

# UNIVERSITY OF HAWAI'I SYSTEM REPORT



REPORT TO THE 2011 LEGISLATURE

Report by the UH Task Force on  
Developing a Budgetary System and Funding Formula for  
Distribution of Fiscal Resources to UH Campuses

Act 188, SLH 2008

January 2011

**Report of the Act 188 Task Force  
to  
The Hawai'i State Legislature**

**September 2010**

## Executive Summary and Recommendation

After deliberation and in consultation with the University President and the Board or Regents, the Act 188 Task Force recommends to the Hawai'i State Legislature that the University biennium budget be enacted so as to include

- a) an outcomes component that provides funds to the University based on actual strategic outcomes related to graduation, Native Hawaiian student graduation, Science, Technology, Engineering, and Math (STEM) graduation, enrollment of low income students, and student transfer. If outcomes are not achieved, any funds dedicated to this purpose would lapse. The recommended level of funding for the outcomes component is \$10M in FY2012 and \$20M in FY2013.
- b) an enrollment component that provides funds to the University based on actual enrollment increases. The formula provides for a differing level of funding for each major unit and a differing share of the cost between the State and the student by each major unit. If enrollments increases are not achieved, any funds dedicated to this purpose would lapse. The recommended level of funding for the enrollment component is \$5M in FY2012 and \$10M in FY2013.
- c) a workforce development component that uses traditional Program Change Requests to allow the University to request and the Legislature to consider specific expansions or improvements to meet critical State workforce needs.

## Work of the Task Force

Act 188 was adopted by the 2008 State Legislature to establish a task force that would make recommendations on a budgetary system that

*includes an equitable, consistent, and responsive funding formula for the distribution of fiscal resources to the various University of Hawaii campuses. The funding formula shall:*

- (1) Be linked to the enrollment of full-time equivalent (FTE) students at each campus;*
- (2) Assign different weights in recognition of the varying costs and revenues relating to educating different categories of students...*
- (3) Include an incentive and performance component...*
- (4) be as simple and transparent as possible...*

In accordance with the statute, the task force was convened with the following members

Gene Awakuni, Chancellor, UH West Oahu  
Virginia Hinshaw, Chancellor, UH Manoa  
John Morton, Vice-President, UH Community Colleges  
Senator Norman Sakamoto, appointed by the President of the State Senate  
Rose Tseng, Chancellor, UH Hilo; replaced by Donald Straney, Chancellor, UH Hilo  
Carol Ann Van Camp, appointed by the Speaker of the House of Representatives

Senator Sakamoto and Vice President Morton were selected to serve as co-chairs of the task force.

As provided by the law, the task force solicited proposals for a consultant to assist with the development of the funding formula. Proposals were solicited from four national firms with experience in developing state funding formulas. By unanimous consent the task force selected Mary McKeown-Moak of MGT of America, Inc. as the consultant. The task force met several times with the consultant and reviewed her recommendations. A preliminary report was submitted to the legislature in January 2009.

Working with data provided by UH and from national data sources, the consultant and the task considered various approaches and methods of formula funding. The report of the consultant and the recommended base budget formula is provided in Attachment C of this report. Additionally, the principles of formula funding and of accountability or performance funding as presented by the consultant are included as Attachment D and Attachment E.

The subsequent economic downturn in the State made the development and implementation of a formulaic approach to the University base budget impossible to consider. Drastic budget reductions resulting from the severe loss of State general revenues, collective bargaining over salary reductions, and strong student demand made planning and budgeting extremely difficult. As a consequence, the work of the Act 188 task force was halted until the economic conditions became clearer.

As the University approached the current biennium budget, the Board of Regents determined that the biennium budget request for the University should incorporate the principles set forth in Act 188 and include both an outcomes component and an enrollment component in addition to more traditional program change requests. The task force recognizes and endorses the University's budget approach as meeting the intent and purpose of Act 188.

## Outcomes Funding

The outcomes funding model is directly linked to the University's established strategic outcomes. The measures adopted are directly from the strategic plan and the targets are the specific targets identified in the strategic outcomes adopted by the University in 2008. These outcomes, if achieved, would ensure that the University meets the expressed Hawai'i Graduation Initiative target of a 25% increase in graduates by 2015.

The outcomes incorporated into the formula include the following

- a) degrees and certificates awarded;
- b) an overweight for degrees and certificates awarded to Native Hawaiian students. The overweight is intended to provide an additional incentive to move Native Hawaiian students through to graduation;
- c) an overweight for degrees and certificates awarded to students in Science, Technology, Engineering, and Math (STEM) fields;
- d) the number of low-income students participating the Federal Pell program;
- e) the number of transfers from the community colleges to the baccalaureate campuses.

For each outcome, the baseline is the value set by the strategic outcomes for FY2010 and the target is the value set for FY2011 (for FY2012 funding) and FY2012 (for FY2013 funding). Generally, the outcomes are growing by 3% to 6% per year. The details of the outcomes formula, including the targets and the specific campus weights for each outcome are included as Appendix A.

The formula has the following characteristics

- a) the funding pool set aside for outcomes funding is approximately 3% of the general fund budget. Based on the review of the national efforts in performance funding, this level is sufficient to provide an incentive for campuses to focus on achieving the desired outcomes.
- b) the weights assigned to the outcomes vary by campus to reflect the mission of that campus. For example, the transfer outcome is more heavily weighted at the community colleges since transfer to the baccalaureates is a major outcome for the community colleges. At the same time, the baccalaureate institutions do have a transfer component, although smaller, to provide the receiving institutions with some incentive in helping to achieve the transfer outcome.

- c) the outcomes are independent of each other. Campuses can only achieve their full outcomes funding if they meet or exceed the targeted outcomes for each of the measures.
- d) If a campus does not meet the targeted outcome, then any unused funds would lapse to the general fund.

### Enrollment Funding

The University and the Act 188 Task Force do not recommend an enrollment formula covering the entire base budget of the campuses at this time. Rather, the recommendation is to provide a pool of money to accommodate enrollment growth should it occur. The recommended level of the enrollment funding pool is \$5,000,000 in FY2012 and \$10,000,000 in FY2013.

The enrollment formula is based on the following principles

- a) The enrollment growth pool is for growth in undergraduate, resident students only. Non-resident students are expected to be self-supporting through tuition and are not included in the program.
- b) The formula recognizes that both the cost of undergraduate education and the student share of the cost vary from campus to campus. In calculating the formula, the current actual cost/FTE was used less the cost of fringe benefits that are not included in the University operating budget.
- c) While the cost/FTE is based on current expenditure levels and differentiating by type of institutions, it is expected that future cost/FTE would be adjusted using an average rolling three year average cost. As institutions such as UH-Hilo grow larger and more mature, the cost/FTE can be expected to decline.
- d) The student share of the cost/FTE in the formula are as follows:
  - UH-Manoa – 50%
  - UH-Hilo and UH-West Oahu – 37.5%
  - UH Community Colleges – 25%
- e) The University also differentiates the cost of tuition for its high cost programs either through a higher tuition or through the addition of program fees that students enrolled in the high cost programs pay in addition to tuition.

- f) If the enrollment growth at the campuses does not utilize the available pool of money, then the unused money would be lapse to the general fund.
- g) If the enrollment growth among the campuses exceeds the available funds, then the share among the campuses would be proportionately reduced based on the enrollment growth at that campus. In other words, the funds available for enrollment growth are capped at the appropriated level.

The calculations and formula related to enrollment growth are included as Appendix B.

