

# The Economic Impact of International Students in Hawaii – Calendar Year 2021



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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 produced by Joseph Roos, Ph.D. under the direction of the Economic Research Administrator Eugene Tian, Ph.D. Survey design was done by Naomi Akamine.

## EXECUTIVE SUMMARY

The *2022 Hawaii International Education Survey* (IES) collected data for the calendar year of 2021 regarding the number of international students, the program length and expenditure amounts of these students and estimated the contribution to the state's economy. The 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, 2018, 2019, and 2020.

The 2022 IES covered calendar year 2021 and reflected impacts associated with the COVID-19 pandemic. This year 39 institutions responded, with 8 indicating that they did not have any international students for calendar year 2021. The total number of students reported by the respondents was 5,515 students, with long-term programs at 3,230 and short-term programs at 2,285 students. In 2021, the number of long-term students had almost recovered to the 2019 pre-pandemic level, as universities and colleges were able to retain students by shifting to online learning. However short-term programs, such as English language study, continued to struggle with only 23 percent of the 2019 student numbers. It appears students were still hesitant to study abroad for short-term programs in 2021.

For calendar year 2021, the direct spending of international students in the State of Hawaii was an estimated \$105.8 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 2021 were as follows:

- \$208.5 million in economic output generated, including direct, indirect, and induced effects.
- \$14.7 million in state taxes generated.
- \$91.0 million in household income generated.
- 2,741 jobs were supported by international student spending.

The average 2021 total spending per student was \$25,833 for long-term students and \$9,802 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 29.0 percent of the total. Japan was followed by South Korea with 8.6 percent, China with 7.9 percent (including Hong Kong and Macao), Switzerland with 5.1 percent, and the Philippines with 4.8 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 institutions. 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 2021, which includes the impacts of the COVID-19 pandemic.

As with previous surveys, the current 2022 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 2021 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 the international students studying in Hawaii.

The survey questionnaire is listed in Appendix I.

This report is divided into four sections; after Section I Introduction, Section II examines the direct, indirect, and induced impacts of international student spending on Hawaii's economy and the results of the 2022 IES. Section III analyzes the results of the 2022 IES, such as specifics on student spending, financial aid, and countries of origin. This section also provides a summary of results from previous surveys. Finally, Section IV concludes by summarizing the survey results.

## **II. 2021 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 2022 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 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 2021. 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 39 educational institutions in Hawaii, for a response rate of 62.9 percent. Of the 39 institutions, 8 indicated that they did not have any international students for calendar year 2021. The institutions responding to the 2022 IES accounted for 5,515 international students for the 2021 calendar year, representing a majority of Hawaii’s international students.

This year a question was added requesting the percentage of students that telecommuted from out-of-state. The living expense amount was reduced by the estimated percentage of students that telecommuted from out-of-state as indicated by the survey respondents. For example, if an institution responded that 20 percent of international students telecommuted from out-of-state, the estimated living expense total was reduced by 20 percent. This methodology was used because, 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.

**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:

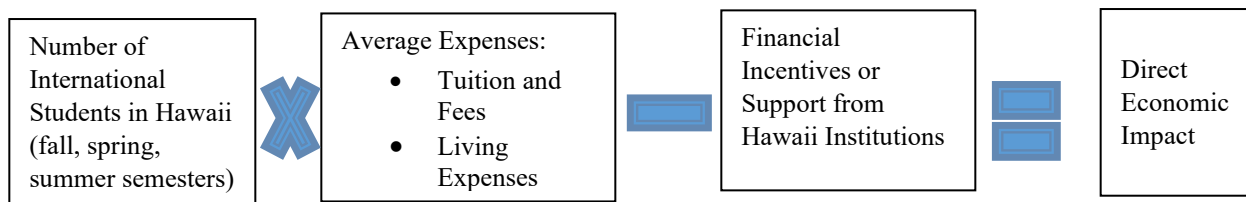


Table 1 presents a summary account of the different types of international students in Hawaii and the amount spent on tuition and fees plus living expenses. These categories show the direct economic impact of international student spending on the state’s economy.

