The Contribution of the University of Hawai‘i at Mānoa to Hawai‘i’s Economy in 2007

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(UHERO)

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The Contribution of the UHM to Hawai‘i’s Economy in 2007

University of Hawai‘i at Mānoa: A Brief History

The University of Hawai‘i at Mānoa (UHM) had its beginnings in 1907 as a college of agriculture and mechanical arts. In 1912, the first permanent building was erected in Mānoa valley in UHM’s current location. With the establishment of the College of Arts and Sciences in 1920, the College of Hawai‘i became a university. Statehood and the establishment of the University of Hawai‘i as the “state university” marked the beginning of a period of accelerating enrollment that resulted in the formation of a large diverse system. In 1965, the State Legislature created a statewide system of community colleges and placed it within the University of Hawai‘i, and in 1972, the flagship Mānoa campus became the University of Hawai‘i at Mānoa.

Today, the University of Hawai‘i system is comprised of 10 campuses—seven community colleges (four on Oahu and one each on Kauai, Maui, and Hawai‘i), University of Hawai‘i at Mānoa, University of Hawai‘i at Hilo, and the University of Hawai‘i at West Oahu. Of these ten campuses, the Mānoa campus is by far the largest, with roughly 40% of the total headcount of the entire system, including 95% of the graduate students during the fall of 2007. The second largest campus, Kapiolani Community College, had 15% of the total headcount.

UH Mānoa is one of only 13 institutions to hold the distinction of being a land-, sea-, and space-grant research institution. It is one of only 63 public schools that are categorized by the Carnegie Foundation as having “very high research activity”. The National Science Foundation ranks UH Mānoa in the top 30 public universities in federal research funding for engineering and science and 49th overall. The University of Hawai‘i at Mānoa offers bachelor and master degrees in 87 fields of study, and doctoral degrees in 53 fields. In addition, the William S. Richardson School of Law and the John A. Burns School of Medicine are the only law and medical schools in Hawai‘i.

Sixty-nine percent of the credit students at UHM in the fall of 2007 were undergraduates; the remaining 31 percent were graduate students. Hawai‘i residents also comprised nearly 69 percent of all credit students enrolled at the University of Hawai‘i at Mānoa. Twenty-one percent of the students were from the United States mainland, and

together with local students represented all 50 states. The remaining ten percent of students were international students drawn to Mānoa from 103 different countries. UHM continues to be one of the nation's more ethnically diverse universities with roughly 46% of the students identifying as Asian, 26% as Caucasian, and 13% as either Hawaiian or Pacific Islander.

In addition to regular and summer classes, each year thousands of students take credit and non-credit continuing education courses offered by the university for personal growth and enjoyment. The task of teaching thousands of students each year, to conduct research at the knowledge frontier, and to serve the needs of the community are assigned to nearly 5,000 University employees including full-time faculty members, lecturers, graduate assistants and other student employees.

UH Mānoa also supports a large athletic program, and is an NCAA Division I school. UH Mānoa is particularly famous for its three-time national champion women's volleyball team, and its football team launched its second hundred years with its first-ever trip to the Allstate Sugar Bowl on New Year's Day 2008.

UHM spent more than $860 million total in fiscal year (FY) 2007. The next sections discuss the impact of this spending in terms of increased business sales, jobs, income, and taxes in the state of Hawai**ʻ**i.

