

**Engineering & Technology
Industry Council
Performance Scorecard**

Biennium 2003-2005

**College of Engineering
Oregon State University**

January, 2005

Successes and Challenges

Successes:

- Bringing in Top New Faculty
- Growth in graduates
- Private Investment
- Research Cluster Growth

Successes and Challenges

(cont.)

Challenges:

- Funding

- Pressure on general fund
- Salary freeze
- Affordability for students

- Deep Collaboration

Fiscal Summary

FY05¹ as of 12/31/04

OSU

	Total Available²	YTD Actual³	Year-End Projection⁴	Projected Variance⁵
OSU COE ETIC⁶	\$7,562,885	\$2,998,080	\$6,570,548	\$913,294
EXT ETIC⁶	\$ 211,028	\$ 63,845	\$ 140,524	\$ 70,504

(1) Fiscal year ending June of indicated year.

(2) Prior year carry-forward plus current fiscal year budget

(3) Year to Date as of date shown in title.

(4) Sum of encumbered and other forecasted expenses expected to clear during fiscal year.

(5) Year-End Projection vs. Total Available.

(6) Total for all ETIC funded programs at institution

(2)-(5) Attach ETIC Financial Info spreadsheet with matching values

Note – Projected variance is due primarily to Start Up funds for faculty hires that are committed but not spent.

Private Support¹

FY05² as of 12/31/04

	Value
Student Scholarships & fellowships	\$ 320,697
Other cash donations	4,570,862
Other cash grants and contracts	1,301,820
Equipment donations and discounts	107,501
Real estate	563,239
Other property	
Internship salaries (See note below)	
Other salaries and equivalent	
Other	<u>741</u>
Total	\$ 6,865,130
Annual Goal³	8,505,891
Variance	(1,640,761)

Note: The figure above for scholarships and fellowships represents new donations to the College of Engineering. The total scholarships and fellowships given to COE students through the College and University (not including need based financial aid or graduate assistantships) is over \$2.6M. Private investment for internships for just MECOP/CECOP is about \$3.8M, but the funds do not flow through the university so we have no precise record and therefore a value is not included here. Total internship investment is estimated at ~ three times this.

- (1) Provide details using current version of ETICFinancialInfoTemplate. Report based on Policy on Private Support Reporting <http://www.oregonetic.org/mission/eticprivatematch5.pdf>
- (2) Fiscal year ending June of indicated year.
- (3) From ETIC Plan for 2003-2005 Biennium. For first year of biennium, Annual Goal is goal given in plan. For second year of biennium, Annual Goal is total goal for Biennium less private support received in first year.