In previous years, a majority of Hawaii’s international students were enrolled in non-degree-short-term programs, including English language schools, camps, and vocational programs. However, due to the impacts of the pandemic, the number of short-term international students was below long-term students at 2,285 or 41 percent of the total. These students generated \$22.4 million in direct spending, which comprised 21 percent of international student total spending for 2021.

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. The number of long-term students was 3,230, which comprised about 59 percent of total international students reported in the survey results. These students generated \$83.4 million in direct spending, which accounted for 79 percent of the total spending.

**Table 1: Direct Economic Impact of International Students in Hawaii for Calendar Year 2021**

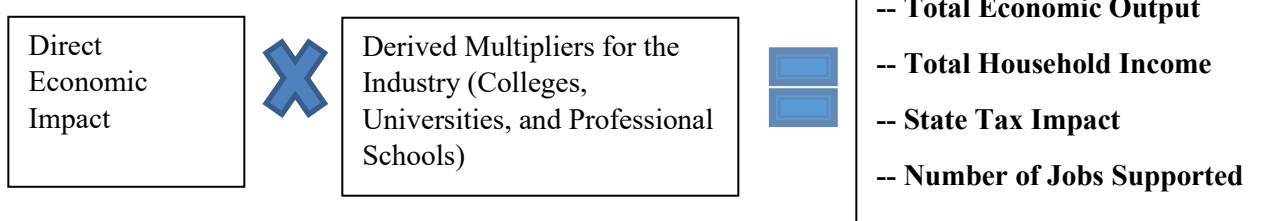
Category	Number of Students	Spending by International Students on		Total
		Tuition & Fees	Living Expenses*	
<b>Long-Term Students</b>	<b>3,230</b>	<b>\$51,406,515</b>	<b>\$32,034,364</b>	<b>\$83,440,879</b>
Middle/high school students	145	\$3,365,407	\$2,628,550	\$5,993,957
Degree-seeking undergraduate students	2,483	\$34,174,165	\$19,191,487	\$53,365,652
Degree-seeking graduate students	602	\$13,866,943	\$10,214,327	\$24,081,270
<b>Short-Term Students</b>	<b>2,285</b>	<b>\$6,850,828</b>	<b>\$15,547,447</b>	<b>\$22,398,275</b>
Non-degree-seeking undergraduate students	487	\$2,538,373	\$4,189,320	\$6,727,693
Non-degree-seeking graduate students	51	\$443,219	\$584,195	\$1,027,414
Short-term training program students/professionals	1,525	\$3,779,986	\$3,963,181	\$7,743,167
Students in summer/winter camps	79	\$89,250	\$107,800	\$197,050
Visiting scholars/teachers	143	\$0	\$6,702,952	\$6,702,952
<b>Total</b>	<b>5,515</b>	<b>\$58,257,343</b>	<b>\$47,581,811</b>	<b>\$105,839,154</b>

Source: DBEDT, 2022 IES

\*Living expense estimates only include the share of international students that were living in-state during 2021

**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: 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 2021:



<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:

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 2021 was an estimated \$208.5 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 \$91.0 million generated from international students for calendar year 2021.

The ***total state taxes generated*** line shows the estimated state tax revenue that can be attributed to international students studying in Hawaii. An estimated \$14.7 million in state taxes was generated by international student spending in the state for calendar year 2021.

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 \$105.8 million for calendar year 2021, **2,741 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, 2021**

Direct Spending (from Table 1)		\$105,839,154
	Final Demand Multiplier (Type II)	Economic Impact (Type II)
Total Output Generated	1.97	\$208,503,133
Total Household Income Generated	0.86	\$91,021,672
Total State Taxes Generated	0.139	\$14,711,642
Total Jobs Supported	25.9 (per \$million)	2,741