Creating Jobs and Generating Income

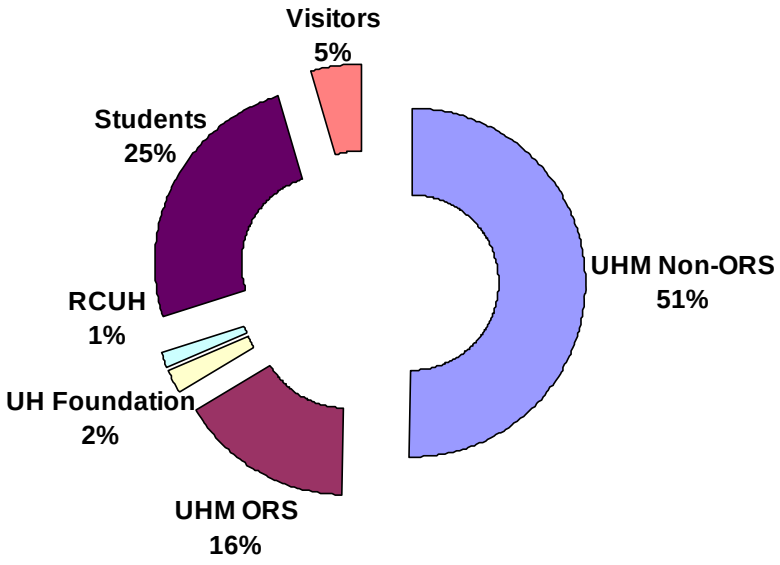
One can think of the University of Hawai‘i at Mānoa as if it were one of many businesses or industries in Hawai‘i. It produces education and research services as its primary outputs. It produces entertainment and sports services, consulting services, health care, housing, and food services. Its customers include students, visitors, private businesses, governments, and the general public. It attracts customers worldwide, many of whom stay for four or more years, as well as serving the local community.

An important difference between the University of Hawai‘i at Mānoa and a private business is that UHM gets a substantial part of its funding from taxpayers. In FY 2007, the University of Hawai‘i at Mānoa spent a total of $861 million in support of its educational mission; the State General Fund paid $299 million of the total. The difference between what the State General Fund paid for and the total amount spent by

UHM ($861 million - $299 million = $562 million) was paid for by government research and training grants, revolving funds (e.g., bookstore revenues), special funds (e.g., tuition and fees), and federal matching grants (e.g., U.S. Department of Agriculture Hatch and Smith-Lever funds).

Adding money spent by the privately funded University of Hawai‘i Foundation, the Research Corporation of the University of Hawai‘i (RCUH), spending by students on items other than tuition, fees, dorm fees, and books[1], out-of-town visitor spending related to UHM-sponsored professional meetings and conferences brings total UHM-related expenditures to $1.296 billion in FY2007, $1.076 billion of which was spent locally. Figure 1, below, shows a breakdown of how that $1.076 billion in direct local expenditures is divided among the different UHM entities.

Figure 1 – Percent Spending by Source



As can be seen in Figure 1 Non-ORS spending is by far the largest component of local expenditures, comprising over half of total spending. Student expenditures and ORS expenditures at UHM both were significant fractions of total spending with 25% and 16% respectively. All other categories combined comprised less than 10% of the total. Tables 1 and 2 detail these expenditures.

[1] Money spent by students for tuition, fees, dorm fees, and books were received and spent by the University and show up in the UHM expenditure data. They were excluded to avoid double counting.