#### Program Change Requests

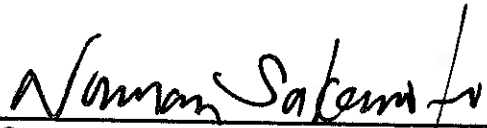
The purpose of the above two budget pools is to provide funds to the University for the express purpose of achieving a higher percentage of the State having a post-secondary credential. The goal is to provide some funding for achieving this goal through expanded enrollment but to shift much of the emphasis to rewarding actual attainment of outcomes.

The task force recognizes that the Legislature may also have a specific interest in selected program expansions or improvements in areas of high demand for the State. The University has elected to focus its program change requests on these specific workforce targets. The task force endorses this approach and feels that the budget approach being taken by the University with its emphasis on a base budget, an outcomes component, a small enrollment growth component, and specific targeted program expansions in key workforce areas fulfills the intent of Act 188.

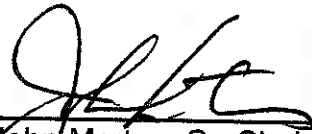
#### Other Considerations

With both the outcomes funding and the enrollment growth funding, the University, if it meets performance expectations, would receive additional dollars. These dollars would be re-invested into continuing program improvements and program expansion. As such, it will be necessary to create a pool of position counts so that the University has the flexibility to re-invest in either specific faculty positions or other support positions as needed.

Act 188 Task Force



Senator Norman Sakamoto, Co-Chair  
Appointee of the State Senate



John Morton, Co-Chair  
Vice President for Community  
Colleges



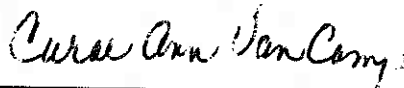
Gene Awakuni, Chancellor  
UH West Oahu



Virginia Hinshaw, Chancellor  
UH Manoa



Donald Straney, Chancellor  
UH Hilo



Carol Ann Van Camp  
Appointee of the House of  
Representatives



Appendix A  
University Strategic Outcomes by Unit

Degrees/Certificates*	Base FY2010	Target FY2011	Increase over base	Target FY2012	Increase over base	Increase over prior yr
UH Manoa	4,576	4,759	183	4,949	373	190
UH Hilo	628	653	25	679	51	26
UH West Oahu	230	239	9	249	19	10
UH Community Colleges	2,878	2,993	115	3,113	235	120
Total	8,312	8,644	332	8,990	678	346

\*Summer, Fall, Spring

Native Hawaiian Degrees/Certificates	Base FY2010	Target FY2011	Increase over base	Target FY2012	Increase over base	Increase over prior yr
UH Manoa Undergrad	248	266	18	285	37	19
UH Manoa Grad & Prof	126	134	8	143	17	9
UH Hilo Undergrad	88	95	7	102	14	7
UH Hilo Grad & Prof	7	8	1	9	2	1
UH West Oahu	38	41	3	44	6	3
UH Community Colleges	482	516	34	552	70	36
Total	989	1,060	71	1,135	146	75

<b>STEM Degrees/Certificates</b>	<b>Base FY2010</b>	<b>Target FY2011</b>	<b>Increase over base</b>	<b>Target FY2012</b>	<b>Increase over base</b>	<b>Increase over prior yr</b>
UH Manoa Undergrad	535	551	16	568	33	17
UH Manoa Grad & Prof	363	374	11	385	22	11
UH Hilo Undergrad	167	172	5	177	10	5
UH Hilo Grad & Prof	6	6	0	6	0	0
UH West Oahu	0	0	0	0	0	0
UH Community Colleges	663	683	20	703	40	20
<b>Total</b>	<b>1,734</b>	<b>1,786</b>	<b>52</b>	<b>1,839</b>	<b>105</b>	<b>53</b>

<b>Pell Recipients</b>	<b>Base FY2010</b>	<b>Target FY2011</b>	<b>Increase over base</b>	<b>Target FY2012</b>	<b>Increase over base</b>	<b>Increase over prior yr</b>
UH Manoa	3,034	3,186	152	3,345	311	159
UH Hilo	1,330	1,396	66	1,466	136	70
UH West Oahu	246	258	12	271	25	13
UH Community Colleges	4,559	4,787	228	5,026	467	239
<b>Total</b>	<b>9,169</b>	<b>9,627</b>	<b>458</b>	<b>10,108</b>	<b>939</b>	<b>481</b>

<b>Transfers</b>	<b>Base FY2010</b>	<b>Target FY2011</b>	<b>Increase over base</b>	<b>Target FY2012</b>	<b>Increase over base</b>	<b>Increase over prior yr</b>
CC to UH Manoa	1,010	1,060	50	1,113	103	53
CC to UH Hilo	148	155	7	163	15	8
CC to UH West Oahu	265	278	13	292	27	14
<b>From Community Colleges</b>	<b>1,423</b>	<b>1,493</b>	<b>70</b>	<b>1,568</b>	<b>145</b>	<b>75</b>

UH Manoa

Degrees/Certificates	FY2012	FY2013	Notes
Baseline	4,576	4,576	From Strategic Plan, FY2010
Target	4,759	4,949	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	70	70	
Score	0	0	

Native Hawaiian Undergrad Over Weights	FY2012	FY2013	Notes
Baseline	248	248	From Strategic Plan, FY2010
Target	266	285	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	5	5	
Score	0	0	

Native Hawaiian Grad Over Weights	FY2012	FY2013	Notes
Baseline	126	126	From Strategic Plan, FY2010
Target	134	143	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	5	5	
Score	0	0	

<b>STEM</b>	<b>Undergrad Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	535	535	535	From Strategic Plan, FY2010
Target	551	568	568	From Strategic Plan, prior fiscal year
Actual				From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	0.0%	Maximum 100%
Weight	5	5	5	
Score	0	0	0	

<b>STEM</b>	<b>Grad Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	363	363	363	From Strategic Plan, FY2010
Target	374	385	385	From Strategic Plan, prior fiscal year
Actual				From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	0.0%	Maximum 100%
Weight	5	5	5	
Score	0	0	0	

<b>Pell Recipient Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	3,034	3,034	From Strategic Plan, FY2010
Target	3,186	3,345	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	5	5	
Score	0	0	

CC Transfer Over Weights		FY2012	FY2013	Notes
Baseline		1,010	1,010	From CC Strategic Plan, FY2010
Target		1,060	1,113	From CC Strategic Plan, prior fiscal year
Actual				From the prior fiscal year
% of Targeted Increase		0.0%	0.0%	Maximum 100%
Weight		5	5	
Score		0	0	
Budget Allocation		FY2012	FY2013	Notes
Available Amount		\$6,036,035	\$12,072,070	(amount to be set)
Points		0	0	(total of all points)
Budget Earned		-	-	(points/100 * available)

UH Hilo

Degrees/Certificates	FY2012	FY2013	Notes
Baseline	628	628	From Strategic Plan, FY2010
Target	653	679	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	60	60	
Score	0	0	

Native Hawaiian Undergrad Over Weights	FY2012	FY2013	Notes
Baseline	88	88	From Strategic Plan, FY2010
Target	95	102	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	10	10	
Score	0	0	

Native Hawaiian Grad Over Weights	FY2012	FY2013	Notes
Baseline	7	7	From Strategic Plan, FY2010
Target	8	9	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	0	0	
Score	0	0	

<b>STEM</b>	<b>Undergrad Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	167	167	167	From Strategic Plan, FY2010
Target	172	177	177	From Strategic Plan, prior fiscal year
Actual				From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	0.0%	Maximum 100%
Weight	10	10	10	
Score	0	0	0	

<b>STEM</b>	<b>Grad Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	6	6	6	From Strategic Plan, FY2010
Target	6	6	6	From Strategic Plan, prior fiscal year
Actual				From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	0.0%	Maximum 100%
Weight	0	0	0	
Score	0	0	0	