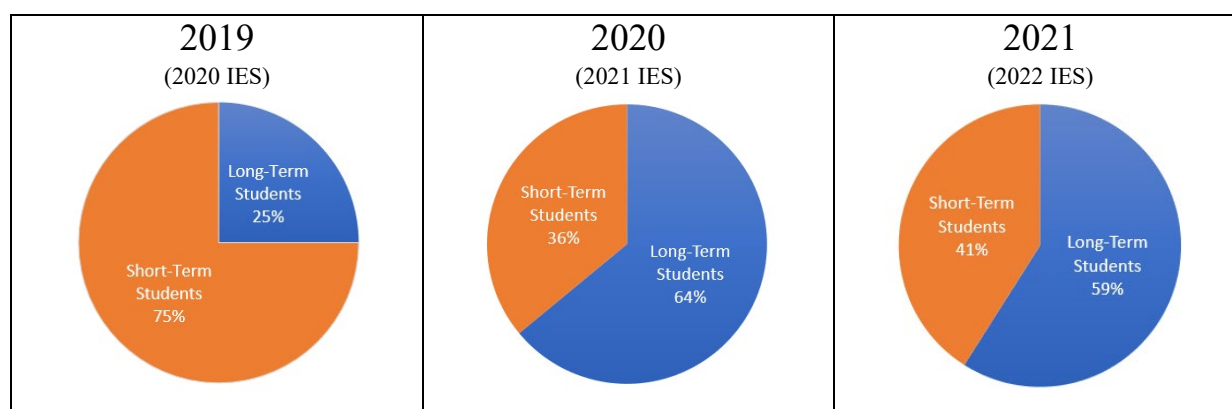
Source: DBEDT, calculations are based on the *Hawaii State Input-Output Study: 2017 Benchmark Report* (March 2022)

### III. RESULTS OF THE 2022 INTERNATIONAL EDUCATION SURVEY

#### **Data comparisons**

Figure 1 below highlights the results of the 2022 IES by the program length and compares these with the two previous survey results. The results show a higher percentage of students enrolled in long-term programs compared with short-term programs, with 59 percent and 41 percent respectively. This was a reverse from the pre-pandemic period that had a higher percentage of short-term students compared with long-term students. The data shows that long-term study programs were more resilient to the pandemic as universities were able to pivot to online learning and retain degree-seeking students. On the other hand, the analysis indicates that many short-term students opted to cancel or postpone their study rather than study abroad during the pandemic. Furthermore, as the pandemic continued, some institutions that focused on short-term programs were forced to close.

**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.<sup>2</sup> 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 \$83.4 million and the short-term student impact was \$22.4 million for calendar year 2021. 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.

<sup>2</sup>The Economic Impact of International Students in Hawaii, 2015 (DBEDT)

**Table 3. Spending by International Students in Hawaii by Program Length for 2021 Calendar Year**

Category	Long-Term Programs	Short-Term Programs
Number of Students	3,230	2,285
Total Spending (\$)	\$83,440,879	\$22,398,275
Living Expenses (\$)*	\$32,034,364	\$15,547,447
Tuition and Fees (\$)	\$51,406,515	\$6,850,828
Average Annual Spending Per Student (\$)	\$25,833	\$9,802

Source: DBEDT, 2022 IES

\*Living expenses only include the percentage of international students that were living in-state during 2021

**Spending per student.** The overall average annual spending per student for calendar year 2021 was \$19,191, including both long-term and short-term students. As shown in table 3, the average annual spending for long-term students was \$25,833 (\$9,918 for living expenses and \$15,915 for tuition/fees) and short-term students was \$9,802 (\$6,804 for living expenses and \$2,998 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: 2019, 2020, and 2021**

	2019 (2020 IES)	2020 (2021 IES)	2021 (2022 IES)
Total Direct Spending	\$185,026,598	\$113,180,070	105,839,154
Output Multiplier	2.06	1.97	1.97
Earnings Multiplier	0.91	0.86	0.86
State Tax Multiplier	0.158	0.139	0.139
Employment Multiplier (jobs per \$m)	20.3	26.6	25.9
Total Output Generated	\$381,154,792	\$222,964,738	208,503,133
Total Income Generated	\$168,374,204	\$97,334,860	91,021,672
Total State Taxes Generated	\$29,234,202	\$15,732,030	14,711,642
Total Jobs Supported	3,756	3,011	2,741

Source: DBEDT The Hawaii State Input-Output Study: 2017 Benchmark Report (2022); The Hawaii State Input-Output Study: 2012 Benchmark Report (2016) for 2019 and 2020 reports.