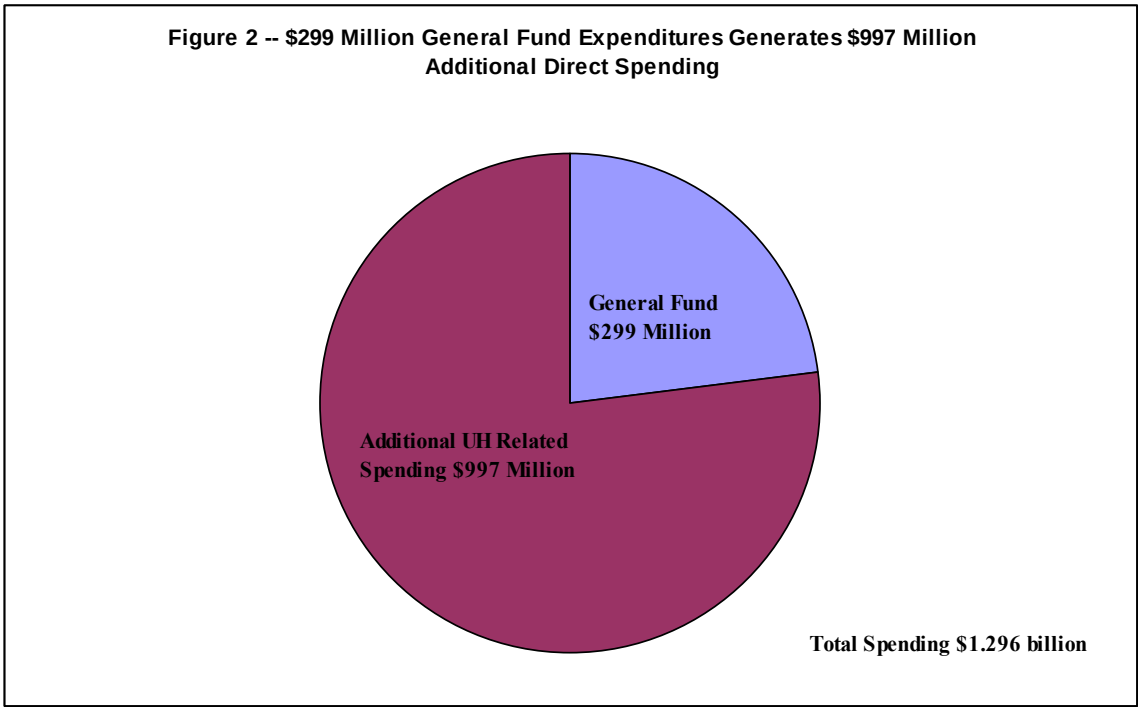
Table 1. UHM Expenditure Breakdown

	Non-ORS	ORS	Total UHM
Total Local Purchases of Goods and Services	$187,932,227	$57,511,040	$245,443,267
Labor Income	$294,282,201	$109,397,087	$403,679,288
Imports	$169,733,845	$41,973,313	$211,707,159
Total expenditures	$651,948,274	$208,881,441	$860,829,715

Table 2. RCUH and UH Foundation Expenditure Breakdowns

	RCUH	UH Foundation
Total Local Purchases of Goods and Services	$7,068,428	$18,037,482
Labor Income	$6,998,190	$5,351,734
Imports	$2,483,501	$6,282,408
Total expenditures	$16,550,121	$29,671,625

These numbers can also be used to illustrate the leverage effects of State General Fund higher education spending (Figure 2). In FY 2007, UHM was able to parlay $299 million in General Fund expenditures into $997 (= $1,296 million – $299 million) million dollars of related educational expenditures.



The University of Hawai‘i at Mānoa generates economic activity in the community through its purchases from local businesses, its payment to its employees, and

spending by its students and visitors. The total amount of economic activity generated in Hawai‘i can be estimated using the state's 2005 input-output (I-O) model of Hawai‘i's economy. The model is able to quantify the economic impacts of UHM expenditures on the different industries in Hawai‘i. We first distributed the $1.076 billion spent locally among the 68 sectors; then we multiplied the expenditures by their respective type II "multipliers" to arrive at their total sales, employment, and earnings impacts. The type II multipliers capture the direct, indirect, and induced effects per dollar of spending in each of the 68 sectors of Hawai‘i's economy.[2]

Student Spending: A Significant Contributor to Hawai‘i's Economy

In previous University of Hawai‘i economic impact studies, student spending represented 19.3% (UHERO 2000) and 18.2% (UHERO 2003) of total expenditures. These totals were calculated using estimates of student expenditures by the Office of the Vice President for Student Affairs. Because these estimates are meant to reflect the minimum cost of attending UHM, we chose a survey approach to collecting student expenditure data, with the hypothesis that official totals may underestimate actual student spending behavior. Details regarding the survey instrument and methodology are provided in Appendix 1.

According to the survey, the average UH Mānoa student spends roughly $18,500 on non-tuition expenditures. Total non-tuition expenditures were lowest for undergraduates from Oahu and from the US mainland. Both categories spent a little more than $15,000 per year on non-tuition expenditures. Graduates as a whole spent more than undergraduates, with graduate students from the neighbor islands spending the most at $28,000 per year. A summary of average student expenditures by classification is provided in Table 3.

