

CoP Goals

University of Hawai'i System

Connecting “student-level data with finance data” to help identify areas of inefficiency

University of Hawai'i System
Debora Halbert



Past Attempt #1

2011 Program Cost Report:

- Simple model,
- Benchmarks efficiency against tuition charged for 1.0 FTE,
- Costs prorated for “Unclassified” students – unsure what that even represents.
- Likely used to determine if tuition is priced right.



2011 Cost Report

SUMMARY OF NET PROGRAM COSTS PER FTE AND TUITION AS A PERCENT OF AVERAGE COST 2010-11

	DIRECT	INDIRECT	TOTAL COST	FTE	AVERAGE COST PER FTE	TUITION RATE PER FT STUDENT ¹		TUITION RATE % OF AVG COST PER FTE		TUITION & FEES PER FT STUDENT ²		TUITION & FEES % OF AVG COST PER FTE	
						RESIDENT	NON-RESIDENT	RESIDENT	NON-RESIDENT	RESIDENT	NON-RESIDENT	RESIDENT	NON-RESIDENT
UH MANOA													
UNDERGRADUATE	\$97,954,512	\$99,535,554	\$197,490,066	11,934	\$16,549	\$7,584	\$21,024	45.8%	127.0%	\$8,154	\$21,594	49.3%	130.5%
Lower Division	\$27,999,346	\$36,266,944	\$64,166,289	4,491	\$14,288	\$7,584	\$21,024	53.1%	147.1%	\$8,154	\$21,594	57.1%	151.1%
Upper Division	\$70,055,166	\$63,268,610	\$133,323,776	7,442	\$17,915	\$7,584	\$21,024	42.3%	117.4%	\$8,154	\$21,594	45.5%	120.5%
GRADUATE	\$85,236,798	\$46,383,625	\$131,620,423	4,042	\$32,563								
Graduate	\$56,414,296	\$37,275,750	\$93,690,046	2,991	\$31,324	\$9,960	\$24,168	31.8%	77.2%	\$10,550	\$24,758	33.7%	79.0%
Law - JD	\$5,825,205	\$2,582,830	\$8,408,035	352	\$23,886	\$15,960	\$30,024	66.8%	125.7%	\$16,480	\$30,544	69.0%	127.9%
Law - LLM	\$143,292	\$64,392	\$207,684	9	\$23,076	\$31,608	\$31,608	137.0%	137.0%	\$32,128	\$32,128	139.2%	139.2%
Medicine	\$16,414,225	\$1,788,664	\$18,202,889	250	\$72,812	\$27,000	\$56,184	37.1%	77.2%	\$27,520	\$56,704	37.8%	77.9%
Nursing	\$2,211,073	\$1,774,354	\$3,985,427	149	\$26,748	\$15,768	\$29,928	59.0%	111.9%	\$16,358	\$30,518	61.2%	114.1%
MBA/Macc	\$4,228,708	\$2,897,635	\$7,126,343	291	\$24,489	\$15,960	\$25,752	65.2%	105.2%	\$16,550	\$26,342	67.6%	107.6%
TOTAL	\$183,191,310	\$145,919,179	\$329,110,489	15,976	\$20,600								
UH HILO													