***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 2021 was \$5,583,370, which was above the \$1,688,294 estimate 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.

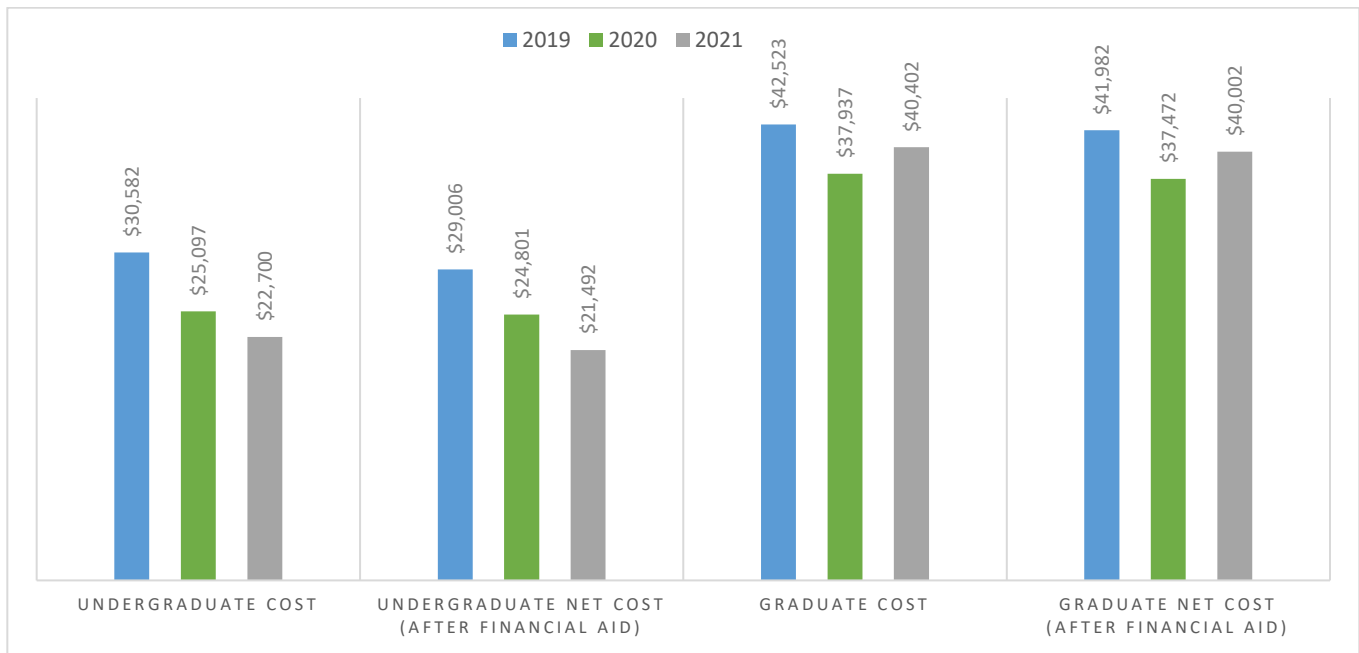
At the ***undergraduate level*** for calendar year 2021, the average annual expense for tuition and cost of living for a full-time international student in Hawaii was \$21,492. This amount was after the average annual financial assistance was subtracted, which reduced the total cost per student by approximately \$1,208 annually (Figure 2). 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 cost for international undergraduate students was substantially below the 2019 amount. This was due to the large number of undergraduate students telecommuting during the pandemic, which reduced the average cost of living amount.

At the ***graduate level*** for calendar year 2021, the average annual expense for tuition and cost of living for a full-time graduate or professional international student in Hawaii was \$40,002. This amount was after the financial assistance was subtracted, which reduced the total cost per student by approximately \$400 annually (this does not include RA/TA assistance).