<b>Pell Recipient Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	1,330	1,330	From Strategic Plan, FY2010
Target	1,396	1,466	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	10	10	
Score	0	0	

CC Transfer Over Weights		FY2012	FY2013	Notes
Baseline		148	148	From CC Strategic Plan, FY2010
Target		155	163	From CC Strategic Plan, prior fiscal year
Actual				From the prior fiscal year
% of Targeted Increase		0.0%	0.0%	Maximum 100%
Weight		10	10	
Score		0	0	
Budget Allocation		FY2012	FY2013	Notes
Available Amount		\$843,532	\$1,687,063	(amount to be set)
Points		0	0	(total of all points)
Budget Earned		-	-	(points/100 * available)



UH West Oahu

Degrees/Certificates	FY2012	FY2013	Notes
Baseline	230	230	From Strategic Plan, FY2010
Target	239	249	From Strategic Plan, prior fiscal year
Actual	0	0	From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	65	65	
Score	0	0	

Native Hawaiian Undergrad Over Weights	FY2012	FY2013	Notes
Baseline	38	38	From Strategic Plan, FY2010
Target	41	44	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	10	10	
Score	0	0	

STEM Undergrad Over Weights	FY2012	FY2013	Notes
Baseline	0	0	From Strategic Plan, FY2010
Target	0	0	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	0	0	
Score	0	0	

Pell Recipient Over Weights	FY2012	FY2013	Notes
Baseline	246	246	From Strategic Plan, FY2010
Target	258	271	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	5	5	
Score	0	0	

CC Transfer Over Weights	FY2012	FY2013	Notes
Baseline	265	265	From CC Strategic Plan, FY2010
Target	278	292	From CC Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	20	20	
Score	0	0	

Budget Allocation	FY2012	FY2013	Notes
Available Amount	\$149,575	\$299,150	(amount to be set)
Points	0	0	(total of all points)
Budget Earned	-	-	(points/100 * available)

# UH Community Colleges

Degrees/Certificates	FY2012	FY2013	Notes
Baseline	2,878	2,878	From Strategic Plan, FY2010
Target	2,993	3,113	From Strategic Plan, prior fiscal year
Actual	0	0	From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	35	35	
Score	0	0	

Native Hawaiian Undergrad Over Weights	FY2012	FY2013	Notes
Baseline	482	482	From Strategic Plan, FY2010
Target	516	552	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	10	10	
Score	0	0	

STEM Undergrad Over Weights	FY2012	FY2013	Notes
Baseline	663	663	From Strategic Plan, FY2010
Target	683	703	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	5	5	
Score	0	0	

<b>Pell Recipient Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	4,559	4,559	From Strategic Plan, FY2010
Target	4,787	5,026	From Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	10	10	
Score	0	0	

<b>CC Transfer Over Weights</b>	<b>FY2012</b>	<b>FY2013</b>	<b>Notes</b>
Baseline	1,423	1,423	From CC Strategic Plan, FY2010
Target	1,493	1,568	From CC Strategic Plan, prior fiscal year
Actual			From the prior fiscal year
% of Targeted Increase	0.0%	0.0%	Maximum 100%
Weight	40	40	
Score	0	0	

<b>Budget Allocation</b>	<b>FY2011</b>	<b>FY2012</b>	<b>Notes</b>
Available Amount	\$2,970,858	\$5,941,717	(amount to be set)
Points	0	0	(total of all points)
Budget Earned	-	-	(points/100 * available)

Appendix B  
Enrollment Formula

UH Manoa	FY2012	FY2013	Notes
Base Enrollment	8,359	8,359	Classified Resident Undergrad FTE, Fall 2009
Actual Enrollment			Fall of prior fiscal year
Increase in enrollment			From base enrollment
Operating cost per undergraduate FTE	\$13,889	\$13,889	FY 2008-09
% General Funds	50.0%	50.0%	
State share of new enrollment cost	\$0	\$0	(Increase in enrollment * cost per FTE * % GF)
UH Hilo	FY2012	FY2013	Notes
Base Enrollment	1,966	1,966	Classified Resident Undergrad FTE, Fall 2009
Actual Enrollment			Fall of prior fiscal year
Increase in enrollment			From base enrollment
Operating cost per undergraduate FTE	\$15,606	\$15,606	FY 2008-09
% General Funds	62.5%	62.5%	
State share of new enrollment cost	\$0	\$0	(Increase in enrollment * cost per FTE * % GF)
UH West Oahu	FY2012	FY2013	Notes
Base Enrollment	631	631	Classified Resident Undergrad FTE, Fall 2009
Actual Enrollment			Fall of prior fiscal year
Increase in enrollment			From base enrollment
Operating cost per undergraduate FTE	\$12,473	\$12,473	FY 2008-09
% General Funds	62.5%	62.5%	
State share of new enrollment cost	\$0	\$0	(Increase in enrollment * cost per FTE * % GF)

UH Community Colleges	FY2012	FY2013	Notes
Base Enrollment	14,142	14,142	Classified Resident Undergrad FTE, Fall 2009
Actual Enrollment			Fall of prior fiscal year
Increase in enrollment			From base enrollment
Operating cost per undergraduate FTE	\$9,939	\$9,939	FY 2008-09
% General Funds	75.0%	75.0%	
State share of new enrollment cost	\$0	\$0	(Increase in enrollment * cost per FTE * % GF)

<b>Enrollment funding pool</b>	<b>FY2012</b>	<b>FY2013</b>
Total state share of new enrollment cost	\$5,000,000	\$10,000,000
Amount returned to state	\$0	\$0
	\$5,000,000	\$10,000,000

Distribution of Funds	FY2012	FY2013
UH Manoa	0	0
UH Hilo	0	0
UH West Oahu	0	0
UH Community Colleges	0	0
Total	0	0

If the total state share of new enrollment costs exceeds the enrollment funding pool, the enrollment funding pool will be proportionately distributed to campuses

**OPERATING COST PER  
FTE**

*Undergraduate only*

**2007-08**

	Operating Cost	UG FTE	Operating Cost per UG FTE	Fall Headcount	
				Total	Classified UG
Manoa	\$162,897,916	11,865	\$13,729	20,051	13,417
Hilo	\$39,158,484	2,756	\$14,208	3,573	3,144
West Oahu	\$7,109,764	522	\$13,620	940	876
CC	\$144,299,129	14,913	\$9,676	25,890	19,401

**2008-09**

	Operating Cost	UG FTE	Operating Cost per UG FTE	Fall Headcount	
				Total	Classified UG
Manoa	\$163,871,362	11,799	\$13,889	20,169	13,438
Hilo	\$44,150,464	2,829	\$15,606	3,773	3,208
West Oahu	\$7,982,746	640	\$12,473	1,140	1,094
CC	\$161,975,787	16,297	\$9,939	28,444	21,248

## **COST**

### **Includes**

- Current year General fund and Tuition and Fees Special fund operating expenditures and encumbrances
- All Instruction, Student Services, and Scholarship/Fellowship expenditures
- Prorata shares of Academic Support, Institutional Support, Operations & Maintenance, and campus prorata shares of Systemwide Support and CC-Systemwide costs.

These costs are reduced by a leakage percentage (equal to the percentage of Research and Public Service expenditures to total campus expenditures), which assumes a proportionate amount of these expenditures support Research/Public Service.