UNDERGRADUATE	\$23,315,240	\$36,243,646	\$59,558,886	2,946	\$20,217	\$5,112	\$15,600	25.3%	77.2%	\$5,416	\$15,904	26.8%	78.7%
Lower Division	\$8,175,840	\$15,064,878	\$23,240,718	1,218	\$19,081	\$5,112	\$15,600	26.8%	81.8%	\$5,416	\$15,904	28.4%	83.3%
Upper Division	\$15,139,400	\$21,178,768	\$36,318,168	1,728	\$21,017	\$5,112	\$15,600	24.3%	74.2%	\$5,416	\$15,904	25.8%	75.7%
GRADUATE	\$6,185,725	\$6,459,367	\$12,645,093	523	\$24,178								
Graduate	\$2,279,256	\$2,784,752	\$5,064,008	172	\$29,442	\$7,680	\$17,664	26.1%	60.0%	\$7,984	\$17,968	27.1%	61.0%
Pharmacy	\$3,906,469	\$3,674,616	\$7,581,085	351	\$21,599	\$17,364	\$34,730	80.4%	160.8%	\$17,668	\$35,034	81.8%	162.2%
TOTAL	\$29,500,965	\$42,703,013	\$72,203,978	3,469	\$20,814								
UH WEST OAHU													
UNDERGRADUATE	\$4,861,310	\$5,740,022	\$10,601,332	825	\$12,850	\$4,656	\$14,352	36.2%	111.7%	\$4,666	\$14,362	36.3%	111.8%
Lower Division	\$838,693	\$1,073,084	\$1,911,777	160	\$11,949	\$4,656	\$14,352	39.0%	120.1%	\$4,666	\$14,362	39.1%	120.2%
Upper Division	\$4,022,616	\$4,666,939	\$8,689,555	665	\$13,067	\$4,656	\$14,352	35.6%	109.8%	\$4,666	\$14,362	35.7%	109.9%
COMMUNITY COLLEGES													
UHCC Average	\$98,911,857	\$98,806,995	\$197,718,852	19,758	\$10,007	\$2,112	\$7,152	21.1%	71.5%	\$2,183	\$7,223	21.8%	72.2%
Honolulu CC	\$16,075,550	\$17,408,528	\$33,484,077	2,689	\$12,452	\$2,112	\$6,744	17.0%	54.2%	\$2,142	\$6,774	17.2%	54.4%
Kapiolani CC	\$25,039,028	\$20,796,126	\$45,835,154	5,222	\$8,777	\$2,112	\$6,744	24.1%	76.8%	\$2,172	\$6,804	24.7%	77.5%
Leeward CC	\$18,979,961	\$18,378,330	\$37,358,292	4,552	\$8,207	\$2,112	\$6,744	25.7%	82.2%	\$2,157	\$6,789	26.3%	82.7%
Windward CC	\$5,516,284	\$8,430,464	\$13,946,748	1,423	\$9,801	\$2,112	\$6,744	21.5%	68.8%	\$2,152	\$6,784	22.0%	69.2%
Hawaii CC	\$12,789,061	\$11,828,370	\$24,617,430	2,417	\$10,185	\$2,112	\$6,744	20.7%	66.2%	\$2,246	\$6,878	22.1%	67.5%
Maui CC	\$14,329,808	\$13,914,001	\$28,243,809	2,636	\$10,715	\$2,112	\$6,800	19.7%	89.6%	\$2,238	\$9,726	20.9%	90.8%
Kauai CC	\$6,182,165	\$8,051,177	\$14,233,342	819	\$17,379	\$2,112	\$6,744	12.2%	38.8%	\$2,172	\$6,804	12.5%	39.2%
TOTAL	\$316,465,442	\$293,169,210	\$609,634,652	40,028	\$15,230								