At the ***middle and high school*** level for calendar year 2021, the average annual expense for tuition and cost of living was \$41,338 per year after financial assistance was subtracted. The financial aid in this category averaged \$778 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 University 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 of origin for Hawaii's international students in 2021. Japan remained the top country of origin in 2021, comprising 29.0 percent of the total. Japan was followed by South Korea with 8.6 percent, China (including Hong Kong and Macao) with 7.9 percent, Switzerland with 5.1 percent, and the Philippines with 4.8 percent.

**Table 5. Places of Origin of International Students in Hawaii in 2021**

Rank	Country/Place	No. of Students	% of Total
1	Japan	1,448	29.0%
2	South Korea	430	8.6%
3	China (PRC, HK, Macao)	392	7.9%
4	Switzerland	256	5.1%
5	Philippines	238	4.8%
6	Germany	231	4.6%
7	Canada	167	3.3%
8	Tonga	151	3.0%
9	Taiwan	112	2.2%
10	Norway	111	2.2%
11	Mongolia	86	1.7%
12	Western Samoa	80	1.6%
13	Denmark	69	1.4%
14	Fiji	60	1.2%
15	New Zealand	59	1.2%
16	Australia	57	1.1%
17	Thailand	57	1.1%
18	Brazil	54	1.1%
19	France	53	1.1%
20	Vietnam	51	1.0%
21	Indonesia	47	0.9%
22	French Polynesia	43	0.9%
23	India	43	0.9%
24	Malaysia	41	0.8%
25	Sweden	31	0.6%

Source: DBEDT, 2022 IES

Compared to last year's rankings, the top three positions remained the same and the Philippines dropped one position from fourth to fifth. Three European countries were in the top ten and all increased their rankings. Switzerland (5.1%) especially stood out by almost tripling the number students and climbing in the ranking from tenth last year to fourth this year. Germany (4.6%) increased from eighth to sixth place, and Norway (2.2%) increased from thirteenth to tenth in the ranking.

## IV. CONCLUSIONS

The data presented in this report were the results of the *2022 Hawaii International Education Survey*. DBEDT received responses from 39 of Hawaii's educational institutions with international students for a response rate of 62.9 percent. The total direct economic impact of international students for the 2021 calendar year was an estimated \$105.8 million, including tuition and fees plus living expenses. Of this, \$83.4 million was from long-term programs and \$22.4 million was from short-term programs.

In addition to the direct impact, other economic benefits of international students for the 2021 calendar year were:

- \$208.5 million added to the state's total economic output, including direct, indirect, and induced effects.
- \$14.7 million in state taxes was generated.
- \$91.0 million in household earnings can be attributed to international students.
- 2,741 jobs were supported by international student spending.

The 2021 average annual spending per student for all programs was \$19,191, including tuition and fees plus living expenses. For each respective category, average annual spending for long-term students was \$25,833 and \$9,802 for short-term students. As colleges and universities continued to offer online classes, many long-term students telecommuted from out-of-state. These students did not spend money for rent, food, and other expenses within the state. Therefore, the living expense portion of the direct impact was reduced by the proportion of international students that telecommuted from out-of-state due during calendar year 2021.

The economic impact estimates in this report 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 from abroad 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.

This year's survey results shed light on the impacts of the COVID-19 pandemic on Hawaii's international students. Short-term programs were substantially below pre-pandemic levels, while long-term programs held fairly steady from the previous year. In looking forward, the number of short-term international students is expected to recover, and Hawaii is well positioned to attract more international students in the future.