Other Leverage – Federal & Other Grants New FY05 - \$11.7M

As of 12/31/04

Grantor	Description	Value
National Science Foundation-Engr	Whole-Cell Biosynthesis of Nanostructured Metal Oxide Semiconductors	\$ 1,299,999
National Science Foundation	Global Transcriptional Responses in Nitrogen Cycling and Nutrient Removal Processes and Development of Supplemental Instru	\$ 802,358
US Ed Grants	US-ED OR Rehabilitatn Engr Res Cntr	\$ 665,852
Airforce	Radiolytic Fuel Cell - Task 6 and Subaw ards	\$ 506,834
Oregon Dept of Transportation	Capacity of Cracked Reinforced Bent Caps	\$ 500,000
Airforce	USAF Nanocommunicator: Hi Perf Comm	\$ 500,000
Dept of Energy	DOE In Situ Uranium Reductn Kinetcs	\$ 440,505
National Science Foundation-Geoscience	Collaborative Research: CROSSTEX (Cross Shore Sediment Transport Experiments) - Wave Breaking and Boundary Layer Pro	\$ 382,228
Propane Education and Research Council	Environmentally Safe Orchard Heating for Frost and Freeze Protection	\$ 305,201
The William and Flora Hew lett Foundation	An Integrated Learning Platform to Improve Engineering Recruitment and Retention	\$ 285,232
National Science Foundation	Global Transcriptional Responses in Nitrogen Cycling and Nutrient Removal Processes and Development of Supplemental Instru	\$ 257,483
National Science Foundation-Engr	NEES (Netw ork for Earthquake Engineering Simulation): Instrumentation Acquisition for the Tsunami Wave Basin	\$ 250,000
Airforce	Radiolytic Fuel Cell - Task 5	\$ 219,688
National Science Foundation-Computer	NSF Pattern Recognition for Eco Sci	\$ 207,312
Northrop Grumman	Northrop Grumann Sigma Delta ADC (Analog-Digital Converter) Development	\$ 200,000
SRI International	Machine Learning for Task Recognition and Exploitation in CALO (Cognitive Assistant that Learns and Organizes)	\$ 196,665
National Science Foundation-Education	Intergovernmental Personnel Act (IPA) Assignment: Dr. R. Stephen Cunningham	\$ 186,226
Oregon Dept of Transportation	Acoustic Emission Testing and Modeling for Applications to Concrete	\$ 185,000
National Science Foundation-Computer	NSF Dependable End-User Softw are	\$ 184,037
National Science Foundation	Clay Undergoing Large Strains	\$ 180,977
DHHS/Public Health Service	Crosslinkable Hydrogels for Growth Factor Release	\$ 174,942
Oregon Dept of Transportation	Truck Load Model for Oregon	\$ 170,000
National Science Foundation-Computer	NSF Dependable End-User Softw are	\$ 164,176
Environmental Protection Agency	Oregon Interstate 5 Free Corridor Project	\$ 156,221
National Science Foundation-Computer	NSF Relatiol Reinforcemnt Learning	\$ 133,808
Oregon Dept of Transportation/FTA	SPR (State Planning and Research) 630 Establishing Guidelines for Incentive/Disincentive Contracting at ODOT (Oregon Depart	\$ 129,822
Environmental Protection Agency	Training and Technical Assistance to Brow nfields (TTAB) Grants	\$ 127,500
University of Alaska	Computational Support of Tsunami Research	\$ 126,542
Office of Naval Research	ONR Dynamic Responses of MPSS	\$ 125,479
Purdue University/NRC	Phase Separation in Tees	\$ 119,952
Hew lett-Packard Company	Thin-Film Inorganic High-Performance Devices Via Additive Processing	\$ 111,321
University of Alaska	Computational Support for Tsunami Research	\$ 110,977
Washington State University	Radiation-hard PLL (Phase-locked Loop) Design Tolerant to Noise and Process Variations	\$ 110,000
Hew lett-Packard Company	Thin-Film Inorganic High-Performance Devices Via Additive Processing	\$ 101,855
Oregon Dept of Transportation	Rapid Softw are Development for the Reliability Based Assessment of Reinforced Concrete Deck Girder Bridges	\$ 100,000
Economic Development Admin	Industrial Economic Development in Western Oregon through the National Center for Multiscale Materials and Devices	\$ 100,000
USDI Geological Survey	Continued Development of a National Biological Information Infrastructure Node for the Pacific Northw est	\$ 100,000
	Total Shown	\$ 9,918,192
	All Other Projects	\$ 3,052,512
	All Projects as of 12/31/04	\$ 12,970,704
	Estimate of Private Grants and Contracts	\$ 1,301,820
	Estimate of New Federal and Other Grants	\$ 11,668,884

Faculty Supported

As of 12/31/04

	Goal ¹	Actual ²
Hired in previous biennia ³ :	20	17
Hired in this biennium ³ :	6	8
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Total	26	25

Comment – Completed hiring for goal of previous biennium and have 5 of the 6 goal for this biennium on board.

(1) From ETIC Plan for '03-'05 Biennium.

(2) Those currently employed, not including those to be hired later in biennium. Stated as FTE. Includes any adjuncts supported by ETIC funds.

(3) Being supported by ETIC funds during '03-'05 Biennium.

Faculty Supported

As of 12/31/04

OSU Extension: ETIC Pre-College Project

	Goal ¹	Actual ²
Hired in previous biennium ³ :	2	2
Hired in this biennium ³ :	0	0
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Total	2	2

(1) From ETIC Plan for '03-'05 Biennium.

(2) Those currently employed, not including those to be hired later in biennium. Stated as FTE. Includes any adjuncts supported by ETIC funds.

(3) Being supported by ETIC funds during '03-'05 Biennium.

Undergraduate Category

As of 12/31/04

	AY99	AY03	AY04	AY05	AY06	AY09 ¹
Student Credit Hours						
Goal ²	52,690	55,290	66,500	68,900	69,000	69,000
Projected/Actual ³	52,690	62,511	63,050	63,400E	64,000	64,000
Variance ⁴	na	7,221	(3,450)	(5500)E	(5000)	(5000)
Graduates						
Goal ²	389	493	519	545	545	545
Projected/Actual ³	389	496	546	570E	545	545
Variance ⁴	na	10	25	25E	0	0

Comments: Graduates are the driving goal, not SCH.

1. Academic Years ending in June of indicated years.
2. From ETIC Plan for '03-'05 Biennium.
3. Actual numbers for prior years. Projections for years not yet complete, including future years. Projections may be different from goal. Values in the current year or prior years that are not final are indicated with an "E", e.g. 78E.
4. Projected/Actual less Goal for all years where Goal established, including years with projected values.