### **Excludes**

- General fund fringe benefits
- Prior fiscal year encumbrance liquidations
- Summer School/Continuing Education expenditures and encumbrances
- All Research, Public Service, Auxiliary Enterprises and Independent Operations expenditures and encumbrances

### **Special cost adjustments:**

- Hilo: Mauna Kea management Operations/Maintenance costs categorized as Organized Research
- West Oahu: Center for Labor Education and Research (CLEAR) costs categorized as Public Service



**Appendix C**  
**CONSULTANTS REPORT,**  
**ACT 188 TASK FORCE**

The Act 188 Task Force contracted with MGT of America to assist the Task Force in the development of an equitable, consistent, and responsive funding formula for the distribution of fiscal resources to the campuses of the University of Hawaii.

The project required that MGT:

1. Provide an analysis and recommendations to the Task Force including:
  - a) the methodology used in developing the funding formula;
  - b) a determination as to whether the campuses are underfunded or overfunded, based on past enrollment growth, current enrollment, enrollment mix, funding, and other factors; and
  - c) a recommendation as to the amount of adjustments to the campus base budgets that are needed to compensate for shortfalls in prior years and how those adjustments should be accomplished.
2. Attend informational briefings.
3. Present a draft report of findings and recommendations.
4. Work with the Task Force in gathering data and analyzing funding formula components to assist in developing long-term components to the financial plan to achieve the strategic goals and long-term funding targets for each institution within the University of Hawaii system. The information was to be included in the University's annual incentive and performance report.

Act 188 requires that the funding formula shall:

- (1) Be linked to the enrollment of full-time equivalent (FTE) students at each campus;
- (2) Assign different weights in recognition of the varying costs and revenues relating to educating different categories of students, such as:
  - (a) The different classifications of students, including two-year, undergraduate, graduate, and professional-program students, and resident and non-resident students;

- (b) Students who are enrolled in programs that address the major workforce needs of the state, including teacher education, nursing, and the science, technology, engineering, and math (STEM) disciplines; and
  - (c) Students with special support needs, including those from underserved populations who are at-risk, because they are subject to language, cultural, economic, or other disadvantages due to their home and community environment;
- (3) Include an incentive and performance component that recognizes the unique goals and missions of the University of Hawaii's various campuses, as well as the higher education needs of the state;
  - (4) Be as simple and transparent as possible and be designed to allow the funding formula to be used as a basis for planning; and
  - (5) Provide for transparency and accountability to ensure the efficient use of state resources.

The six-member Act 188 Task Force consisted of the chancellor of the University of Hawaii at Manoa, the chancellor of the University of Hawaii at Hilo, the chancellor of the University of Hawaii at West Oahu, the vice-president of the University of Hawaii community colleges, one member appointed by the president of the Senate, and one member appointed by the speaker of the House.

The Task Force was charged with hiring a consultant who is an independent higher education finance expert to work with the Task Force to develop the funding formula. The Task Force also was asked to submit a report, including the findings and recommendations of the consultant, including:

- (1) Information as to how FTE enrollment, historical enrollment growth, future enrollment growth, enrollment mix, and similar factors should be linked to funding through formula funding, base funding, incentive funding, or any other methodology;
- (2) The consultant's analysis and expert opinion as to the methodology to be employed and as to whether campuses are underfunded or overfunded, based on past enrollment growth, current enrollment, enrollment mix, funding, and other factors;
- (3) The consultant's recommendations as to the amount of adjustments to the campus base budgets that are needed to compensate for shortfalls in prior years and how those adjustments should be accomplished; and
- (4) A target date for the completion of a funding formula together with any proposed legislation to establish and implement the funding formula.

This report is the findings and recommendations of the consultant, Dr. Mary McKeown-Moak, Senior Partner, MGT of America, Inc.

## **METHODOLOGY**

MGT carried out the study through eight tasks:

- *Task One: Finalize Work Program*
- *Task Two: Meet with the Task Force at Monthly Meetings to Gain Input and Understanding, and Collect Data*
- *Task Three: Develop Consensus on Guiding Principles for Funding Guidelines and for Performance Indicators*
- *Task Four: Obtain Input from Each of the Ten University of Hawaii Campuses*
- *Task Five: Based on Tasks Two through Four, Develop Funding Formula*
- *Task Six: Develop Performance Measures*
- *Task Seven: Develop Options and Recommendations*
- *Task Eight: Prepare Reports*

The consultant met with the Task Force to reach consensus on guiding principles to evaluate any funding models and any performance measures. **Exhibits 1 and 2** display the guiding principles recommended by the consultant to the Task Force for evaluating any funding formula or set of performance measures.

Act 188 includes some guiding principles for the University of Hawai'i System:

- *Recognize the unique missions and roles of the campuses;*
- *Recognize the higher education needs of the State;*
- *Be equitable;*
- *Be consistent;*
- *Be responsive to changes;*
- *Recognize needs of students with special needs;*
- *Recognize students enrolled in programs that address the major workforce needs of the State;*
- *Include an incentive and performance component;*
- *Be used as a basis for planning;*
- *Provide for accountability; and*
- *Be as simple and transparent as possible.*

# **EXHIBIT 1** **DESIRED CHARACTERISTICS OF A FUNDING FORMULA OR GUIDELINE**

Characteristic	Summary Description
<b>A. Equitable</b>	The funding formula should provide both <b>horizontal equity</b> (equal treatment of equals) and <b>vertical equity</b> (unequal treatment of unequals) based on size, mission and growth characteristics of the institutions.
<b>B. Adequacy-Driven</b>	The funding formula should determine <b>the funding level needed</b> by each institution to fulfill its approved mission.
<b>C. Goal-Based</b>	The funding formula should incorporate and <b>reinforce the broad goals of the state</b> for its system of colleges and universities as expressed through approved missions, quality expectations and performance standards.
<b>D. Mission-Sensitive</b>	The funding formula should be based on the recognition that <b>different institutional missions</b> (including differences in degree levels, program offerings, student readiness for college success and geographic location) require different rates of funding.
<b>E. Size-Sensitive</b>	The funding formula should reflect the impact that relative levels of student enrollment have on funding requirements, including <b>economies of scale</b> .
<b>F. Responsive</b>	The funding formula should <b>reflect changes in institutional workloads and missions</b> as well as <b>changing external conditions</b> in measuring the need for resources.
<b>G. Adaptable to Economic Conditions</b>	The funding formula should have the <b>capacity to apply under a variety of economic situations</b> , such as when the state appropriations for higher education are increasing, stable or decreasing.
<b>H. Concerned with Stability</b>	The funding formula <b>should not permit shifts in funding levels to occur more quickly than</b> institutional managers can reasonably be expected to respond.
<b>I. Simple to Understand</b>	The funding formula should <b>effectively communicate</b> to key participants in the state budget process how changes in institutional characteristics and performance and modifications in budget policies will affect funding levels.
<b>J. Adaptable to Special Situations</b>	The funding formula should include provisions for supplemental state <b>funding for unique activities</b> that represent significant financial commitments and <b>that are not common</b> across the institutions.
<b>K. Reliant on Valid &amp; Reliable Data</b>	The funding formula should rely on <b>data that are appropriate</b> for measuring differences in funding requirements and <b>that can be verified</b> by third parties when necessary.
<b>L. Flexible</b>	The funding formula should be used to <b>estimate funding requirements</b> in broad categories; it is not intended for use in creating budget control categories.
<b>M. Incentive-Based</b>	The funding formula should provide <b>incentives for institutional effectiveness and efficiency</b> and should not provide any inappropriate incentives for institutional behavior.
<b>N. Balanced</b>	The funding formula should achieve a <b>reasonable balance among the sometimes competing requirements</b> of each of the criteria listed above.

