HIGHER EDUCATION COORDINATING COMMISSION

FUNDING AND ACHIEVEMENT SUBCOMMITTEE
June 4, 2015

Docket Item:

ETIC Sustaining Funds Transition and Allocation Determination Process

Summary:

Under both current and proposed legislation and as part of the larger transition taking place in higher education in Oregon, the HECC will be taking charge of much of the funding historically associated with the Engineering Technology Industry Council (ETIC). These funds are referred to as "Sustaining Funds" and are described in detail below. The following briefly summarizes the genesis in 1997 of ETIC and its more recent re-visioning and transition process. As the HECC is required to act by rule when allocating funds appropriated by the Legislative Assembly, this document describes a potential process and timeline by which HECC staff will engage stakeholders and develop Administrative Rules (OARs) for allocating these funds. This includes a short-term process, in which OARs will be adopted for the allocation of funds for 2015-16, and a longer-term process, which will determine funding allocation methodology for the subsequent fiscal year and beyond.

ETIC Background

The Creation – SB 504

In 1997, the Oregon Legislature recognized that a growing high technology cluster was developing in the state of Oregon and particularly in the Portland metro area. This cluster required additional engineering and computer science talent to thrive. As a result, the 1997 Legislature passed SB 504[1], which created the Oregon Engineering Investment Fund and charged the State Board of Higher Education (SBHE) with establishing the Engineering Technology Industry Council (ETIC). The majority of the Council was to be composed of representatives from high technology companies in Oregon and was to be consulted on work plans and resource allocations for engineering education by the SBHE.

For ETIC's initial biennium (1997-1999) SB 504 provided significant direction to the SBHE. Specifically, the SBHE was to focus on four primary areas: (1) investments in building faculty and program capacity in the Portland area in relevant graduate level and professional education domains for workers already in the high technology industry; (2) enhance program capacity and through strategic collaboration with the Oregon Graduate Institute; (3) strengthen programs in community colleges for training skilled technicians, and (4) strengthen and expand technology programs offered through Oregon Institute of Technology

On a go-forward basis SB 504 required ETIC to establish a set of criteria by which funding allocation decisions were to be made.

[1] Senate Bill 504." <http://static1.squarespace.com/static/53c045f4e4b03089bf3f98c0/t/53d7dbe0e4b0b94401a25a17/1406655456643/SB504.pdf>

These included the following;

(a) Responding to the urgent engineering educational needs of Oregon's fast growing high technology industry, especially in the Portland metropolitan area.
(b) Increasing this state's faculty and program capacity to meet the graduate level, professional education needs of engineers working in Oregon's high technology industry through investments in public and private institutions.
(c) Creating additional opportunities for Oregonians to pursue education in electrical engineering, computer engineering and other engineering disciplines critical to the advancement of Oregon's high technology industry.
(d) Investing relatively scarce state financial resources to:
  (A) Address the high technology industry's most demonstrated and pressing needs;
  (B) Produce the greatest amount of educational benefits with the least short-term and long-term costs to the public;
  (C) Avoid duplicating existing public or private resources; and
  (D) Leverage existing and future private resources for the public benefit.
  (E) Making all investments in public and private institutions through performance-based contracts with measurable outcomes in order to ensure strong linkage between the most urgent engineering education needs and implemented solutions.
  (F) Maximizing the leverage of state investment funds to build faculty and program capacity and share existing and new faculty and program resources.

However, over time allocations came to be made on the basis of historic allocation levels and were less actively managed by the Council.

The ETIC Council set aggressive goals to develop engineering and technology education in Oregon as a pipeline to support a thriving technology and innovation economy in Oregon. In effect, the ETIC Council intended for its work to serve as the soil for Oregon's "Silicon Forest." These goals included doubling the number of engineering and technology graduates and increasing research revenues five-fold. Despite the dot.com bubble's collapse and rapid disinvestment by the state, with ETIC's support the seven public universities increased total degree production in engineering and technology fields by 54%, from 1,174 in 1999 to 1,813 in 2013. Total research expenditures at the seven public universities doubled from the inception of ETIC during the period[2]. By 2013, ETIC was supporting well over 70 faculty FTE at six of the seven public universities. The remaining university, the University of Oregon, treated ETIC funding as grant or project driven funding and not direct tied with faculty lines.