[2] To illustrate the relationship between "direct," "indirect," and "induced" effects, consider the following example. I spend $10 at a local grocery store; the "direct effect" of my expenditure on business sales in the economy is the $10 received by the grocery store. In turn, the grocery store purchases $5 worth of goods from its wholesaler. The additional sale in the economy by the wholesaler to the grocery store is an "indirect" effect of my grocery purchase. Both the grocery store and the wholesaler pay their employees, and with their pay the employees purchase goods and services in the economy. These are the "induced" effects. Similarly, the grocer and wholesaler pay rent, interest on loans, and take home profits; those incomes are eventually spent in the economy as well. Type II multipliers capture the "multiplier," or sometimes referred to as the "ripple," effects of any initial spending.

Table 3. Average Expenditures, by Student Classification

	Undergraduate			
	Oahu	Neighbor island	Mainland	International
Housing	$3,407	$4,744	$4,486	$6,357
Durables/start-up	$1,052	$1,563	$1,051	$1,407
Books and supplies	$878	$904	$932	$768
Utilities	$1,361	$1,277	$941	$1,404
Food	$3,060	$3,578	$3,168	$4,070
Local transportation	$1,666	$1,860	$909	$1,579
Recreation/entertainment	$717	$783	$688	$829
Personal care	$3,168	$3,218	$2,760	$4,129
Travel	$196	$443	$264	$51
Total	$15,505	$18,371	$15,199	$20,595
	Graduate			
	Oahu	Neighbor island	Mainland	International
Housing	$8,414	$8,057	$7,910	$6,146
Durables/start-up	$1,217	$1,894	$1,558	$1,104
Books and supplies	$604	$686	$629	$538
Utilities	$2,163	$2,987	$1,340	$1,575
Food	$4,554	$4,697	$3,709	$3,830
Local transportation	$1,772	$3,111	$733	$968
Recreation/entertainment	$845	$711	$658	$451
Personal care	$4,553	$4,913	$3,878	$4,299
Travel	$644	$871	$395	$466
Total	$24,767	$27,926	$20,809	$19,377

The largest percentage of non-tuition expenditures went towards housing. Food and personal care (including insurance) were also significant spending categories. The differences in Table 3 confirm that spending also varies widely by student classification. Undergraduates tend to spend more on books, supplies, recreation, and entertainment, while graduate students spend more on utilities, personal care, and travel. More details on student spending patterns are provided in Appendix 1.

UH Mānoa's Impact on Hawai'i's Economy

In FY 2007, student spending; state and federal government-funded UHM spending for goods and services; out-of-state visitor spending; and UHM related institutions expenditures totaled $1.296 billion, $1.076 of which was spent locally.

Together with additional indirect and induced benefits from these activities, UHM had a total impact of $1.895 billion on Hawai‘i’s economy.

Table 4. Multiplier Effects per Dollar of UHM-Related Expenditures

	Direct Local Spending (‘000$)	Business Sales per $ of Spending	Jobs per Million $ of Spending	Earnings per $ of Spending	State Taxes per $ of Spending
Total Expenditures	1,075,688	1.76	20.1	0.89	0.10
Organized Research (ORS)	166,908	1.65	19.6	1.14	0.09
Instructional Units (Non-ORS)	482,214	1.70	23.3	1.12	0.09
UH Foundation	23,389	1.94	20.9	0.87	0.11
RCUH	14,067	1.73	15.6	0.94	0.10
Student Spending	327,887	1.86	16.5	0.49	0.10
Visitor Spending	61,223	1.94	17.3	0.56	0.12

Table 4 shows that each educational dollar spent generates $1.76 of total business sales, $0.89 of employee earnings, and $0.10 of state revenues in Hawai‘i in FY 2007; and each million dollars of spending generates 20.1 jobs in Hawai‘i. Table 5 shows the total impact of each source of expenditures as well as impact per dollar of general fund and total impact to the state. As can be seen from the table, every dollar of general fund spending on UHM translates into $6.34 of total business sales, $3.21 of employee earnings, and 35 cents of state taxes in Hawai‘i. Every $1 million of general funds spent on UHM generates 73 jobs in the economy.

State dollars will have varying degrees of mileage across institutions. As mentioned above, for every dollar of state money spent on the Mānoa campus, UHM was able to leverage an additional $5.34 of spending in the state. A similar calculation was done for the UH system in 2003, and the UH system’s leverage was lower, estimated at $4.43 per state dollar. This suggests that the Mānoa campus was able to leverage more spending off of state funds than the UH system was able to.