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

**CONTACT INFORMATION**

\* 1. Please fill in your contact information

**Name**

**Institution**

**Address**

**Address 2**

**City/Town**

**ZIP/Postal Code**

**Email Address**

**Phone Number**

2. Did you have any international students during the 2021 calendar year?

☐ Yes

☐ No

(if respond “no” survey ends)

## ENROLLMENT

3. Please enter the international student enrollment numbers by category for **Spring 2021**

Middle/High school students

Degree-seeking undergraduate students

Non-degree-seeking undergraduate students

Degree-seeking graduate students

Non-degree-seeking graduate students

4. If any students took online classes from out-of-state during **Spring 2021**, please enter the estimated percentages for each respective category below:

% of middle/high school students

% of degree-seeking undergraduate

% of non-degree-seeking undergraduate

% of degree-seeking graduate students

% of non-degree-seeking graduate students

5. Please enter the international student enrollment numbers by category for **Summer 2021**

Middle/High school students

Degree-seeking undergraduate students

Non-degree-seeking undergraduate students

Degree-seeking graduate students

Non-degree-seeking graduate students

6. If any students took online classes from out-of-state during **Summer 2021**, please enter the estimated percentages for each respective category below:

% of middle/high school students

% of degree-seeking undergraduate

% of non-degree-seeking undergraduate

% of degree-seeking graduate students

% of non-degree-seeking graduate students

7. Please enter the international student enrollment numbers by category for **Fall 2021**

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 2021**, please enter the estimated percentages for each respective category below:

% of middle/high school students

% of degree-seeking undergraduate

% of non-degree-seeking undergraduate

% of degree-seeking graduate students

% of non-degree-seeking graduate students

9. Please indicate the international student enrollment numbers for **the total calendar year of 2021** (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

10. If any students participated online from out-of-state, please enter the estimated percentages for each respective category below:

% of students/professionals in training programs

% in summer/winter camps

% visiting scholars/teachers

11. Please indicate the average program length in days for **calendar year 2021** 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.

Students/professionals in  
short-term training  
programs

Summer/winter camps

Visiting scholars/teachers

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

## FINANCIAL SUMMARY FOR TUITION AND FEES

13. Please indicate the cost of tuition and fees per student for **Spring**

**2021** by the following categories of international students. Please specify 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

14. Please indicate the cost of tuition and fees per student for **Summer**

**2021** by the following categories of international students. Please specify 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

15. Please indicate the cost of tuition and fees per student for **Fall**

**2021** by the following categories of international students. Please specify 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

16. Please indicate the cost of tuition and fees per student for **calendar year 2021** by the following categories of international students. Please specify time period (e.g. per day, per week, per month, per program, per year).

Students/professionals in  
short-term training  
programs

Summer/winter camps

Visiting scholars/teachers

## FINANCIAL SUMMARY FOR COST OF LIVING

17. Please indicate the cost of living per student for **Spring 2021** by the following categories of international students. Please specify 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 cost of living per student for **Summer 2021** by the following categories of international students. Please specify 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

19. Please indicate the cost of living per student for **Fall 2021** by the following categories of international students. Please specify 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

20. Please indicate the cost of living per student for **calendar year 2021** by the following categories of international students. Please specify time period (e.g. per day, per week, per month, per program, per year).

Students/professionals in  
short-term training  
programs

Summer/winter camps

Visiting scholars/teachers

## FINANCIAL ASSISTANCE

21. For **calendar year 2021** (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).

Middle/High school students	<input type="text"/>
Degree-seeking undergraduate students	<input type="text"/>
Non-degree-seeking undergraduate students	<input type="text"/>
Degree-seeking graduate students	<input type="text"/>
Non-degree-seeking graduate students	<input type="text"/>
Students/professionals in short-term training programs	<input type="text"/>
Summer/winter camps	<input type="text"/>
Visiting scholars/teachers	<input type="text"/>

## PLACE OF ORIGIN FOR 2021

22. Please indicate the number of international students from each country during **Spring, Summer, and Fall for 2021**.

American Samoa	<input type="text"/>
Argentina	<input type="text"/>
Australia	<input type="text"/>
Belgium	<input type="text"/>
Brazil	<input type="text"/>
Cambodia	<input type="text"/>
Canada	<input type="text"/>
Chile	<input type="text"/>
China, PRC	<input type="text"/>
China, Hong Kong	<input type="text"/>
China, Macao	<input type="text"/>
Colombia	<input type="text"/>
Costa Rica	<input type="text"/>
Czech Republic	<input type="text"/>
Denmark	<input type="text"/>
Ecuador	<input type="text"/>
Egypt	<input type="text"/>
Fiji	<input type="text"/>
Finland	<input type="text"/>
France	<input type="text"/>
French Polynesia	<input type="text"/>
Germany	<input type="text"/>