Support from ETIC delivered significant results in terms of educational and research capacity and supported faculty lines for well over a decade. This base capacity support has become an integral portion of many institutions ability to offer engineering programs and manage long-term research programs.

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[2] See Research Expenditures in Fiscal Year 1997 in "Oregon State System of Higher Education Annual Financial Statements." <http://www.ous.edu/sites/ous.edu/files/cont-div/reports/fy1997afs.pdf> and Research Expenditures in Fiscal Year 2013 in "Oregon University System: 2013 Annual Financial Report." <http://www.ous.edu/sites/ous.edu/files/cont-div/annual_financial_reptg/fy2013_ous_afs.pdf>

ETIC Restructuring

In 2013. the Council released a report entitled *ETIC: Renaissance – Mission and Strategy*[3] which reviewed the progress and results of ETIC investments from its inception up to 2013 and described a new strategic approach. This was done during a time of great structural reform within the Oregon University System, and higher education in Oregon more broadly, which eventually resulted in the dissolution of the University System and the creation of seven independent public universities and the Higher Education Coordinating Commission.

This "renaissance" effort recognized that the ETIC and ETIC funding had accomplished much through its 15 year history, but also began to shift the conversation to a more active Council-driven investment concept. The ETIC report envisioned a movement from "long term operational or base funding," which ETIC funding had become at many institutions, towards an "outcomes-driven funding model" which "invested in value" and focused on linkages between quality, student outcomes and industry needs.

ETIC Transition

Beginning in 2011 and culminating in the 2013, the Oregon Legislature initiated a set of comprehensive reforms encompassing all aspects of higher education in Oregon[4]. As a result of this effort, the three public research universities in Oregon (Oregon State University, Portland State University and the University of Oregon) would form independent governing boards separate from the OUS effective July 1, 2014. Subsequent legislation accelerated the timeframe by which the Technical and Regional Universities (TRU's) would form independent governing boards separate from the SBHE[5]. The ETIC Council, recognizing that the SBHE would no longer represent all public universities in Oregon, advocated legislation that would shift the Council to a more broadly-focused entity. This effort resulted in ETIC and its associated funding moving from under the auspices of the SBHE to the OEIB, and subsequently to the HECC due to provisions which sunset the OEIB[6]. Through this newly-enacted reporting structure ETIC would make funding recommendations to the OEIB for the 2014-15 Fiscal Year. Upon the OEIB sunset in March of 2016, ETIC and ETIC funds were slated to shift to the HECC.

In May, 2014, ETIC issued a report through the SBHE to the OEIB which outlined the transition and strategy of a restructured ETIC[7]. The process which led to the "ETIC Renaissance" report represented the

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[3] "ETIC: Renaissance: Mission and Strategy." (http://static1.squarespace.com/static/53c045f4e4b03089bf3f98c0/t/53d97f53e4b0bc3ea21c1d29/1406762835584/ETIC+Renaissance-+Mission+and+Strategy.pdf)

4 "Senate Bill 242 (2011)." <https://olis.leg.state.or.us/liz/2011R1/Downloads/MeasureDocument/SB242/Enrolled> . "Senate Bill 270 (2013). <https://olis.leg.state.or.us/liz/2013R1/Downloads/MeasureDocument/SB270/Enrolled>, and "House Bill 3120 (2013). <https://olis.leg.state.or.us/liz/2013R1/Downloads/MeasureDocument/HB3120/ Enrolled>.