¹ Annual full-time tuition (12 credits per semester); no fees

² Annual full-time tuition and fees (12 credits per semester); professional fees not included

Notes

These costs are developed primarily for tuition analyses

NET Indirect costs - - - NET program costs:

Includes all Student Services, and Scholarships & Fellowships; Includes prorata shares of Academic Support, Institutional Support, Operations & Maintenance, campus prorata share of System-wide Support and CC Admin

Excludes all Organized Research, Public Service, Auxiliary Services, and Independent Operations (Aquarium)

Allocations are prorata by headcount (percent headcount, each major, of the total headcount times the total indirect costs)

Total per headcount and per FTE are the indirect costs plus the direct instruction costs divided by headcount and FTE

There may be some totals, etc., that don't equal the sums of the parts because of rounding

Includes general funds, tuition revenues/special funds and fringe benefits

Supply side Inputs, college expenditures, are from the 2010-11 Expenditures Study

Demand side Inputs, headcount, ssh, etc., are from the Fall 2010 Academic Crossover

For the Law, MD and Pharmacy Program, where the FTE count exceeds Headcount, Cost per FTE is equal to cost per Headcount, by definition

NET PROGRAM COSTS
UH WEST OAHU
2010-11

		DIRECT INSTRUCTION COSTS					NET INDIRECT COSTS	TOTAL COSTS			TUITION RATE PER FT STUDENT ¹		TUITION RATE % OF AVG COST PER FTE		TUITION & FEES PER FT STUDENT ²		TUITION+FEE% OF AVG COST PER FTE		
		DIRECT COSTS	HDCT	AVG COST PER HDCT	FTE	AVG COST PER FTE		TOTAL COST	AVG COST PER HDCT	AVG COST PER FTE	RES	NON RES	RES	NON RES	RES	NON RES	RES	NON RES	
MAJOR/PROGRAM	EDUCATION	T	850,594	147	5,788	88	9,688	573,612	1,424,208	9,688	16,184	4,656	14,352	28.8%	88.7%	4,666	14,362	28.8%	88.7%
		LD	83,263	25	3,331	13	6,405	97,553	180,816	7,233	13,909	4,656	14,352	33.5%	103.2%	4,666	14,362	33.5%	103.3%
		UD	767,331	122	6,290	75	10,231	476,059	1,243,390	10,192	16,579	4,656	14,352	28.1%	86.6%	4,666	14,362	28.1%	86.6%
HUMANITIES		T	306,127	85	3,601	51	6,002	331,680	637,808	7,504	12,506	4,656	14,352	37.2%	114.8%	4,666	14,362	37.3%	114.8%
		LD	64,746	20	3,237	11	5,886	78,042	142,788	7,139	12,981	4,656	14,352	35.9%	110.6%	4,666	14,362	35.9%	110.6%
		UD	241,381	65	3,714	40	6,035	253,638	495,019	7,616	12,375	4,656	14,352	37.6%	116.0%	4,666	14,362	37.7%	116.1%
APPLIED SCIENCES		T	82,624	33	2,504	15	5,508	128,770	211,394	6,406	14,093	4,656	14,352	33.0%	101.8%	4,666	14,362	33.1%	101.9%
		LD	40,586	14	2,899	8	5,073	54,630	95,215	6,801	11,902	4,656	14,352	39.1%	120.6%	4,666	14,362	39.2%	120.7%
		UD	42,038	19	2,213	7	6,005	74,140	116,178	6,115	16,597	4,656	14,352	28.1%	86.5%	4,666	14,362	28.1%	86.5%
SOCIAL SCIENCES		T	1,343,527	436	3,081	237	5,669	1,701,325	3,044,852	6,984	12,847	4,656	14,352	36.2%	111.7%	4,666	14,362	36.3%	111.8%
		LD	197,581	65	3,040	38	5,200	253,638	451,219	6,942	11,874	4,656	14,352	39.2%	120.9%	4,666	14,362	39.3%	121.0%
		UD	1,145,945	371	3,089	199	5,759	1,447,688	2,593,633	6,991	13,033	4,656	14,352	35.7%	110.1%	4,666	14,362	35.8%	110.2%
BUSINESS ADMIN		T	1,287,444	392	3,284	211	6,102	1,529,632	2,817,076	7,186	13,351	4,656	14,352	34.9%	107.5%	4,666	14,362	34.9%	107.6%
		LD	155,758	49	3,179	30	5,192	191,204	346,962	7,081	11,565	4,656	14,352	40.3%	124.1%	4,666	14,362	40.3%	124.2%
		UD	1,131,686	343	3,299	181	6,252	1,338,428	2,470,114	7,201	13,647	4,656	14,352	34.1%	105.2%	4,666	14,362	34.2%	105.2%
PUBLIC ADMIN		T	691,386	261	2,649	166	4,165	1,018,454	1,709,840	6,551	10,300	4,656	14,352	45.2%	139.3%	4,666	14,362	45.3%	139.4%
		LD	112,094	42	2,689	24	4,671	163,889	275,983	6,571	11,499	4,656	14,352	40.5%	124.8%	4,666	14,362	40.6%	124.9%
		UD	579,292	219	2,645	142	4,080	854,565	1,433,857	6,547	10,098	4,656	14,352	46.1%	142.1%	4,666	14,362	46.2%	142.2%
GENERAL		T	196,901	64	3,077	38	5,182	249,736	446,637	6,979	11,754	4,656	14,352	39.6%	122.1%	4,666	14,362	39.7%	122.2%
		LD	184,665	60	3,078	36	5,130	234,127	418,792	6,980	11,633	4,656	14,352	40.0%	123.4%	4,666	14,362	40.1%	123.5%
		UD	12,236	4	3,059	2	6,118	15,608	27,845	6,961	13,922	4,656	14,352	33.4%	103.1%	4,666	14,362	33.5%	103.2%
UNCLASSIFIED		T	102,707	53	1,938	19	5,406	206,813	309,520	5,840	16,291	4,656	14,352	28.6%	88.1%	4,666	14,362	28.6%	88.2%
		UD	102,707	53	1,938	19	5,406	206,813	309,520	5,840	16,291	4,656	14,352	28.6%	88.1%	4,666	14,362	28.6%	88.2%
TOTAL			4,861,310	1,471	3,305	825	5,892	5,740,022	10,601,332	7,207	12,850	4,656	14,352	36.2%	111.7%	4,666	14,362	36.3%	111.8%
LOWER DIVISION			838,693	275	3,050	160	5,242	1,073,084	1,911,777	6,952	11,949	4,656	14,352	39.0%	120.1%	4,666	14,362	39.1%	120.2%
UPPER DIVISION			4,022,616	1,196	3,363	665	6,049	4,666,939	8,689,555	7,266	13,067	4,656	14,352	35.6%	109.8%	4,666	14,362	35.7%	109.9%