A related measure is *net leverage*. Because state funds may have a similar multiplier effect if given to another state-supported institution or program, it is instructive to consider UHM’s leverage after netting out the cost to the state times the internal

"multiplier" found for the campus. This calculation tells us that if the general funds were given to another state institution or program and had the same indirect and induced effects on the economy, how much additional spending UHM was able to generate. UHM's *net leverage* was $4.58, again more than net leverage from the UH system study in 2003 ($3.03). Once again, this implies that the Mānoa campus is able to generate more spending per state allocated dollar than the UH system as a whole.

Table 5. Economic Impacts of UHM & Related Local Expenditures

Source of Expenditure	Direct Expenditures ('000 $)	Business Sales ('000$)	Employment (jobs)	Income ('000 $)	State Tax ('000 $)
Total	$1,075,688	$1,894,882	21,700	$958,555	$105,420
Non-ORS	$482,214	$820,342	11,252	$539,115	$45,246
ORS	$166,908	$275,649	3,273	$190,021	$15,196
UH Foundation	$23,389	$45,305	488	$20,269	$2,650
RCUH	$14,066	$24,294	220	$13,217	$1,475
Students	$327,887	$610,511	5,406	$161,706	$33,353
Visitors	$61,223	$118,778	1,061	$34,225	$7,498
Impact per $ of General Fund	$3.60	$6.34	72.6	$3.21	$0.35
Impact as a % of State Total	1.06%	1.87%	2.51%	2.54%	1.98%

UHM: A Major Economic Sector in Hawai'i

Overall, the $1.296 billion of education-related expenditures attributable to UH Mānoa generated $1.895 billion in local business sales, $959 million in employee earnings, $105 million in state tax revenues, and 21,700 jobs in Hawai'i in FY 2007. They represented approximately 1.9 percent of total business sales (output), 2.5 percent of total jobs, 2.5 percent of worker earnings, and 2.0 percent of total state tax revenues in the economy of Hawai'i. Table 6 summarizes the impact by source of expenditures.

Table 6. Summary of Impacts by Source of Expenditures

	Direct Local Exp	Sales	Jobs	Income	Taxes
Non-ORS	$482,214,429	$820,342,113	11,252	$539,115,713	$45,246,615
ORS	$166,908,127	$275,649,417	3,273	$190,021,685	$15,196,522
UH Foundation	$23,389,217	$45,305,865	488	$20,269,150	$2,650,325
RCUH	$14,066,619	$24,294,967	220	$13,217,275	$1,475,331
Students	$327,886,917	$610,511,246	5,406	$161,705,860	$33,353,060
Visitors	$61,223,193	$118,778,311	1,061	$34,225,137	$7,498,813
Total	$1,075,688,502	$1,894,881,920	21,700	$958,554,820	$105,420,666