[5] "House Bill 4018 (2014)." <https://olis.leg.state.or.us/liz/2014R1/Downloads/MeasureDocument/HB4018/Enrolled>

[6] "House Bill 4020 (2014)." <https://olis.leg.state.or.us/liz/2014R1/Downloads/MeasureDocument/HB4020/Enrolled>

[7] "ETIC: Transition Report." <http://static1.squarespace.com/static/53c045f4e4b03089bf3f98c0/t/55395dc8e4b02b8e3a3c817d/142

culmination of significant information collection and analysis and fed into subsequent efforts to identify and propose methods by which funding allocations could be better matched with ETIC's mission and create greater value for the state. This effort was intended to accomplish a "strategic restructuring" which would rebalance the portfolio of funded initiatives, emphasize outcomes and build a more transparent and rationalized funding model which would persist into the future. This restructuring resulted in a bifurcated funding system including a "Renewable Funds" and "Sustaining Funds." The Renewable Fund would solicit campus proposals and award funding on a single or multi-year basis with reporting expectations and funding contingent upon demonstrated progress towards independent, and sustaining financing. Independent financing could include tuition, state funding and non-Renewable ETIC funding. Sustaining Funds were designed to assist institutions in launching initiatives which serve current labor force and industry needs and nurture them from concept to scale. The Sustaining Fund would be based off of external metrics which link funding levels to desired outcomes instead of historical allocation levels. This funding source would provide relatively stable and predictable funding, after a phase-in period, while linking to relevant university outcomes. Taken together, Renewable Funds served the purpose of initiating programs and assisting them to reach viable scale; while Sustaining Funds rewarded programs once they reached scale for meeting industry needs.

During Fiscal Year 2015, the OEIB, acting on ETIC's recommendation[8], split funding into two separate tranches, Renewable Funding and Sustaining Funding. Renewable Fund investments were vetted by ETIC and recommended by the Council to the OEIB in accordance with the strategy outlined above. Sustaining Funds, which make up the bulk of historic ETIC allocations, were however carried forward historic appropriation levels which were designed to provide "on-going faculty support that cannot be removed without jeopardizing graduate production[.]"

Much work has been undertaken by ETIC Members and staff with engagement from various constituencies to develop an outcomes-driven funding model. This model was based on labor force outcomes aligned with a strategic focus on "Oregon students placed in Oregon jobs." This framework is designed to link Sustaining Funding to labor force outcomes of Oregon resident graduates and would be available to all public universities regardless of historic funding allocations.

There is an inherent tension between sustaining "on-going faculty support that cannot be removed without jeopardizing graduate production" and shifting a funding model from to a formula driven approach which recognizes current productivity and labor force demand. Different stakeholders have expressed differing opinions on the efficacy of such a shift. This model was not adopted by the OEIB for the 2014-15 allocation. Efforts continued through the fall of 2014 and beyond to refine adjustments to the ETIC's proposed Sustaining Funding allocation model.

9822920925/ETIC+Transition+Report+v1.0.pdf>. and "Issue Brief… Transitioning ETIC." <http://static1.squarespace.com/static/53c045f4e4b03089bf3f98c0/t/53d97439e4b0e7d7b30412a0/1406759993759/ETIC_TransitionIssueBri ef_May2014.pdf>

[8] "Oregon Education Investment Board Agenda: January 13, 2015. <http://education.oregon.gov/Documents/archive/OEIBJan2015matsFINAL.pdf>

<u>The HECC's Role</u>

Policy packages included within the OEIB and HECC's 2015-17 Governor's Recommended Budget (GRB)[9] split ETIC funding from a single line item within the OEIB to a system in which the OEIB retains the Council and actively managed Renewable Funds and formula driven Sustaining Funds which will be allocated by the HECC. If approved by the Legislature, Sustaining Funding will be in the State Programs line. HECC's authorizing legislation require the adoption of "rules governing the distribution of appropriations from the Legislative Assembly[.][10]" This is applicable to Sustaining Funds shifting from the OEIB to HECC. If the allocation total as included in the GRB and in the Co-Chair's Budget Framework[11] is approved by the Legislature in 2015 this Sustaining Funding will be approximately $24.5 million for the upcoming biennium.

In order to allocate these funds the HECC must adopt an Administrative Rule (OAR). In order for an OAR to be developed, staff has undertaken a process to convene stakeholders and establish a framework agreement on a short-term and a long-term path forward. A recommended emergency OAR will be developed by staff for approval by the Commission at its August meeting to begin allotting of funds in September of 2015 for Fiscal Year 2016.

