Co-chairs Senator Janeen Sollman, Representative Ricki Ruiz and members of the Joint Committee on Ways and Means Subcommittee on Education

Thank you for this opportunity to update you on the work of TallWood Design Institute (TDI). We are sincerely grateful for the continuing support of this committee and the State Legislature, and look forward to continuing the important work that your funding has made possible. TDI is a unique industry-driven partnership between:

- College of Forestry, Oregon State University
- College of Design, University of Oregon
- College of Engineering, Oregon State University

TDI Mission

To drive **economic development** based on Oregon's **wood products manufacturing sector** and **facilitate increased use of Oregon's sustainable timber products** in the design and construction industries. We achieve this through applied research, technical prototyping, and testing, and by providing professional education and outreach services to industry audiences.

How Funds are Used

TDI was established in 2015. State funds support core operating costs for some of our staff, equipment and operation of testing and research facilities, and development of industry training programs that are part of a larger strategic economic development effort to create manufacturing jobs in timber-dependent rural communities and design and construction jobs in urban and rural locations. In addition, these funds are employed as matching dollars that have typically leveraged approximately $4M per biennial budget cycle from the federal government and other external sources (in 2022 federal dollars leveraged were much higher, as noted below). TDI personnel also contribute extensively to research and development, economic development and outreach efforts led by external public and private-sector partners.

Leveraging State Support

Major External Research Grants: $50.68 million

USDA
Agricultural Research Service: $10M
Wood Innovations Grants: $4.28M

Economic Development Administration
I6 Challenge: $450,000
Build Back Better Regional Challenge Phase 1: $110,000
Build Back Better Regional Challenge Phase 2: $24.6M
Tech Hub Catalytic Award: $500,000
Public Works and Economic Adjustment Assistance Program: $1.25M

Business Oregon
Oregon Innovation Council: $702,000
University Innovation Research Fund: $6M
Strategic Competitiveness Fund: $50,000

NSF
NSF Engines Development Award: $1M

Department of Education (Federal)
$449,000

REACTS Consortium Member Contributions (Industry)
$660,000

Funding from Non-Oregon State Sources
$303,000

OR Counties, Cities, UO Design Studios
$150,000

US Endowment for Forestry & Communities
$100,000

Softwood Lumber Board
$80,000

OSU and UO Research and Testing Facility Investments:

A.A. "Red" Emmerson Advanced Wood Products Laboratory (OSU Corvallis campus)
- Opened Summer 2019; $12 million private and public funds investment by OSU
- World-class capabilities for structural testing, computer-controlled fabrication, and manufacturing

Oregon Fire Testing Facility (OSU Corvallis campus)
- Opening 2027: $3.4 M investment by EDA, Business Oregon and OSU
- Will enable rapid and affordable in-state testing of building assemblies and components, vital for product development and code acceptance

Oregon Acoustic Research Laboratory (UO Portland)
- Opening 2027; $18.75 million investment by EDA and Business Oregon
- Unique capabilities within North America for testing mass timber floor/ceiling assemblies, needed for further building applications to meet code requirements

These facilities, and others across the two universities' campuses, will offer our researchers and the Oregon industry community unparalleled R&D infrastructure and facilitate continued innovation and technical leadership.

TDI has supported or directly funded almost 100 industry-focused R&D projects on structural and seismic resilience of wood buildings, energy efficiency, acoustic and fire performance, indoor air quality, durability, carbon benefits, housing prototypes and other design demonstration projects. New faculty members continue to be hired at both institutions to add new expertise in these disciplines. These investments all support our economic development strategy to grow Oregon's mass timber industry capacity, creating rural jobs in manufacturing and urban jobs in architecture, engineering, and construction.

Economic Development and Technical Assistance Highlights

Mass Plywood Panel Manufacturing Facility

• $40 million investment by Freres Lumber Company in Lyons, OR (2018), to manufacture a unique new mass timber product made possible by prototyping and testing by TDI-affiliated researchers.