Greece	<input type="text"/>
Hungary	<input type="text"/>
India	<input type="text"/>
Indonesia	<input type="text"/>
Iraq	<input type="text"/>
Ireland	<input type="text"/>
Israel	<input type="text"/>
Italy	<input type="text"/>
Japan	<input type="text"/>
Jordan	<input type="text"/>
Kazakhstan	<input type="text"/>
Kenya	<input type="text"/>
Kiribati	<input type="text"/>
Korea, South	<input type="text"/>
Laos	<input type="text"/>
Lebanon	<input type="text"/>
Lithuania	<input type="text"/>
Malaysia	<input type="text"/>
Marshall Islands	<input type="text"/>
Mexico	<input type="text"/>
Micronesia	<input type="text"/>
Mongolia	<input type="text"/>
Morocco	<input type="text"/>
Nepal	<input type="text"/>
Netherlands	<input type="text"/>
New Zealand	<input type="text"/>
Nicaragua	<input type="text"/>
Norway	<input type="text"/>

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)

Other (specify)

**APPENDIX II: List of the Educational Institutions Surveyed (*calendar year 2021 data*).**

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

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

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

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

## 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 that were telecommuting from out-of-state.

**Table AIII.1: Direct Economic Impact of International Students for the University of Hawaii System, 2021**

Category of International Students	Number of Students	Spending by International Students:		Total
		Tuition & Fees	Living Expenses*	
<b><i>Long-Term Students</i></b>	<b>1,384</b>	<b>\$32,526,655</b>	<b>\$17,924,122</b>	<b>\$50,450,777</b>
Degree-seeking undergraduate students	827	19,524,243	8,642,951	28,167,194
Degree-seeking graduate students	557	13,002,412	9,281,171	22,283,583
<b><i>Short-Term Students</i></b>	<b>786</b>	<b>\$1,586,008</b>	<b>\$7,846,776</b>	<b>\$9,432,784</b>
Non-degree seeking undergraduate students	179	727,142	806,571	1,533,713
Non-degree seeking graduate students	4	75,504	50,275	125,779
Short-term training program students/professionals	435	774,262	258,978	1,033,240
Students in summer/winter camps	25	9,100	28,000	37,100
Visiting scholars/teachers	143	0	6,702,952	6,702,952
<b><i>Total</i></b>	<b>2,170</b>	<b>\$34,112,663</b>	<b>\$25,770,897</b>	<b>\$59,883,560</b>

Source: DBEDT, 2022 Hawaii IES

\*Living expense estimates are calculated based on the percentage of international students that were living in-state in 2021

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, and UH-West Oahu.

**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 \$59.9 million, the total output generated by international students for the University of Hawaii System was estimated at \$118.0 million (Type II multiplier) for calendar year 2021.

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

	<b>Final Demand Multiplier (Type II)</b>	<b>Economic Impact (Type II)</b>
<b>Total Output Generated</b>	1.97	<b>\$117,970,613</b>
<b>Total Household Income Generated</b>	0.86	<b>\$51,499,862</b>
<b>Total State Taxes Generated</b>	0.139	<b>\$8,323,815</b>
<b>Total Jobs Supported (2021)</b>	25.9 (per \$million)	<b>1,551</b>

Source: DBEDT, calculations are based on the Hawaii State Input-Output Study: 2017 Benchmark Report (March 2022)

***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 \$51.5 million generated from University of Hawaii's international students for calendar year 2021.

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 **\$8.3** million in state taxes was generated by University of Hawaii's international student spending for calendar year 2021.

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 \$59.9 million for calendar year 2021, 1,551 jobs were supported. As noted above, these estimates are based on the Type II multiplier, which includes direct, indirect, and induced effects.