		DIRECT INSTRUCTION COSTS					NET INDIRECT COSTS	TOTAL COSTS			TUITION RATE PER FT STUDENT ¹		TUITION RATE % OF AVG COST PER FTE		TUITION & FEES PER FT STUDENT ²		TUITION+FEE% OF AVG COST PER FTE		
		DIRECT COSTS	HDCT	AVG COST PER HDCT	FTE	AVG COST PER FTE		TOTAL COST	AVG COST PER HDCT	AVG COST PER FTE	RES	NON RES	RES	NON RES	RES	NON RES	RES	NON RES	
BY TUITION CATEGORY																			
Undergraduate			4,861,310	1,471	3,305	825	5,892	5,740,022	10,601,332	7,207	12,850	4,656	14,352	36.2%	111.7%	4,666	14,362	36.3%	111.8%

¹ Annual full-time tuition (12 credits per semester); no fees

² Annual full-time tuition and fees (12 credits per semester); professional fees not included

Past Attempt #2

2016 Delaware Cost Study:

- results complex,
- data fluctuates year to year,
- extremely time consuming,
- allows for national comparisons of expenditures by CIP categories,
- costly,
- did not renew contract in 2019 due to lack of adoption and momentum from UH Mānoa and UH Hilo.



Delaware Cost Study

DELAWARE COST STUDY							
UH MANOA - DIRECT INSTRUCTIONAL EXPENSES							
PER SSH							
		2016-17		2017-18		2018-19	
CIP	Name	\$ EXP/SSH	\$ EXP/SSH (national norm)	\$ EXP/SSH	\$ EXP/SSH (national norm)	\$ EXP/SSH	\$ EXP/SSH (national norm)
1.1	Food Science	\$314		\$347	\$312	\$538	\$350
1.11	Plant & Environ Protect Sci	\$836	\$495	\$806	\$399	\$1,007	\$569
1.12	Tropical Plant & Soil Science	\$1,029		\$951		\$1,478	
3.01	Global Environmental Science	\$76	\$384	\$47	\$334	\$88	\$340
PER FTE							
		2016-17		2017-18		2018-19	
CIP	Name	\$EXP/STUDENT FTE	\$EXP/STUDENT FTE (national norm)	\$EXP/STUDENT FTE	\$EXP/STUDENT FTE (national norm)	\$EXP/STUDENT FTE	\$EXP/STUDENT FTE (national norm)
1.1	Food Science	\$8,971		\$9,852	\$8,342	\$15,450	\$9,494
1.11	Plant & Environ Protect Sci	\$19,649	\$13,317	\$18,185	\$10,678	\$22,658	\$14,916
1.12	Tropical Plant & Soil Science	\$27,560		\$24,328		\$36,731	
3.01	Global Environmental Science	\$2,033	\$11,639	\$1,309	\$9,122	\$2,474	\$8,791



