baptist Academy	Secondary School	2429 Pali Highway Honolulu, HI, 96817
Hawaii Preparatory Academy	Primary/Secondary School	65-1692 Kohala Mountain Road Kamuela, HI, 96743
Hawaiian Mission	Primary/Secondary	1415 Makiki Street
Academy	School	Honolulu, HI, 96814
Hongwanji Mission School	Secondary School	1728 Pali Highway Honolulu, HI, 96813
Honolulu Waldorf School	Primary/Secondary	350 Ulua Street
	School	Honolulu, HI, 96821
Iolani School	Secondary School	563 Kamoku Street Honolulu, HI, 96826
Island Pacific Academy – Upper School	Secondary School	909 Haumea Street Kapolei, HI, 96707
Kaimuki Christian School	Secondary School	1117 Koko Head Avenue Honolulu, HI
Kohala High School	Secondary School	54-3611 Akoni Pule Hwy,
	2000110011	Kapaau, HI 96755
La Pietra Hawaii School for Girls	Secondary School	2933 Poni Moi Road Honolulu, HI, 96815
Makua Lani Christian	Secondary School	74-4966 Kealakaa Street
Academy		Kailua-Kona, HI, 96740
Maryknoll School	Secondary School	1526 Alexander Street Honolulu, HI, 96822
Maui Preparatory Academy	Secondary School	4910 Honoapiilani Highway Lahaina, HI, 96761
Le Jardin Academy	Secondary School	917 Kalanianaole Highway Kailua, HI, 96734
Parker School	Primary/Secondary	65-1224 Lindsey Rd
	School	Kamuela, HI 96743
Punahou School	Primary/Secondary	1601 Punahou Street
Saarad Haarts Acadomy	School	Honolulu, HI, 96822 3253 Waialae Avenue
Sacred Hearts Academy	Secondary School	Honolulu, HI, 96816
Saint Anthony	Primary/Secondary	148 Makawao Street
	School	Kailua, Hawaii 96734
Saint Louis School	Secondary School	3142 Waialae Avenue Honolulu, HI, 96816
Seabury Hall	Secondary School	480 Olinda Road
		Makawao, HI, 96768
St. Joseph School of Hilo	Secondary School	1000 Ululani Street Hilo, HI, 96720
The St. Andrew's Schools	Secondary School	224 Queen Emma Square Honolulu, HI, 96813
Trinity Christian School	Secondary School	1110 A Kailua Road Kailua, HI, 96734
Mid-Pacific Institute	Primary/Secondary	2445 Kaala Street
	School	Honolulu, HI, 96822

Post-secondary Institutions – University/College					
Brigham Young	University/College	55-220 Kulanui Street			
University-Hawaii		Laie, HI, 96762			
Central Pacific College	University/College	1833 Kalakaua Avenue Suite 510 Honolulu, HI, 96815			
Chaminade University of	University/College	3140 Waialae Avenue			
Honolulu		Honolulu, HI, 96816			
Hawaii Pacific University	University/College	1164 Bishop Street Honolulu, HI, 96813			
Hawaii Tokai	University/College	91-971 Farrington Highway			
International College		Kapolei, HI, 96707			
International Mid Pac	University/College	1311 Kapiolani Blvd. 200-5			
College		Honolulu, HI, 96814			
University of the Nations,	University/College	75-5851 Kuakini Highway			
Kona		Kailua-Kona, HI, 96740			
Wayland Baptist	University/College	95-1091 Ainamakua Drive			
University – HI		Mililani, HI, 96789			
	University of Hawaii	, •			
Hawaii Community	University/College	200 W. Kawili Street			
College		Hilo, HI, 96720			
UH Center at West Hawaii	University/College	81-964 Halekii Street Kealakekua, HI, 96750			
Kapiolani Community	University/College	4303 Diamond Head Road			
College		Honolulu, HI, 96816			
Kauai Community College	University/College	Kauai Community College - University of Hawaii Lihue, HI, 96766			
Leeward Community College	University/College	96-045 Ala Ike Pearl City, HI, 96782			
Honolulu Community College	University/College	874 Dillingham Blvd. Honolulu, HI, 96817			
University of Hawaii at Hilo	University/College	University of Hawaii at Hilo Hilo, HI, 96720			
University of Hawaii at	University/College	University of Hawaii at Manoa,			
Manoa		OVCAA/OIEP/ISS			
		Honolulu, HI, 96822			
University of Hawaii at	University/College	Outreach College			
Manoa - Outreach College	I In issue with a / C a 11 a	Honolulu, HI, 96822			
University of Hawaii Maui College	University/College	University of Hawaii Maui College Kahului, HI, 96732			
Windward Community	University/College	45-720 Keaahala Road			
College	omversity/Conege	Kaneohe, HI, 96744			
University of Hawaii	Law School	2515 Dole Street			
William S. Richardson	Law Sonooi	Honolulu, HI, 96822			
School of Law		,			
	cational Exchange	Programs			
	<u> </u>	9			
Japan-America Institute of	Educational	JAIMS 6660 Hawaii Kai Drive			
Management Science (JAIMS)	Exchange	Honolulu, HI, 96825			
(JAINIS)		1101101u1u, 111, 70023			