**EXHIBIT 2**  
**GUIDING PRINCIPLES FOR DEVELOPING AND ESTABLISHING**  
**INSTITUTIONAL PERFORMANCE INDICATORS**

<b>Guiding Principle</b>	<b>Definition</b>
<b>Credibility</b>	The performance indicators should have internal and external credibility among all institutional stakeholders.
<b>Linkage to Mission, Strategic Plan, and Policy Goals</b>	The performance indicators should incorporate and reinforce institutional missions and strategic plans, as well as broad policy goals.
<b>Stakeholder Involvement and Consensus</b>	The performance indicators should be developed through negotiation and consensus among key stakeholders.
<b>Simplicity</b>	The performance indicators should be simple to convey and broadly understood.
<b>Reliant on Valid, Consistent, and Existing Information</b>	The performance indicators should be based on data that are valid and consistent and that can be verified by third parties when necessary. The indicators should also be based on established data sources <u>where possible</u> in order to maximize credibility and minimize additional workload.
<b>Recognizes Range of Error in Measurement</b>	The performance indicators should be established with wide recognition that there are certain unavoidable ranges of error in any performance measurement activity.
<b>Adaptable to Special Situations</b>	The system of performance indicators should accommodate special institutional circumstances where possible.
<b>Minimizes Number of Indicators</b>	The performance indicators chosen should be kept to the smallest number possible in order to minimize conflicting interactions among the indicators and to maximize the importance of each indicator.
<b>Reflects Industry "Standards" and "Best Practices"</b>	The performance indicators chosen should reflect "industry" norms and standards where possible in order to allow for benchmarking and peer comparisons.
<b>Incorporates Input, Process, Output, and Outcomes Measures</b>	The performance indicator system developed should have a balance of measures related to institutional inputs, processes, outputs, and outcomes.
<b>Incorporates Quantitative and Qualitative Measures</b>	The performance indicator system developed should incorporate both quantitative and qualitative measures in order to present the most complete picture of institutional performance possible.

The process for developing and establishing a system of performance indicators is unique to every enterprise; however, the consultant believes that all 11 of these principles need to be considered during this process to ensure a successful and effective outcome.

These 11 guiding principles have a number of corollaries that should be considered as well:

- The expectations for institutional performance should be clearly understood and stated at the outset. *Organizations can only "improve" if there is an understanding of the priorities for organizational performance. Clearly, the priorities should grow out of organizational mission and goals, however it is important that these be understood and agreed to by key participants at the beginning of the process.*
- The starting place for institutional performance measurement and benchmarks for success varies among institutions. *Because each institution operates within its own context, the beginning point for institutional performance measurement will also vary depending on the specific performance indicator. Using "graduation rate" as an example, one institution may be at 45 percent for a six-year graduation rate while another may be at 85 percent. Because these types of variances can be due to a variety of potentially valid reasons, no value judgment should automatically be attached.*
- Performance measures should not be developed only with available data systems in mind. *Implementing a system of institutional performance measurement requires data to be available. In fact, most institutions develop performance measures with this in mind. This practice has both positive and negative consequences. The ability to work with existing data systems reduces the start-up time and cost to implement a performance indicator system. It also improves the comfort level of those involved, and thus the credibility of the process. On the other hand, limiting an institution's performance measures according to data availability may not result in the most appropriate or meaningful set of measures in the long run. Thus, notwithstanding the benefits of using existing data systems, the development of performance measures should recognize the current availability of data where appropriate, but should be primarily driven by the questions "what are we trying to measure?", and "why?"*
- "Continuous improvement" is not infinite. *A related issue that must be dealt with in establishing performance measurement mechanisms is the fact that the rate of "improvement" in any given area is non-linear. Institutions may be able to make great strides toward improving certain operational or programmatic areas initially, but then come to a standstill. Or, an institution may move forward in another area and then falter for a period of time. In short, it is important to realize that the process of enhancing institutional performance is imprecise at best and that to expect institutions to "continuously improve" is unrealistic.*

Perhaps the greatest challenge in designing a performance indicator system is to achieve some level of balance among all of these competing, and sometimes contradictory, principles. Again, no one of these principles is more important than the others. Rather, it is important that all be

Act 188 set out a set of principles that are among those listed above:

- Recognize the unique missions and roles of the campuses;
- Recognize the higher education needs of the State; and
- Be as simple and transparent as possible.

The Task Force also was provided background or briefing papers on the national use of funding formulas and performance measures, which are attached as **Appendix A** and **Appendix B**. The University of Hawaii provided data on current and historical levels of funding, FTE enrollment, historical enrollment growth, future enrollment growth, enrollment mix, gross square feet of facilities, utilities costs, enrollment by credit hour by level of enrollment and by discipline, and other factors.

### **COMPARISONS TO PEERS OR BENCHMARKS**

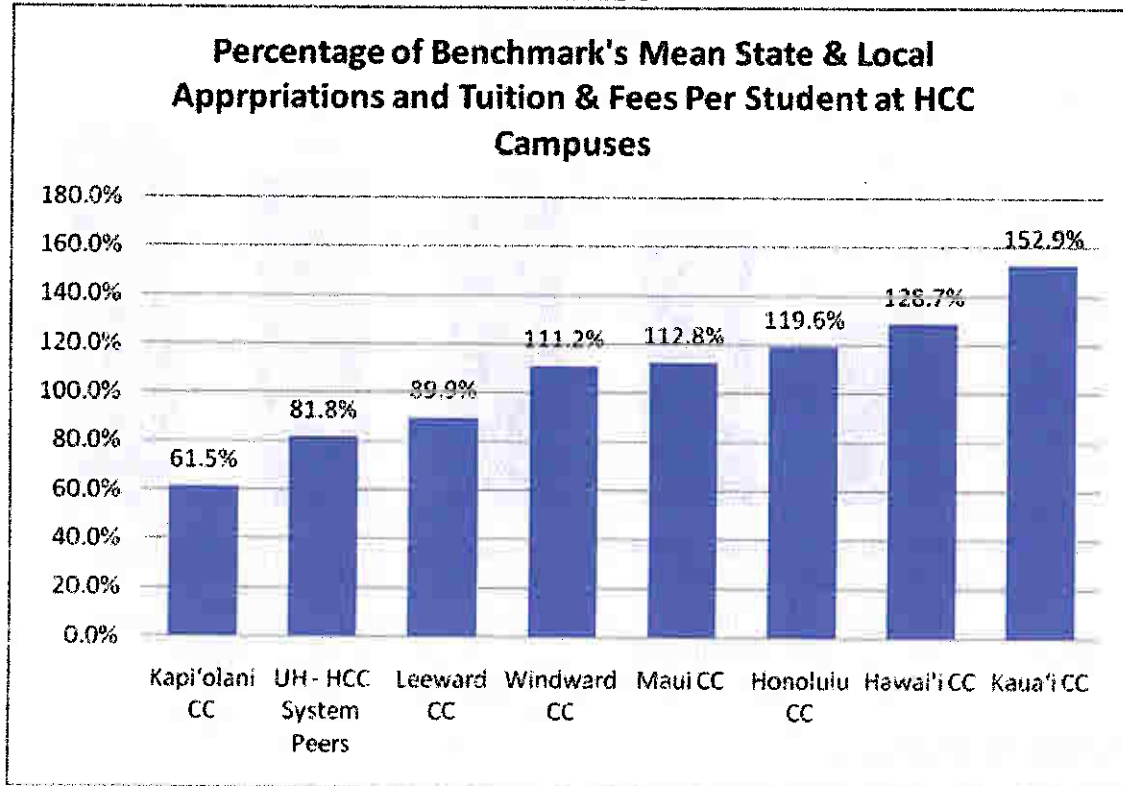
Additionally data were collected on the peer or benchmark institutions for the ten campuses and comparisons were made of the funding levels at the Hawaii campuses to those of their peers or benchmarks. Those comparisons were shared with the chancellors of each of the campuses, their executive staff, and the Task Force. The comparisons are shown in **Appendix C**.