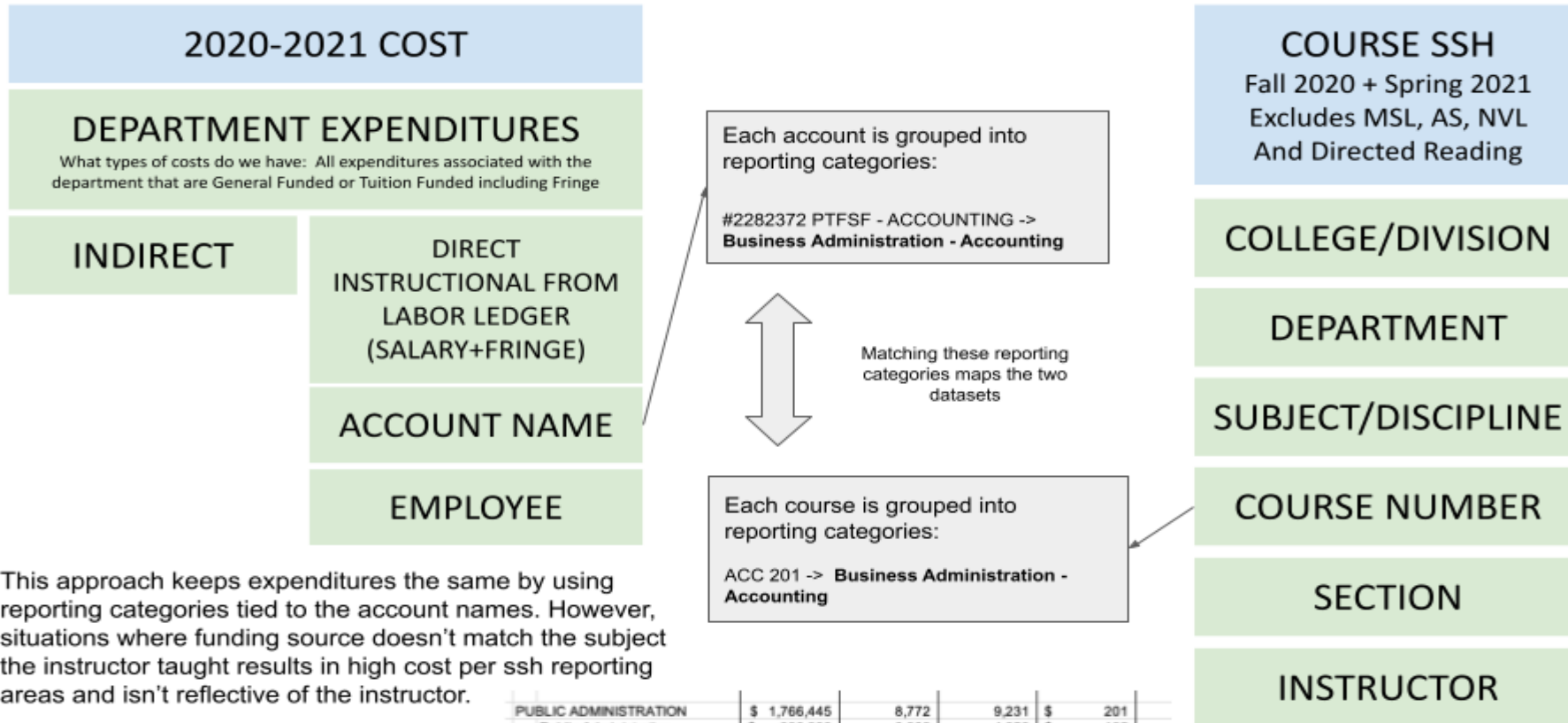
2020 Effort (#3)

Program cost and efficiency:

- **Spurred by legislative inquires and**
- **2020 budget projections were 20% reductions.**



Current Effort



This approach keeps expenditures the same by using reporting categories tied to the account names. However, situations where funding source doesn't match the subject the instructor taught results in high cost per ssh reporting areas and isn't reflective of the instructor.

PUBLIC ADMINISTRATION	\$ 1,766,445	8,772	9,231	\$ 201
Public Administration	\$ 336,239	3,202	4,650	\$ 105
Community Health	\$ 36,819	588	771	\$ 63
Disaster Prep & Emer Mgmt	\$ 439,780	1,458	1,092	\$ 302
Health care	\$ 568,877	1,424	1,272	\$ 400
Justice Adm	\$ 266,516	1,812	1,362	\$ 147
Long Term Care	\$ 118,214	288	84	\$ 410

288 = ssh assigned by source of salary
84 = strictly by the mapping



Current Effort Questions

Questions to Consider:

- Look at program health rather than number of graduates.
- What does this mean for programs that we may find intrinsically valuable?
- How do we even account for the costs? At what level of granularity?
 - Integrate facility costs?
 - Does SSH measure revenue?
 - Include support staff costs?
 - Faculty salaries across programs, departments, tenured, non-tenured?
- How avoid gamification?
- What do we want to encourage?