Figure 3 -- Breakdown of Hawai'i's Output

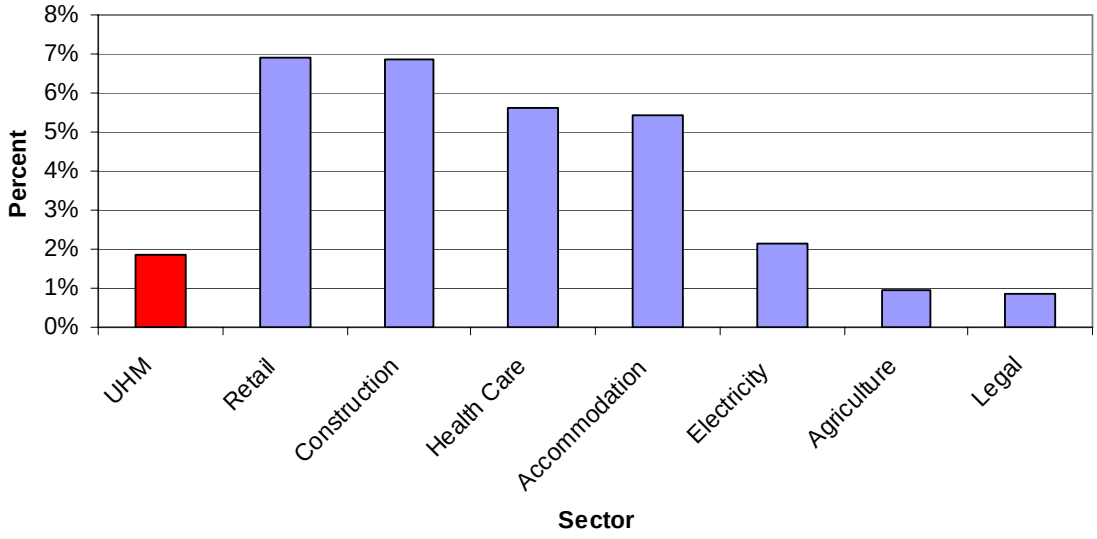


Figure 3 shows the size of UHM's contribution to Hawai'i's output compared with other sectors of the economy. UHM represented about 1.9 percent of Hawai'i's total output of more than $101 billion, and about 2.3 percent of Hawai'i's GDP (estimated).[3] By comparison, retail trade's contribution to Hawai'i output was 6.89 percent; construction, 6.85 percent; the health care industry, 5.63 percent; hotels and other accommodations, 5.42 percent; electricity, 2.13 percent; agriculture, 0.95 percent; and legal services comprised only 0.87 percent of the total output in 2007. Thus, the University of Hawai'i at Mānoa is a major economic sector in Hawai'i.

[3] Because we are unable to directly calculate UHM's contribution to state GDP, we estimate this contribution by comparing the ratio of the state's output to GDP in 2007, and assume this same ratio holds for the relationship between UHM's output and GDP.

Appendix 1. Student Spending

Student Spending Methodology

An email was sent to all current students and response was voluntary. Of the roughly 20,000 students enrolled at UH Mānoa, 2,048 students responded. Of those 2,048 responses, only 1,947 were complete enough to use in the study.[4] Due to high heterogeneity across student profiles, we felt it was necessary to estimate the spending habits for different types of students separately.[5]

The University of Hawai‘i Institutional Research Office releases reports detailing the composition of its student body every fall semester. Included in the report is a breakdown of students by graduate status and permanent residence. Such numbers are not available for the spring semester, but typically spring enrollment is roughly 7% lower than the previous fall. From this we estimate the average number of students enrolled fall and spring semester and assume that the distribution is the same as during the fall semester.[6]

In addition to the necessary background characteristics questions (gender, class year, permanent residence), the survey asked students about expenditures on a variety of different categories. Some questions looked at expenses assumed to be made at most once a year, such as durable goods like computers, refrigerators, furniture, etc. A few other questions looked at expenditures on a per semester basis, such as expenditures on tuition and books. Most of the remaining questions looked at expenses on a monthly basis. Rent, groceries, cell phones, health insurance, and utilities are all paid monthly.

As with any survey data where free response is permitted, the data had to be cleaned before use. When cleaning the data, the following rules were observed. First of all, all questions left blank were treated as zero. All answers that did not include a clear number were also counted as a zero. All ranges were given their maximal value and all

[4] A survey was considered complete enough to use if all background characteristics were included. There were no responses that included all background characteristics that also left all expenditure questions blank.
[5] It should be noted that our survey was remarkably representative by all observable measures. For example, campus undergraduate to graduate ratios were 69% to 31%, and our survey had a 67% to 33% split. Similarly, the ratio of permanent residents by Oahu/NeighborIsland/Mainland/International campus wide is 59/10/21/9% and our survey reported 70/10/16/5%.
[6] The actual adjustment made reflected the Fall enrollment to Spring enrollment decrease in 2006, the most recent year that Spring data was available.

answers that included a 'per week' treated the month as having four weeks and a 'per semester' answer treated the semester as lasting four months. Finally, some unreasonable answers, such as tuition payments above $50,000 per year or monthly mortgage payments in the hundreds of thousands of dollars, were treated as missing.

When aggregating monthly data to yearly expenditures, students were assumed to spend nine months in the state due to school plus an extra one and a half months per summer session enrolled. A yearly total was calculated from a sum of their expenses per month times the number of months in Hawai'i.

