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HB 5025

Co-Chairs Frederick and McLain and Members of The Ways and Means Education Subcommittee,

For the record, I am Scott Ashford, dean of the College of Engineering at Oregon State University. I am here today to give an overview of State Programs and highlight the Engineering & Technology Sustaining Fund (ETSF).

As many of you already know, during the 2013-2015 budget cycle, the state intentionally separated education and general funding into two categories: the Public University Support Fund and an appropriation category known as State Programs.

State Programs, funded as line items in the Higher Education Coordinating Commission's budget, play a crucial role in integrating the public universities' diverse research, service, and instruction missions. The legislature chose to separately appropriate funding for the programs listed on the screen to address critical issues such as economic development, natural resources, and other public services across the state. Supplemental information has been provided with descriptions of each program.

The Public Universities ask you to please support \$64.4 million in base funding for the university state programs budget.

Today, you are going to hear about three of the specific State Programs starting with the Engineering Technology Sustaining Fund (ETSF).

All seven universities receive support from the ETSF. I am here today on behalf of a coalition of engineering deans at PSU, OSU, OIT, and the UO Knight Campus executive director. The demand for engineering and STEM graduates continues to increase at the state and national levels.

ETSF originated as funding distributed through the Engineering and Technology Industry Council (ETIC). The original ETIC was an investment to grow the engineering programs in the state, improve research facilities and labs, recruit outstanding faculty, and dramatically increase the number of engineering graduates. We exceeded every metric set by the council. In 2015, the legislature moved from investing in the programs' growth to providing only funds to sustain each university's strategic investments. The (ETSF) enables us to continue to produce high-quality graduates, sustain our investments, and provide us with the opportunity to address critical priorities, including the recruitment and retention of an inclusive, diverse student body, and faculty.

For 22 years, the legislature has provided Oregon's public engineering and computer science programs with critical support through directed funding. These funds have transformed engineering programs in the state, supported innovation, and boosted the state's economy with a competitive workforce. Because of this support, the state's programs have kept pace with the demand for a growing workforce, which has remained high even during difficult times.

The state's historical investment through the Engineering Technology Industry Council, and now through the ETSF, has produced significant ROI. It has:

- Tripled the number of engineering graduates in the state.
 - University of Oregon and Oregon State launched a dual shield Ph.D. program in Bioengineering that already has over 50 Ph.D. students.
- More than tripled research expenditures.
 - Research productivity increased by 600% as measured by external funding.
- Successfully enabled a focus on diversifying faculty and student populations, as evidenced by:
 - Oregon State University doubled the number of women on the engineering faculty, ranking second nationally among land-grant universities for the percentage of tenured or tenure-track faculty who are women and ranking fifth among the nation's public highly research active R1 universities.
 - Portland State University increased underrepresented minorities to 37% of students.
 - Oregon Institute of Technology doubled the number of women on their engineering and technology faculty.
 - University of Oregon increased underrepresented minorities to 50% within graduate internship programs.
- Provided substantial economic mobility for students graduating with engineering degrees.
 - At Portland State, nearly half the students in the College of Engineering are PELLeligible students. That means their families earn less than \$50,000 each year. Many of them receive Oregon Opportunity Grant, which means their families earn less than \$35,000 annually. When they get their first job at David Evans and Associates, they will likely make more than their entire family after their first full year as a civil engineer.
- Created the workforce that is fueling industries important to Oregon's economy.
 - Over 500 companies attend recruiting events at Oregon State.
- Leveraged private donor and industry philanthropic support.

ETSF ensures that each engineering program can produce graduates that are in high demand, as evidenced by high-placement rates in Oregon companies. Graduates are employed at leading companies ranging from the state's largest employer Intel, to Oregon-grown companies like A- DEC and to university spin-out companies like Agility Robotics. Starting salaries may range from \$50,000 to \$100,000, depending on the students' expertise.

You have heard a great deal about the semiconductor industry this session. The universities I am representing today fuel the engineering needs of Oregon's semiconductor industry. In fact, the American Electronics Association led the passage of the originating legislation. The demand for engineers, computer scientists, and other STEM majors goes well beyond semiconductors. Oregon's construction, manufacturing, software, and biotech industries rely on the same talent pipelines. The demand for STEM graduates continues to grow, underscoring the need for the legislature's continued and increased investment.

Thank you for your time and consideration, you will now hear about the Oregon Renewable Energy Center.