

**JOINT COMMITTEE ON WAYS & MEANS
SUBCOMMITTEE ON EDUCATION**

**OREGON PUBLIC UNIVERSITIES
OUTDOOR SCHOOL AND ENGINEERING TECHNOLOGY
& SUSTAINING FUNDS**

APRIL 18, 2019





OUTDOOR SCHOOL

Kristopher Elliot, Outdoor School, Program Leader

Spirit Brooks, Outdoor School Research, Assessment, and Evaluation Coordinator

Steven Braun, Researcher and Consultant to Outdoor School

Funding and leveraged support



- **Requested CSL \$46.8 million**
- **Impacting 92,000 students over biennium**
 - Support for ALL students and schools
 - High quality, inclusive programming
 - Support for better educational experiences
 - Statewide provider capacity
 - Value added educational benefits to K-12
 - Oregon outdoor economy career pathway
 - High school student involvement & support
- **\$3.45 million in leveraged funds *(first biennium)***

Funding Priorities



- **Reduced funding would**
 - **Limit duration of participation (less time spent outside)**
 - **Create equity issues (students and districts)**
 - **Reverse growth of program (participation and duration trends)**
 - **Reduce support provided to educators, schools, and providers**
 - **Hurt camp/provider capacity**
 - **Decrease provider investments in facility improvements**
 - **Harm programs that were full week before M99**
 - **Less support for high school student involvement**

Benefits of full programming



National and International Studies

- 3-day vs 5-day residential program comparison:
 - Interest in learning
 - Environmental stewardship
 - Knowledge & awareness
 - Differences still pronounced after 3 months

Oregon Studies

- Time outside & programming length associated with:
 - Locus of control
 - Environmentally responsible behavior
 - Sensitivity & awareness
- Outdoor school evaluation; 3-day vs. 5 or 6-day
 - Environmental learning
 - 21st Century Skills: collaboration & communication
 - Positive school behaviors

Engineering Technology Sustaining Funds



Scott Ashford
Dean of Engineering, OSU

Brian Fox
Vice President for Finance & Administration, OIT

Al Barkouli
Chief Executive Officer, David Evans & Associates, PSU Alum



Engineering Technology Sustaining Funds



2017-19 LAB - \$25,569,618

2019-21 DAS CSL - \$27,004,432

2019-21 University CSL - \$27,669,944

Oregon State College of Engineering Leveraged Funds

Philanthropy - FY17-\$19.9 M, FY18 -\$20.5 M

Total Research Expenditures - FY17-\$47 M, FY18-\$45.3 M



History of ETSF



- ETSF originated as the Engineering and Technology Industry Council (ETIC) in 1997
- A public-private partnership with results-driven metrics requiring engineering schools to increase the number of graduates, research funding, private support and industry support
- Initial goal to double the number of engineering degrees awarded in Oregon has been met

ETSF Transformed Oregon State University College of Engineering



OSU College of Engineering

- More than tripled the number of graduates
 - 1999 Undergraduate Engineering Degrees: 389
 - 2018 Undergraduate Engineering Degrees: 1,489
- Nearly quadrupled research funding
- Nearly doubled tenure/tenure track faculty
 - Faculty to student ratio remains high (40 – an average of 71 students in a class)

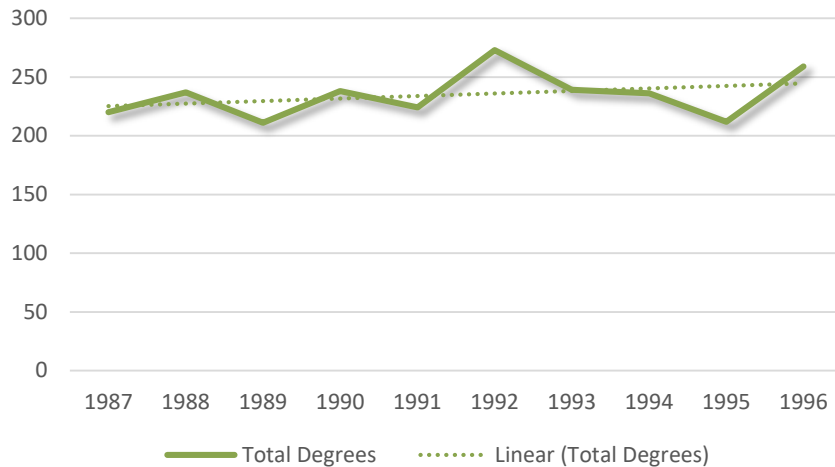
OSU College of Engineering is:

- 4th in nation in terms of undergraduate computer science degrees conferred
- 15th largest engineering program in terms of the number of undergraduate degrees conferred
- 34th largest engineering faculty in the nation