Travel expenses were calculated two different ways. For international flights or flights to the US mainland, the students recorded the average price of the ticket(s) purchased. For flights to other Hawaiian Islands, we record the number of flights made and assume an average of $89.80 was spent on the trip in total.[7] Furthermore, we also record the number of people visiting the students, but include the impact of those visitors with other visitors to the university.

Student Spending Results

By far the largest component of non-tuition expenditures was rent/mortgage. The average student spent $5,300 per year on rent or mortgage, but this average varied significantly by student status and by permanent residence. Undergraduate students claiming Oahu as their permanent residence spent only $3,400 per year, while graduate students from Oahu had the highest rent or mortgage at $8,414 per year. On top of this, students spent another $800 per year to cover their utility bills, with Hawai'i residents spending two to three times that.

Food and beverages purchased at grocery stores was another major expense for UHM students. Average expenditures on groceries was $2,000 per year, with Oahu undergraduates again spending the least at $1,500 per year. Other undergraduates spent about $2,000 per year on groceries, while graduate students spent more than $2,500 per year, with neighbor island graduate students spending $3,200 per year on groceries. Students spent roughly $1,500 extra dollars per year eating and drinking at restaurants

[7] The $89.80 is average cost of a round trip ticket between Oahu and the other Hawaiian Islands DBEDT Data Book 2007, Table 18.42).

and bars. This spending is mostly uniform by student background, with the exception of students from the US mainland who only spent about $1,200 dining out.

Another major expenditure by UH Mānoa students was local transportation. The average expenditure by students per year was $1,500, but this was highly heterogeneous across categories. Mainland students spent the least, at $750 per year for graduate students and $900 for undergraduates. Graduate international students spent just under $1,000 on local transportation, while undergraduates spent $1,500. Both undergraduate and graduate Oahu residents spent roughly $1,700 per year on local transportation. Students from neighbor islands spent the most on ground transportation, with undergraduates spending $1,900 and graduates spending over $3,000 per year on local transportation.

Heath care expenditures was a major category that was left out of previous economic impact studies. Undergraduate students spent roughly $500 per year on health care and another $700 on insurance. Graduate students, meanwhile, spent roughly double that with $1,000 per year on health care and $1,500 per year on insurance.

For telecommunications, all students spent between $500 and $700 per year on cell phones with graduate students and international students spending slightly more than other groups. Internet bills, meanwhile, varied significantly across categories. Undergraduates spent much less on internet usage than graduate students. Mainland undergraduates spent the least at only $80 per year, with other undergraduates spending between $150 and $180 per year. For graduate students, students from the US mainland again spent the least for internet usage at $150 per year; international students spent $190 per year. Oahu and other Hawai‘i residents spent much more at $300 per year for Oahu residents and $400 per year for other Hawai‘i residents.

Students across the board spent around $200 for club memberships and other recreational activities. They also spent between $200 and $400 for services and another $700-$900 on other personal expenditures such as gifts, drugstore purchases, and household items. Entertainment expenditures were almost uniformly around $500 per year, except undergraduate international students spent over $600 per year while international graduate students spent less than $250. Clothing expenditures on the other hand varied considerably with undergraduates spending much more per year than

graduate students. Non-international undergraduates spent about $900 per year on clothing, while international undergraduates spent closer to $1,300. Graduate students spent much less with expenditures between $400 and $750.

Student Spending Comparison with Previous Impact Studies

In 2000 and 2003, the University of Hawai‘i Economic Research Organization (UHERO) released studies on the impact of the entire University of Hawai‘i system. Estimates of student spending by the Office of the Vice President for Student Affairs were used to represent expenditures by university students. The current estimates from the Office of the Vice President for Student Affairs are listed in the table below along with the results of the current student spending survey.