The comparisons to peer institutions and to benchmarks showed the following for the ten campuses:

- The University of Hawaii at Manoa is below its peers and its benchmarks in funding from appropriations and tuition and fees per student.
- The University of Hawaii at Hilo is equal to or above its peers and benchmarks in funding from appropriations and tuition and fees per student.
- The University of Hawaii at West Oahu is below its peers in funding from appropriations and tuition and fees per student.
- The University of Hawaii community colleges, as a group are below its benchmarks in funding from appropriations and tuition and fees per student.
- Hawaii Community College is above its peers in funding from appropriations and tuition and fees per student.
- Honolulu Community College is above its peers in funding from appropriations and tuition and fees per student.
- Kapi'olani Community College is below its peers in funding from appropriations and tuition and fees per student.
- Kaua'i Community College is above its peers in funding from appropriations and tuition and fees per student.
- Leeward Community College is below its peers in funding from appropriations and tuition and fees per student.
- Maui Community College is above its peers in funding from appropriations and tuition and fees per student.
- Windward Community College is above its peers in funding from appropriations and tuition and fees per student.

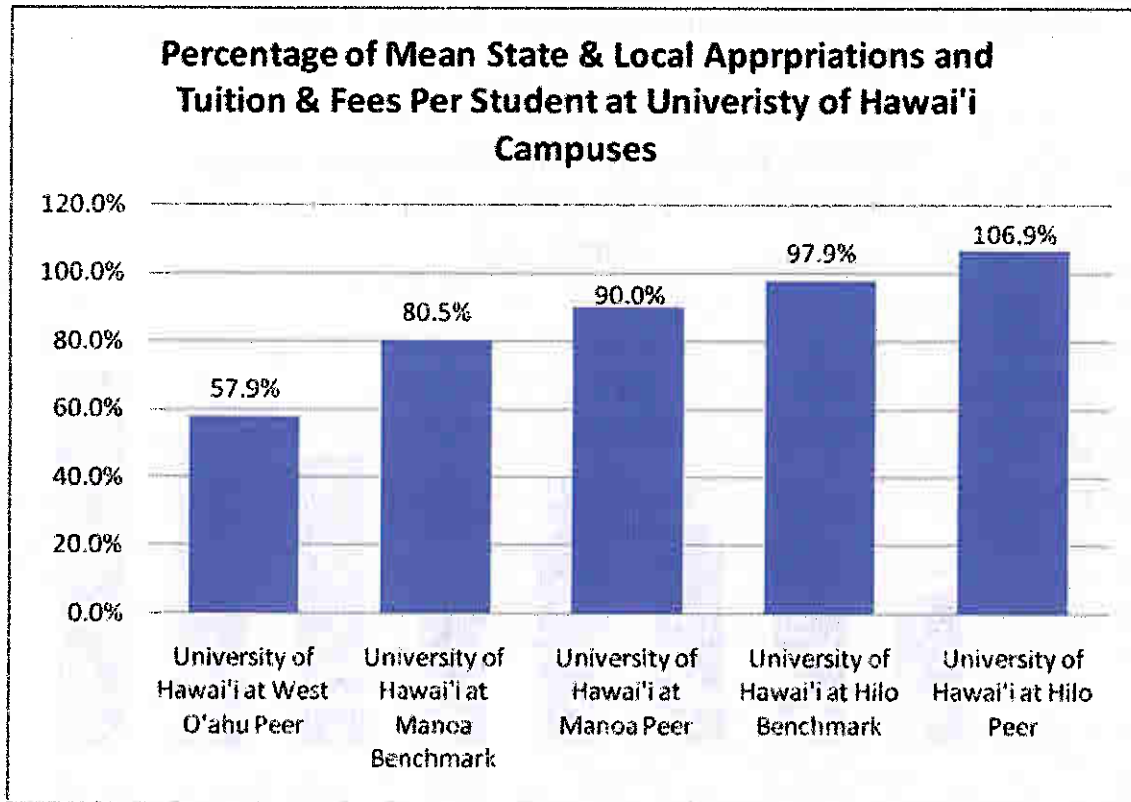
If the comparisons to the peers or benchmarks were to be used as a measure of adequate funding, only Manoa, West Oahu, Kapi'olani, and Leeward would be considered to be underfunded. These data are shown graphically in Exhibits 3 and 4.

**EXHIBIT 3**





#### EXHIBIT 4



#### FUNDING FORMULA

In developing the potential formula for the University of Hawai'i, the consultant considered the funding mechanisms used by other states to establish some basis for a funding mechanism. Because the ten campuses of the University of Hawai'i System are not a sufficiently large enough "sample" upon which to run regression analysis, the funding mechanisms developed by other states was used as the basis for a funding formula.

Therefore, costing studies done by Texas, Illinois, North Carolina, and South Carolina were used as the basis for weighting factors to assign to the various disciplines (architecture, business, education, health professions, engineering, etc.) and levels of instruction (freshmen and sophomore, junior and senior, masters level, doctoral, and professional). Using weights that recognize the costs of providing credit hours, the number of weighted credit hours and the cost of those hours for each of the ten campuses were calculated. These data are shown in **Exhibit 5**.

**EXHIBIT 5**  
**COST PER WEIGHTED CREDIT HOUR, 2006-07**

University of Hawaii - Manoa	\$888.22
University of Hawaii - Hilo	\$390.58
University of Hawaii - West O'ahu	\$516.73
Hawaii Community College	\$181.23
Honolulu Community College	\$190.88
Kapiolani Community College	\$151.51
Kauai Community College	\$321.46
Leeward Community College	\$144.37
Maui Community College	\$256.59
Windward Community College	\$239.14
Community College Average	\$184.28

Weighted credit hours are credit hours by discipline by level times a weight determined by the "average price" of producing the credit hours. "Average price" is based on a 2006-07 study of the costs in Texas. "Cost" was calculated as the total 2006-07 operating expenditures, minus auxiliaries, minus independent operations, and minus depreciation, as reported to IPEDS.

If expenditures were equal among the campuses, then the weighted credit hour cost for each of the campuses should be equivalent. However, the costs varied from \$888.22 at Manoa to \$144.37 at Leeward Community College. The costs at the community college campuses are relatively equal except for Kauai Community College which is too small to take advantage of economies of scale. Costs at the four-year campuses are greater because the total costs include the costs/expenditures for research and public service. This means that the expenditures related to providing services for cooperative extension, land grant, sea grant, and space grant functions are included in the total costs, although those costs are not related to credit hours.

The consultant examined formulas used by other states, and the requirements of Act 188. Given the requirements of Act 188, the consultant recommended that the following factors should be included in a funding formula:

- 1) a factor related to the base cost of higher education, that is, what costs are necessary once a decision is made to have a college whether it is Kauai Community College or UH-Manoa. Included in this factor would be fixed administrative costs.
- 2) a factor related to the credit hours generated by the students. This factor is a measure of full-time equivalent student enrollment but includes not just the cost of instruction but also the related costs associated with student services, library services, and other support driven by higher enrollments. The factor would

account for the fact that different levels of students have different costs – graduate and professional programs cost more than undergraduate, science classes cost more than history classes, technical classes cost more than liberal arts. The factor would account for the mix of levels, programs, and students at the various campuses. The factor would also be designed to take into account enrollment trends and not react too quickly to sudden shifts in enrollment.