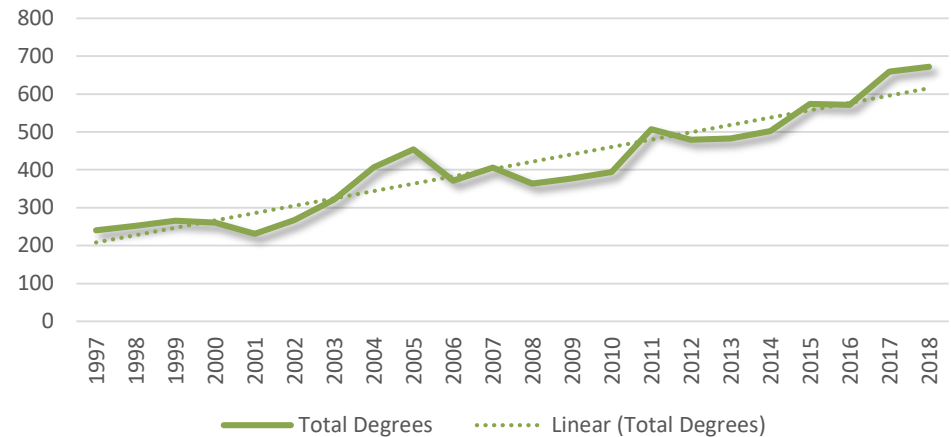
ETSF is Transforming Engineering at Public Universities



PSU Degrees Granted Pre-ETIC



PSU Degrees Granted w/ETIC support



- PSU shows similar significant impacts – more than 2x the degrees granted;
- At PSU, ETSF supports 25% of the faculty teaching the students.

Growing a Diverse and Inclusive Community



- **OSU doubled the number of female faculty**; 50 of 200 faculty members are female; OSU recruits and hires faculty reflective of the student body
- ETSF accelerated universities' ability to grow a diverse and inclusive community – as an example through cluster hires, providing stability
- OSU and all the engineering colleges are working to meet employers demand for a more diverse workforce;
 - Recruitment competition is intense for high-achieving students and students from traditionally underrepresented populations
- PSU: 31% of students are female;
- PSU: 37% of students are students of color;

ETSF Reductions Impacts



Loss or reduction of ETSF funds jeopardizes engineering programs at PSU, OIT and OSU

Reductions will impact:

- Student Recruitment
- Student Retention
- Student Access
- Faculty Recruitment

- Regional Workforce

Outcomes Based Funding Formula



Campus Support Funding:

- Ensuring each campus has sufficient funds to provide engineering and technology programs to students

Degree Outcomes:

- Number of degrees awarded to Resident Oregon students in key engineering and technology fields

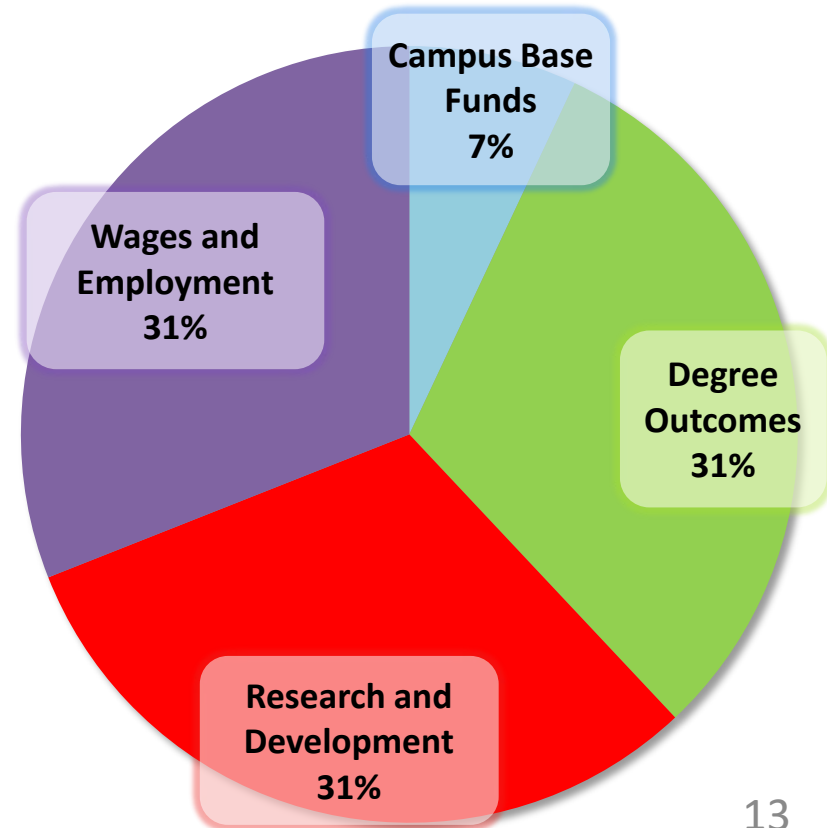
Research and Development

- Number of Ph.D.'s awarded in key STEM fields, and
- Research expenditures in engineering and technology fields