A draft document outlining deliverables, goals, processes and targeted timeline has been developed for discussion by the Funding and Achievement Subcommittee and is appended to this document. This staff led process will first seek to develop broad agreement for Fiscal Year 2015-16 and move forward with a more comprehensive process to review and propose a long-term funding model for Sustaining Fund appropriations. The workgroup will be assisted by Commissioner Kirby Dyess, who has unique institutional history in regards to the universities unique research portfolio and engineering education capacity. Recommendations of the workgroup will be made to the HECC's Executive Director or designee. In order to be successful, the long-term funding model must recognize the work and direction provided by ETIC Members and staff, their university partners, as well as the inherent tension between changes in a funding model and institution's long-term investments in faculty and educational capacity.

Staff Recommendation:

No action is required at this time.

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[9] Governor's Recommended Budget 2015-17." <http://www.oregon.gov/DAS/CFO/docs/budget_policy/201517_gb.pdf>

[10] Oregon Revised Statutes (2014) 251.735(3)(d) (as amended by SB 1525). <https://olis.leg.state.or.us/liz/2014R1/Downloads/MeasureDocument/SB1525/Enrolled>

[11] "Co-Chairs' Budget Framework 2015-17." <https://www.oregonlegislature.gov/lfo/Documents/2015-17%20Co-Chair%20Budget%20Framework.pdf>

Appendix I: Sustaining Funds Allocation Recommendation Process

Applicability:

A workgroup will be convened by HECC staff consisting of institutional and industry stakeholders to recommend to the HECC Executive Director, or designee, an allocation model for funds appropriated by the Legislative Assembly to the HECC for Sustaining Funds. This recommendation will include separately allocations for Fiscal Year 2015-16 and for Fiscal Year 2016-17 and beyond.

Context:

- Historical investments by institutions in their education and research capacity given ETIC's long-standing allocation philosophy
- Multi-year process by which ETIC has engaged universities and stakeholders in restructuring funding model
- HECC goal of focusing investments in student centered approach and industry demand for growth and quality in programs which are directly linked to industry needs

Goals:

- Establish Fiscal Year 2015-16 Sustaining Funding allocation
- Execute a process which engages stakeholders, including industry representatives and universities which results in the development of a long-term allocation model for Sustaining Funding
- This long-term allocation model must:
    - Rationalize funding allocations
    - Align investment of Sustaining Funds in order to reward tight coupling of university programs and graduates with labor force needs
    - Recognize and respect past processes, discussions, and efforts ETIC has engaged in with institutions as well as historic funding and expectations which resulted in long-term investments in faculty capacity by institutions

Principles:

- The allocation model will reflect the principles and priorities embedded in the strategic plan of the HECC
- The allocation model will effectively link Sustaining Funding with industry and labor force needs over the short and long-term

- The allocation model will recognize allocation history and program capacity in core engineering and technology related disciplines and legislative intent as expressed in SB 504 (1997) which created ETIC
- The allocation model will prioritize clarity and simplicity where possible
- The allocation model will use data that is clearly defined and currently available
- The allocation model will be phased-in, starting with the 2016-17 Fiscal Year

Action and Deliverable:

HECC staff will a) convene a workgroup of institutional stakeholders to review prior work and develop recommendation to be submitted to HECC's Executive Director, or designee, for Fiscal Year 2015-16 Sustaining Funding allocation on an institution by institution basis, and b) convene a workgroup of institutional and industry stakeholders to develop a recommendation to be submitted to HECC's Executive Director, or designee, for a funding allocation model for Sustaining Funding beginning with Fiscal Year 2016-17 and continues into the future that meets the objectives outlined in the Goals and Principles sections of this document.