- 3) a factor related to contact hours generated by students who do not earn credit. Examples are apprenticeship students, Employment Training Center students, and construction academy students.
- 4) a factor related to the number of native Hawaiian students enrolled.
- 5) a factor related to the number of Pell Grant recipients as a proxy for how well the campuses are serving low-income students.
- 6) a factor related to the headcount of students. While credit hours or contact hours are the best measure of costs in some areas, certain costs are the same whether a student is taking one class or four classes. This factor accounts for that impact.
- 7) a factor related to the Gross Square Footage of the campus. This factor is related to the operations and maintenance of the space, including utility costs. The costs associated with construction or repair and maintenance are not part of the formula.
- 8) a factor related to the level of extramurally funded research.
- 9) a factor related to the amount of general funded public service activity such as agriculture extension agents or the Imiloa science center.
- 10) a factor related to performance in reaching the identified strategic outcomes – student graduation and transfer rates, meeting State workforce needs, more STEM graduates, etc.

The formula would take the following form:

Funding need = base + a times weighted credit hours + b times weighted contact hours + c times number of Native Hawaiian students + d times number of Pell grant recipients + e times headcount students + f times gsf + utilities allowance + g times outside research funding + h times public service funding + incentive or performance funding + j per FTE in nursing, health, teacher education, and STEM programs.

In the formula, the base is equal to the amount needed to have a campus, including the chief executive officer, chief financial officer, chief academic officer, accountant, registrar, financial aid officer, counselor, human resources officer, custodian, physical

plant director, support staff (i.e. secretary or receptionist), and chief information officer. The base may be referred to as the fixed costs.

Weighted credit hours are equal to the sum of the hours by level and discipline, weighted by the varying costs of providing these hours; further, the sum is equal to ( .25 times the credit hours for last year+ .5 times the budgeted number of credit hours current year + .25 times the projected number of credit hours next year). And with special weights for those credit hours in programs that meet the workforce needs of the state, such as nursing, teaching, or STEM disciplines. The base is inflated by the cost of living in Hawaii over the cost on the mainland.

The weighted credit hour factor is a measure of full-time equivalent students, and considers past and future enrollment by averaging the past, current, and following years' credit hours. Discipline hours are weighted by the average cost to produce the credit hour, using cost studies in Texas and Illinois. Also, the weighted credit hour cost is inflated by the cost of living in Hawaii.

Weighted contact hours are equal to the sum of the apprenticeship and non-credit hours, ( .25 times the number of contact hours last year+ .5 times the budgeted number of contact hours current year + .25 times the projected number of contact hours next year);, where provision of these classes is part of mission.

Number of native Hawaiian students is as reported to the System;

Number of Pell grant recipients is as reported by the System; this is a proxy measure for students with special needs.

Headcount students are equal to the sum of ( .25 times the number of students registered last year+ .5 times the budgeted number of students current year + .25 times the projected number of students next year).

Gross square footage (GSF) is equal to the number of education and general gross square feet maintained on each campus.

Outside research funding is the amount of externally funded research, where research is a part of mission.

Public service funding is the amount of special public service, as required by mission.

Incentive or performance funding is equal to a maximum of two percent of the sum of all the above.

Weights in the recommended formula are as follows:

A = \$115	G = 5% or 0.05
B = \$5.50	H = 25% or .25
C = \$75	weight for nursing: \$8,200 per FTE
D = \$2,500	weight for health: \$5,000 per FTE
E = \$102	weight for teacher ed: \$6,000 per FTE
F = \$6.85	weight for STEM: \$7,000 per FTE

In addition to funding within the formula, funding for the research and public service functions associated with the land grant, sea grant, and space grant services of the University of Hawaii should be outside the funding formula, and provided as currently with adjustments for inflation and for changes in the services provided. In most states funding formulas, these services are outside the scope of the formula, and considered "special items" in the state budget. Likewise, these programs generally receive separate appropriations that are not related to the number of full-time equivalent or headcount students. Because these functions are to meet the needs of the state, and are unrelated to student counts, any funding for the services or programs should be outside the funding formula which is related to full-time or headcount students.

In implementation of any funding formula, there are special considerations:

- the formula does not determine how much money should come to the University from the State. The formula is designed to establish what is a reasonable and equitable funding level for a campus given the mix of programs and activities. What proportion of that cost should be borne by the State, what proportion borne by the student, what proportion borne by other revenue sources is a separate question from the results of the formula. The distribution of shared cost is not likely to be the same for the Manoa campus as it is for the baccalaureate campuses or for the community colleges.
- the use of the formula is a very different approach than Hawaii's current budgeting system. With a formula, the University would no longer come to the executive and the legislature with individual program change requests. For example, the University would not come to the Legislature for permission to hire a new janitor to maintain a newly constructed building but would have to make that decision internally within the allocation of the formula.
- a mechanism would have to be developed to monitor the impacts of the formula and ensure that the right actions are being rewarded and that the weights and factors are achieving established goals. The University is almost unique in the country in its complexity and creating the right formula with the right weighting and with the right incentives is likely to take some adjustments. It is also important that the introduction of a new method of funding such as a formula not be too disruptive to the on-going operations of the University.

- the Legislature could propose initiatives to the University outside the funding formula to further State objectives beyond the normal operating budget but these likely would be very focused.
- the University would be responsible to the Legislature for the achievement of the agreed upon strategic outcomes.
- consideration will need to be given on how to handle State funding that is outside the normal biennium budget process or the University budget. This includes fringe benefits and collective bargaining augmentation, which likely would be added to the formula calculations in determining state appropriations or campus needs.

## **PERFORMANCE INDICATORS OR INCENTIVE FACTORS**

As recommended, the formula includes incentives for the campuses. These incentives are related to the factors for STEM, health care, nursing, and teaching enrollments, as well as to the numbers of Pell grant enrollments and enrollments of Native Hawaiian students.

Act 188 mandates that up to two percent of funding should be based on performance or incentive funding. Based on the guiding principles discussed with the Task Force, interviews with the chancellors of each of the campuses, and Task Force conversations, the consultant recommends that the University of Hawaii system consider a two-part incentive and performance funding “pool.”

The first one percent would be based on no more than five performance indicators that are related to each campus’ specific mission within the UH System. For example, graduation rates, enrollment of native Hawaiian students could be included in the performance pool.

The second percent would be a pool awarded for addressing the state’s needs, whether that is through enrollment and completion of students in health professions, or by bringing outside research funding to the state.

These recommendations on the performance and incentive funding is based on the four different types of indicators: input, process, output, and outcome; and is linked to each campus’ mission, is simple to understand, transparent, and recognized the needs of the state.

System wide, some measures already exist, and have been reported to the Legislature.

For each campus, it is recommended that the following measures be used:

- graduation or completion rates
- retention to second year
- student satisfaction
- employer satisfaction.

To be determined are what the baseline measure is to be, and how progress is to be measured. Should the progress be against a standard, or against peers or for closing the gap between current performance and perfect performance, e.g. 100 percent graduation or completion.

Data are not available currently for all of the suggested measures – no employer satisfaction surveys currently are completed. It will take time to transition to this method of rewarding performance.

## Appendix D

### Guiding Principles in Formula/Guideline Usage

Over time, a number of researchers in the area of higher education finance have offered their concepts regarding desired characteristics in state higher education funding formulas. Frequently, what is offered as the “desired characteristic” is in direct response to a perceived shortcoming of a particular state's funding formula or guideline.