Graduate Category

As of 12/31/04

	AY99	AY03	AY04	AY05	AY06	AY09 ¹
Student Credit Hours						
Goal ²	12,870	14,112	21,600	22,300	22,800	23,600
Projected/Actual ³	12,870	18,435	19,453	16,535E	18,000	19,000
Variance ⁴	na	4323	(2147)	(5764)E	(4800)	(4600)
Graduates						
Goal ²	154	193	210	215	218	240
Projected/Actual ³	154	160	208	190E	190	210
Variance ⁴	na	(33)	1	(25)E	(28)	(30)

Comments: The total graduate degrees are projected to be below the peak of 208 for FY04 during the next couple of years, but we now have a larger percentage of PhD students

1. Academic Years ending in June of indicated years.
2. From ETIC Plan for '03-'05 Biennium.
3. Actuals for prior years. Projections for years not yet complete, including future years. Projections may be different from goal. Values in the current year or prior years that are not final are indicated with an "E", e.g. 78E.
4. Projected/Actual less Goal for all years where Goal established, including years with projected values.

Student Metrics

AY05¹ as of 12/31/04

	Prior Year	Current Year	
	Actual ⁷	Goal ⁶	Actual ⁷
Freshmen SAT/ACT ² :	73%	85%	75%
Incoming grad-student GRE ³ :	78%	82%	76%
Women graduating ⁴ :	124(17%)	(16%)	N/A
Minorities graduating ^{4,5} :	89(15%)	(13%)	N/A

(1) Academic year ending in June of indicated year

(2) Percentiles for freshmen that have declared relevant majors. If applicants are required to submit SAT scores, the percentile corresponding to the average composite SAT score of those submitting them. If applicants have choice of SAT and ACT, average composite SAT score and the average composite ACT score, converted to percentiles in each case, and combined as the weighted average of the two.

(3) Percentiles based on the average quantitative score over those submitting such scores; ignoring verbal and analytic scores.

(4) From engineering, computer science, and other programs directly benefiting from ETIC funding, stated as number graduating and as a percent of all those graduating.

(5) Racial and ethnic minorities who are US citizens or permanent residents – stated as number graduating and as a percent of US citizens or permanent residents.

(6) From ETIC Plan for '03-'05 Plan.

(7) If actual is not yet available, estimate is marked with “E”. If estimate is not possible, “N/A” is shown.

Research Metrics

FY05¹ as of 12/31/04

	Prior Year	Current Year	
	Actual ⁶	Goal ⁵	Actual ⁶
Research Faculty ²	100		100
Total Research Expenditures ³	\$21M	\$20.5M	\$23M,E
Research Expenditures / Faculty ⁴	\$210K		\$230K, E

- (1) Fiscal year ending in June of indicated year
- (2) Number of faculty members whose roles include research
- (3) Total dollars spent by ETIC-related departments towards research during academic year
- (4) Total Research Expenditures divided by Research Faculty
- (5) From ETIC Plan for '03-'05 Plan.
- (6) If actual is not yet available, estimate is marked with "E". If estimate is not possible, "N/A" is shown.

Intellectual Property Metrics

AY05¹ as of 12/31/04

	Prior Year	Current Year	
	Actual ⁶	Goal ⁵	Actual ⁶
Spin-offs ²	0		0
Patent Disclosures	23		9
Patents Awarded	2		2
Number of Licenses ³	3	10	0
Revenue ⁴	\$50K		\$0K

(1) Academic year ending June of indicated year.

(2) Number of spin offs as reported to Association of University Technology Managers.

(3) Number of patent licenses or other royalty-generating intellectual property licenses granted to commercial entities

(4) Revenue from patent and other intellectual property licenses granted to commercial entities.

(5) From ETIC Plan for '03-'05 Plan.

(6) If actual is not yet available, estimate is marked with "E". If estimate is not possible, "N/A" is shown.

National Ranking

As of 12/31/04

	AY99	AY03	AY04	AY05	AY06	AY09 ¹
• EECS						
– Goal ³	65-75		60-70	60-65	55-65	50-60
– Actual/Projection: ⁴	65-75	38	45(62,54)			
• ME						
– Goal ³	45-55		40-50	40-50	40-50	40-50
– Actual/Projection: ⁴	45-55	49	62(82)			
• CCEE						
– Goal ³	35-45		30-40	30-40	30-40	30-40
– Actual/Projection: ⁴	35-45	37	31(50)			
• College of Engineering						
– Goal ³	83	65-75	65-75	60-70	55-65	50-60
– Actual/Projection: ⁴	83	78 (83)	78 (78)			

Comment – College entry for '03 and '04 shows two values: 1. OSU's COE rank in total research funding based on ASEE data and 2. US News and World Report ranking for Graduate Engineering Schools based on metrics and reputation, in (). Department entries are similar, but please note that the published rankings, in (), which are new this year from USN&WR are based only on reputation.

- 1 Academic years ending in June of indicated years
- 2 Name of program, department or college
- 3 From ETIC Plan for '03-'05 Plan – goals of programs, departments, and or college in terms of national ranking through 2009.
- 4 Actuals for prior years. Projections for years not yet complete, including future years. Projections may be different from goal. Values in the current year or prior years that are not final are indicated with an "E", e.g. 78E