Target Timeline:

MAY-JUNE

- Engage stakeholders, universities and HECC Commission to establish "lay of the land," this includes:
    - Understand and educate commissioners on prior work and ETIC's historic role
    - Understand institutional positions, prior work and colleges/departmental needs
    - Understand industry (ETIC) position, prior work and perspective
- Convene initial workgroup which is tasked with developing and submitting a recommendation on Fiscal Year 2015-16 funding allocations on an institution by institution basis
- Develop framework and process for determining long-term Sustaining Funding model recommendation

JULY

- Communicate to Commission, institution and stakeholders HECC staff recommendation for Fiscal Year 2015-16 Sustaining Funds allocation
- Develop emergency OAR for approval by HECC in August for Fiscal Year 2015-16 allocations
- Begin long-term Sustaining Funds allocation model development with stakeholder workgroup

AUGUST

- HECC adoption of temporary OAR for Fiscal Year 2015-16 Sustaining Funds and begin allotments in September 2015

- Upon adoption of temporary OAR issue permanent OAR for Fiscal Year 2015-16 Sustaining Funds for comment and adoption in December 2015

AUGUST-NOVEMBER

- Engage in model development and refinement process with workgroup
- Iterate model and finalize data sources and definitions for recommendation to HECC's Executive Director, or designee

DECEMBER

- Adopt permanent Fiscal Year 2015-17 OAR with expiration at June 30, 2016
- Issue long-term Sustaining Funding OAR for public comment and subsequent adoption with effective date of July 1, 2016

Appendix II: ETIC 2011-2013 Biennium – Report as of June 30, 2013

2011-2013 Biennium - *Report as of June 30, 2013*

updated 11/6/13

Investment Summary

		PRIVATE SUPPORT ($M)		FACULTY SUPPORTED				RESEARCH EXPENDITURES ($M)		
				Existing ETIC supported positions		New ETIC Positions				
	2011-13 Biennium ETIC Investment	Biennium Goal*	Biennium Actuals 2011-13	Supported as of June 2011 (FTE)*	Actual faculty in existing positions as of June 2013 (FTE)**	New Positions Goal* for 2011-13 Biennium	New Positions Filled as of June 2013	AY13 Goal*	AY12 Actual	AY13 Actual
EOU	**0.344**	0.58	0.71	2.20	2.20	0.00	0.00	0.50	0.22	0.02
OHSU	**1.429**	2.55	4.95	9.50	9.50	2.00	1.00	19.59	16.23	14.82
OIT	**1.058**	1.93	1.64	4.00	3.00	0.00	0.00	0.375	1.336	1.18
OSU	**14.704**	24.47	30.27	44.00	37.00	2.00	0.00	35.00	38.80	36.38
PSU	**5.735**	9.61	4.66	16.40	16.24	0.00	0.00	9.00	8.95	9.50
SOU	**0.401**	0.68	2.75	2.50	1.50	0.00	0.00	0.20	0.00	0.00
UO	**2.214**	4.58	10.75	0.00	0.00	2.00	0.00	13.00	14.06	16.36
WOU	**0.566**	0.96	0.20	5.00	4.65	0.00	0.00	0.01	0.00	0.00
TOTAL	**26.451**	**45.352**	**55.93**	**83.60**	**74.09**	**6.00**	**1.00**	**77.68**	**79.60**	**78.26**

OPAS investment of .937M not included in first column

* From ETIC Plan for 2011-2013 Biennium

** Reflects actual faculty in existing ETIC-support positions supported on 6/30/13 and no vacant existing positions or new positions.

2011-2013 Biennium - *Report as of June 30, 2013*

updated 11/6/13

Metrics Data

	BACHELOR'S DEGREES GRANTED								UNDERGRADUATE STUDENT CREDIT HOURS							
	Actuals						Goals from 2011-2013 Plan		Actuals						Goals from 2011-2013 Plan	
	AY99	AY09	AY10	AY11	AY12	AY13	AY13	AY15	AY99	AY09	AY10	AY11	AY12	AY13	AY13	AY15
EOU	0	7	10	15	14	20	15	20	0	8,933	3,429	13,294	12,791	12,403	3,000	3,250
OIT	167	183	181	212	199	254	216	255	26,603	25,303	25,457	26,895	27,685	29,560	26,499	29,633
OSU	390	536	561	614	660	679	550	560	52,690	64,344	69,204	74,896	84,375	87,507	67,000	69,000
PSU	157	185	203	261	274	220	204	253	20,785	33,231	35,524	35,644	35,669	38,030	35,050	37,955
SOU	33	35	31	43	39	43	50	55	7,389	5,325	6,170	5,409	5,795	5,523	8,500	9,100
WOU	40	35	32	46	53	28	42	45	7,170	7,700	7,780	7,765	7,200	7,618	8,000	8,500
TOTAL	**787**	**981**	**1,018**	**1,191**	**1,239**	**1,244**	**1,077**	**1,188**	**114,637**	**144,836**	**147,564**	**163,903**	**173,515**	**180,641**	**148,049**	**157,438**