Fourteen characteristics, listed and summarized below in no particular order of importance from A to N, often tend to be in opposition to one another. For instance, the desire to have a simple-to-understand funding formula may preclude features that might contribute to a greater degree of equity (e.g., more detailed sub-categories to reflect institutional differences). Similarly, a formula that is responsive to changes in enrollment levels may not be able at the same time to provide the desired level of stability. Use of the characteristics provides an objective framework for evaluating funding policy alternatives – both during the phase of review of the current formula and in subsequent years. There will be many alternatives and options for funding formulas – an accepted, pre-established set of guiding principles provides a rationale for narrowing down this list of options.

Act 188 includes some guiding principles for the University of Hawai'i System:

- Recognize the unique missions and roles of the campuses;
- Recognize the higher education needs of the State;
- Be equitable;
- Be consistent;
- Be responsive to changes;
- Recognize needs of students with special needs;
- Recognize students enrolled in programs that address the major workforce needs of the State;
- Include an incentive and performance component;
- Be used as a basis for planning;
- Provide for accountability; and
- Be as simple and transparent as possible.



### Desired Characteristics of a Funding Formula or Guideline

Characteristic	Summary Description
A. Equitable	The funding formula should provide both horizontal equity (equal treatment of equals) and vertical equity (unequal treatment of unequals) based on size, mission and growth characteristics of the institutions.
B. Adequacy-Driven	The funding formula should determine the funding level needed by each institution to fulfill its approved mission.
C. Goal-Based	The funding formula should incorporate and reinforce the broad goals of the state for its system of colleges and universities as expressed through approved missions, quality expectations and performance standards.
D. Mission-Sensitive	The funding formula should be based on the recognition that different institutional missions (including differences in degree levels, program offerings, student readiness for college success and geographic location) require different rates of funding.
E. Size-Sensitive	The funding formula should reflect the impact that relative levels of student enrollment have on funding requirements, including economies of scale.
F. Responsive	The funding formula should reflect changes in institutional workloads and missions as well as changing external conditions in measuring the need for resources.
G. Adaptable to Economic Conditions	The funding formula should have the capacity to apply under a variety of economic situations, such as when the state appropriations for higher education are increasing, stable or decreasing.
H. Concerned with Stability	The funding formula should not permit shifts in funding levels to occur more quickly than institutional managers can reasonably be expected to respond.
I. Simple to Understand	The funding formula should effectively communicate to key participants in the state budget process how changes in institutional characteristics and performance and modifications in budget policies will affect funding levels.
J. Adaptable to Special Situations	The funding formula should include provisions for supplemental state funding for unique activities that represent significant financial commitments and that are not common across the institutions.

K. Reliant on Valid & Reliable Data	The funding formula should rely on data that are appropriate for measuring differences in funding requirements and that can be verified by third parties when necessary.
L. Flexible	The funding formula should be used to estimate funding requirements in broad categories; it is not intended for use in creating budget control categories.
N. Incentive-Based	The funding formula should provide incentives for institutional effectiveness and efficiency and should not provide any inappropriate incentives for institutional behavior.
N. Balanced	The funding formula should achieve a reasonable balance among the sometimes competing requirements of each of the criteria listed above.

## Appendix E

### PRINCIPLES FOR ACCOUNTABILITY MEASURES

The driving force behind any performance-based funding model is the desire to establish a formal link between institutional performance and funding received. These are ultimately translated into a system of performance indicators on which the allocation is based.

The concept of what is a "best practice" in measuring the performance of higher education institutions continues to evolve. However, there are a number of guiding principles that are generally accepted as "good practice" in the development of institutional performance measurement mechanisms. Exhibit 1 outlines 11 guiding principles that are presented in no particular order of importance. The process for developing and establishing a system of performance indicators is unique to every enterprise; however, we believe that all 11 of these principles need to be considered during this process to ensure a successful and effective outcome.

These 11 guiding principles have a number of corollaries that should be considered as well:

- The expectations for institutional performance should be clearly understood and stated at the outset. Organizations can only "improve" if there is an understanding of the priorities for organizational performance. Clearly, the priorities should grow out of organizational mission and goals, however it is important that these be understood and agreed to by key participants at the beginning of the process.
- The starting place for institutional performance measurement and benchmarks for success varies among institutions. Because each institution operates within its own context, the beginning point for institutional performance measurement will also vary depending on the specific performance indicator. Using "graduation rate" as an example, one institution may be at 45 percent for a six-year graduation rate while another may be at 85 percent. Because these types of variances can be due to a variety of potentially valid reasons, no value judgment should automatically be attached.

**EXHIBIT 1**  
**Guiding Principles For Developing And Establishing**  
**Institutional Performance Indicators**

Guiding Principle	Definition
Credibility	The performance indicators should have internal and external credibility among all institutional stakeholders.
Linkage to Mission, Strategic Plan, and Policy Goals	The performance indicators should incorporate and reinforce institutional missions and strategic plans, as well as broad policy goals.
Stakeholder Involvement and Consensus	The performance indicators should be developed through negotiation and consensus among key stakeholders.
Simplicity	The performance indicators should be simple to convey and broadly understood.
Reliant on Valid, Consistent, and Existing Information	The performance indicators should be based on data that are valid and consistent and that can be verified by third parties when necessary. The indicators should also be based on established data sources <u>where possible</u> in order to maximize credibility and minimize additional workload.
Recognizes Range of Error in Measurement	The performance indicators should be established with wide recognition that there are certain unavoidable ranges of error in any performance measurement activity.
Adaptable to Special Situations	The system of performance indicators should accommodate special institutional circumstances where possible.
Minimizes Number of Indicators	The performance indicators chosen should be kept to the smallest number possible in order to minimize conflicting interactions among the indicators and to maximize the importance of each indicator.
Reflects Industry "Standards" and "Best Practices"	The performance indicators chosen should reflect "industry" norms and standards where possible in order to allow for benchmarking and peer comparisons.
Incorporates Input, Process, Output, and Outcomes Measures	The performance indicator system developed should have a balance of measures related to institutional inputs, processes, outputs, and outcomes.
Incorporates Quantitative and Qualitative Measures	The performance indicator system developed should incorporate both quantitative and qualitative measures in order to present the most complete picture of institutional performance possible.

- Performance measures should not be developed only with available data systems in mind. Implementing a system of institutional performance measurement requires data to be available. In fact, most institutions develop performance measures with this in mind. This practice has both positive and negative consequences. The ability to work with existing data systems reduces the start-up time and cost to implement a performance indicator system. It also improves the comfort level of those involved, and thus the credibility of the process. On the other hand, limiting an institution's performance measures according to data availability may not result in the most appropriate or meaningful set of measures in the long run. Thus, notwithstanding the benefits of using existing data systems, the development of performance measures should recognize the current availability of data where appropriate, but should be primarily driven by the questions "what are we trying to measure?", and "why?"
- "Continuous improvement" is not infinite. A related issue that must be dealt with in establishing performance measurement mechanisms is the fact that the rate of "improvement" in any given area is non-linear. Institutions may be able to make great strides toward improving certain operational or programmatic areas initially, but then come to a standstill. Or, an institution may move forward in another area and then falter for a period of time. In short, it is important to realize that the process of enhancing institutional performance is imprecise at best and that to expect institutions to "continuously improve" is unrealistic.

Perhaps the greatest challenge in designing a performance indicator system is to achieve some level of balance among all of these competing, and sometimes contradictory, principles. Again, no one of these principles is more important than the others. Rather, it is important that all be considered during the design and implementation of the system.

Act 188 set out a set of principles that are among those listed above:

- Recognize the unique missions and roles of the campuses;
- Recognize the higher education needs of the State; and
- Be as simple and transparent as possible.