Wages and Employment

- Number of recent graduates in engineering and technology fields employed in Oregon companies, weighted by average wage

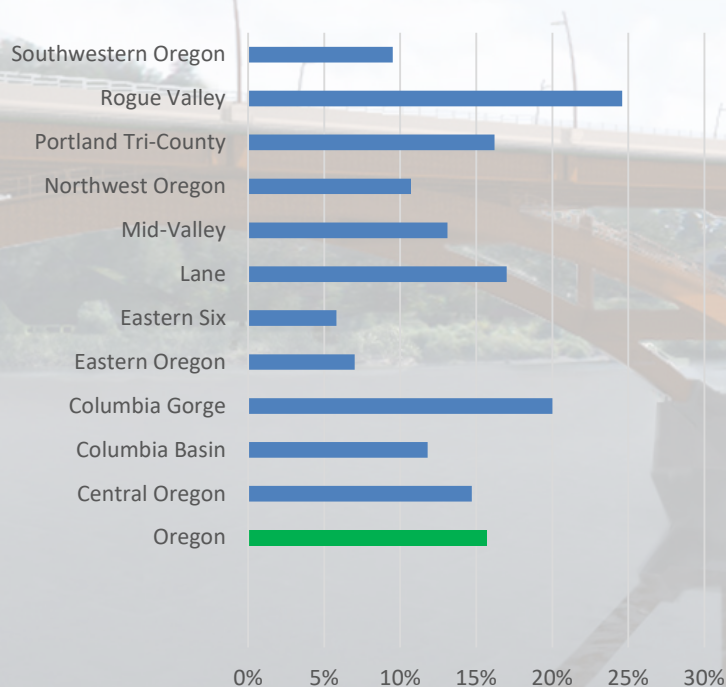
ETSF ALLOCATIONS



Return on Investment



Civil Engineering Job Growth
2017 - 2027



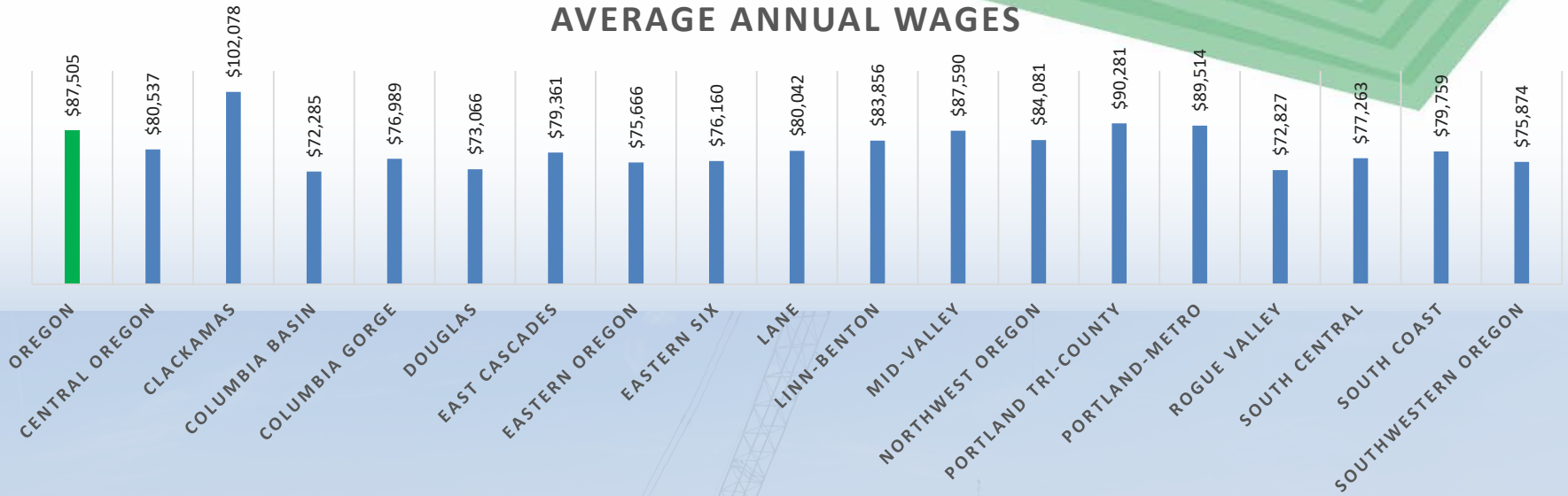
“Oregon derives more of its GDP from manufacturing than every other state but one due to its highly productive High Technology sector.”
- Business Oregon, 2018



Return on Investment



AVERAGE ANNUAL WAGES



Questions?

Engineering and Technology Sustaining Fund

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