Table A1: Comparison of the Cost of Attendance with Surveyed Student Spending

Cost of Attendance	Living with Parent	Living in UH Dorm	Living Off-Campus	Surveyed Average
Books/Supplies	$1,179	$1,179	$1,179	$791
Meals/Housing	$3,018	$7,335	$12,125	$9,836
Personal Expenses	$1,143	$1,333	$1,333	$3,192
Transportation	$360	$360	$360	$1,869
Health/Insurance				$1,635
One Time				$1,187
TOTAL (non-tuition)	$5,700	$10,207	$14,997	$18,510

The above estimates (aside from the final column) are the official numbers issued by the Office of the Vice President for Student Affairs and were developed by the Student Budget Committee. These numbers can be found on the University of Hawai‘i Financial Aid Services website and are said to be used for determining a student’s need for financial aid.[8]

Our conclusion is that while the official cost of attendance may accurately reflect the minimum required to attend the University of Hawai‘i at Mānoa, it does not accurately reflect what students are actually spending in the state. The only category that is consistently overestimated in the official figures is books and supplies. Meals and

[8] The Cost of Attendance is downloadable at:
http://manoa.hawaii.edu/about/facts/finance/cost_attendance.html.

Housing expenditures, on the other hand, may potentially be overestimated for some categories but not for others.

The surveyed average for meals and housing includes the money spent on rent or mortgage, utilities, internet, groceries, and food and beverages purchased at restaurants. A rough estimate from the survey suggests that meals/housing is a little under $6,000 if living with parents or in a UH dorm, but closer to $15,000 for those living off campus in apartments.

In the current survey, personal expenses were divided into cell phone ($530), club memberships and recreation ($204), entertainment ($522), clothing ($816), services ($295), and other personal expenditures ($823). In total, these expenditures are more than double the amount listed in the University's official numbers.

Transportation expenses were clearly much greater than that listed in the official cost of attendance. While $360 could cover two semesters of bus passes or a yearly parking pass plus $24 worth of gas, on average students actually spend more than $1,500 on local transportation. In addition, students spend on average $338 on travel either to neighbor islands or on flights to the US mainland or international destinations.

Not included in the cost of attendance are the expenditures on health care and insurance, perhaps because it is not required. Students report that they spend on average $675 a year on health care and $960 on insurance.

Finally, we include expenditures that are made at most once per year. These are typically durable goods such as computers, refrigerators, televisions and furniture. It is possible that the cost of attendance budget includes some of these expenditures in its number for books and supplies, but clearly it does not represent the full amount that students spend on these goods. Although a majority of students in the survey did not report any of these expenditures this year, the average expenditure on durable goods was over $1,000 per student.

With the new estimation of student expenditures, it is not surprising that the current UHM impact study finds that student spending comprises a larger percentage of the total impact (25%) than previous studies (19% and 18% for 2000 and 2003, respectively).

Appendix 2: Implicit Multiplier by Source of Expenditure

Source of Impact	**Direct Expenditures**	**Sales** (per $ of expenditure)	**Employment** (jobs per million $of expenditure)	**Income** (per $ of expenditure)	**Taxes** (per $ of expenditure)
Non-ORS					
Total In-State Expenditures	$482,214,429	$1.70	23.33	$1.12	$0.09
Total Expenditures	$651,948,274	$1.26	17.26	$0.83	$0.07
ORS					
Total In-State Expenditures	$166,908,127	$1.65	19.61	$1.14	$0.09
Total Expenditures	$208,881,441	$1.32	15.67	$0.91	$0.07
Total In-State Non-ORS+ORS	$649,122,556	$1.69	22.37	$1.12	$0.09
RCUH					
Total In-State Expenditures	$14,066,619	$1.73	15.64	$0.94	$0.10
Total Expenditures	$16,550,121	$1.47	13.29	$0.80	$0.09
UH Foundation					
Total In-State Expenditures	$23,389,217	$1.94	20.89	$0.87	$0.11
Total Expenditures	$29,671,625	$1.53	16.46	$0.68	$0.09
Student Spending	$327,886,917	$1.86	16.49	$0.49	$0.10
Visitor Spending	$61,223,193	$1.94	17.34	$0.56	$0.12
TOTAL					
Total In-State Expenditures	$1,075,688,502	$1.76	20.17	$0.89	$0.10
Total Expenditures	$1,296,161,572	$1.46	16.74	$0.74	$0.08