# 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. As noted earlier in the report, the living expense estimate was reduced based on the percentage of international students who were telecommuting from out-of-state.

Table AllI.1: Direct Economic Impact of International Students for the University of Hawaii System, 2022

Category of International Students	Number of Students	Spending by International Students:		Total
		Tuition & Fees	Living Expenses*	
Long-Term Students	1,594	\$41,023,050	\$30,822,288	\$71,845,338
Degree-seeking undergraduate students	988	\$20,466,878	\$19,607,819	\$40,074,697
Degree-seeking graduate students	606	\$20,556,172	\$11,214,469	\$31,770,641
Short-Term Students	1,479	\$6,049,591	\$17,274,296	\$23,323,887
Non-degree seeking undergraduate students	836	\$5,355,854	\$3,784,435	\$9,140,289
Non-degree seeking graduate students	11	\$265,202	\$143,954	\$409,156
Short-term training program students/professionals	399	\$380,535	\$553,950	\$934,485
Students in summer/winter camps	48	\$48,000	\$48,000	\$96,000
Visiting scholars/teachers	185	0	\$12,743,957	\$12,743,957
Total	3,073	\$47,072,641	\$48,096,584	\$95,169,225

Source: DBEDT, 2023 Hawaii IES

The above figures are aggregated from the following University of Hawaii related institutions: Hawaii Community College, Kapiolani Community College, Kauai Community College, Leeward Community College, Windward Community College, UH-Maui College, UH-HELP, UH-Hilo, UH-Manoa, UH-William S. Richardson School of Law, UH-Outreach College, and UH-West Oahu.

<sup>\*</sup>Living expenses are calculated based on the estimated percentage of international students who were living in-state.

**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: 2017 Benchmark Report* (March 2022). 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. Based on the direct output of \$95.2 million, the total output generated by international students for the University of Hawaii System was estimated at \$187.5 million (Type II multiplier) for calendar year 2022.

Table AllI.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)
<b>Total Output Generated</b>	1.97	\$187,483,373
<b>Total Household Income Generated</b>	0.86	\$81,845,534
<b>Total State Taxes Generated</b>	0.139	\$13,228,522
Total Jobs Supported (2022)	25.3 (per \$million)	2,408

Source: DBEDT, 2022. Hawaii State Input-Output Study: 2017 Benchmark Report. March.

**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 \$81.8 million generated from University of Hawaii's international students for calendar year 2022.

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 \$13.2 million in state taxes was generated by University of Hawaii's international student spending for calendar year 2022.

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 \$95.2 million for calendar year 2022, 2,408 jobs were supported. As noted above, these estimates are based on the Type II multiplier, which includes direct, indirect, and induced effects.