	MASTER'S DEGREES GRANTED								GRADUATE STUDENT CREDIT HOURS							
	Actuals						Goals from 2011-2013 Plan		Actuals						Goals from 2011-2013 Plan	
	AY99	AY09	AY10	AY11	AY12	AY13	AY13	AY15	AY99	AY09	AY10	AY11	AY12	AY13	AY13	AY15
OHSU	103	36	12	14	13	5	14	20	9,479	4,812	3,318	3,229	2861	2,952	2,580	2,824
OIT	0	7	2	6	8	9	15	19	135	533	722	437	628	695	761	950
OSU	123	138	168	185	206	186	150	160	12,870	19,981	22,976	25,304	27,858	27,276	23,000	28,000
PSU	105	180	203	237	216	209	187	208	8,685	13,542	13,459	13,034	13,286	13,150	14,125	15,638
SOU	5	3	1	2	3	0	7	9	128	90	170	203	134	75	325	450
UO	2	23	43	44	58	52	35	45	203	2,358	2,124	2,488	3,132	2,808	3,000	3,500
WOU	0	1	8	17	24	15	24	30	0	240	340	1,400	584	374	960	1,080
TOTAL	**338**	**388**	**437**	**505**	**528**	**476**	**432**	**491**	**31,500**	**41,556**	**43,109**	**46,095**	**48,483**	**47,330**	**44,751**	**52,442**

	PHD DEGREES GRANTED							
	Actuals						Goals from 2011-2013 Plan	
	AY99	AY09	AY10	AY11	AY12	AY13	AY13	AY15
OHSU	9	8	9	12	10	5	11	12
OSU	27	36	41	41	46	60	38	45
PSU	4	14	9	9	9	18	17	28
UO	9	6	9	16	16	10	17	19
TOTAL	**49**	**64**	**68**	**78**	**81**	**93**	**83**	**104**
Grand Total	1,174	1,433	1,523	1,774	1,848	1,813	1,592	1,783

INTELLECTUAL PROPERTY METRICS									
	Invention Disclosures			Licenses Granted			Spin-Off Companies	
	Actuals		Goal	Actuals		Goal	Actuals	Goal
	AY12	AY13	AY13	AY12	AY13	AY13	AY13	AY13
OHSU	16	29	18	-	4		2	1
OIT	11	4	5	-		2	0	2
OSU	29	34	25	7	5	3	4	3
PSU	8	8	5	2	1	4	1	1
UO	15	19	12	-	4	1	2	-
TOTAL	**79**	**94**	**65**	**9**	**14**	**10**	**9**	**7**

Notes on Intellectual Property Metrics:

1- # invention disclosures received by your college or department as reported to Association of University Technology Managers

2- # patent licenses or other royalty-generating intellectual property licenses granted to commercial entities

3- $ income received (thousands) from patent and other intellectual property licenses granted to commerical entities

4- # spinoffs as reported to Association fo University Technology Managers

*PSU - 3 existing start-up companies (2 ongoing, 1 new in FY13)

2011-2013 Biennium - *Report as of June 30, 2013*

Metrics Data

	Women Graduating					
	Actuals				Goals from 2011-2013 Plan	
	AY99	AY11	AY12	AY13	AY13	AY15
EOU			14%	35%	15%	20%
OHSU	29%		44%	67%	28%	33%
OIT		12%	11%	14%	11%	12%
OSU	13%		15%	17%	14%	15%
PSU	15%	12%	17%	22%	23%	22%
SOU			8%	18%		
UO	30%	29%	32%	24%	40%	45%
WOU	9%		29%	1%	7%	12%

Percentage of ETIC-funded graduates that were women.