Swinerton Builders and Timberlab

• TDI R&D and outreach has assisted Swinerton Builders, which has become a national leader in mass timber construction. Swinerton established an engineering and fabrication subsidiary (Timberlab) in Portland in 2020. Together, Swinerton and Timberlab have completed 63 buildings, with 40 more in design or construction, including Ascent in Milwaukee, WI, which at 25 stories is the world's tallest hybrid wood building. Timberlab has grown rapidly and currently employs 90 project managers, fabricators, engineers, digital construction detailers and construction professionals, and has broken ground on a new CLT manufacturing and fabrication facility in Millersburg, OR in 2026, representing a $125M investment and 100 new jobs in a location enabling even closer collaboration with TDI.

Sauter Timber

• Working with Clackamas County, TDI helped facilitate Sauter Timber's investment in a new CNC fabrication plant in Estacada, which opened in 2025.

Oregon Mass Timber Coalition

TDI, in partnership with Business Oregon, Port of Portland, Oregon Dept. of Forestry and Dept. of Land Conservation & Development, formed the Oregon Mass Timber Coalition (OMTC) which won a $41.4M award from the US Economic Development Administration's Build Back Better Regional Challenge in 2022, one of only 21 coalitions to be funded among 529 nationwide. Nine projects are building new R&D capacity, modernizing forestry practices, addressing fiber supply and workforce challenges, and prototyping and testing affordable modular housing designs and retrofit applications for energy and seismic resilience.

NSF Engines Development Award: Advancing mass timber technologies (OR, WA)

TDI expanded the OMTC to include partners in Washington and were awarded a $1M NSF Engines Development Award in 2023 for strategic planning to grow the mass timber ecosystem in the Pacific Northwest to drive the US to become a global leader in mass timber technologies.

Pacific Northwest Mass Timber Tech Hub

Building on the OMTC and the NSF Engine Development Award, TDI led a successful effort for Tech Hub designation in 2023, which included a Catalytic Award of $500K in 2024. The Tech Hib is conducting a Supply Chain Analysis and projects to support access to capital and policy advocacy.

Critical Mass Timber Group

• Over 1,100 industry professionals and other stakeholders are now part of our peer-to-peer learning hub which meets virtually and in person each month to share new opportunities and innovations and best-practices in design, manufacturing and construction

Industry-Driven Research Agenda

• Representatives from the manufacturing, architecture, engineering, and construction sectors work closely with TDI to identify research needs and provide materials and expertise

• TDI launched the REACTS Consortium in 2021 (Research in Engineering, Architecture and Construction of Timber Structures), consisting of 20 innovative private-sector firms, to sponsor key research and testing projects through funded memberships. Seven industry-led R&D projects are underway or completed.

• 8,000+ Oregon stakeholders have benefited from TDI outreach and extension activities.

Education

• TDI is addressing current Oregon labor market skills gaps by offering certificate programs and developing a Professional Science Master's degree in mass timber manufacturing and construction, in partnership with community colleges, unions and others. In 2022 we received a Congressionally Directed Spending Award to create a suite of training courses on wood design for practicing engineers.

• A new focus area in advanced mass timber design was launched (2021) within UO's MS in Architecture program

TallWood Design Institute Leadership

TDI has led the way for Oregon to become the epicenter of mass timber development in the United States., beginning with technical support for DR Johnson in Riddle, OR as the first US certified manufacturer of cross-laminated-timber in 2015, and continuing with Freres Lumber, as the only manufacturer of Mass Plywood Panels (2018). As a partner in the International Mass Timber Conference, we have seen this annual Portland event grow from 500 participants in 2016 to over 3,000 participants from across the globe in 2025. Oregon is now home to more than 125 mass timber buildings with more on the way and a growing community of architects, engineers, and contractors whose unique experience with mass timber is driving down the carbon footprint of the built environment and gaining them business around the country. However, Oregon is facing competition from new manufacturing facilities in Washington, Montana, Illinois, Arkansas, Alabama, and Canada, as well as growing expertise around the U.S., and European mass timber producers are making increasing efforts to capture market share. Your continued support of TDI is vital if Oregon is to consolidate and build on our first-mover advantage in this rapidly growing industry sector.

TALLWOOD DESIGN INSTITUTE

UNIVERSITY OF OREGON

Oregon State University

April 21, 2025

Senator Janeen Sollman, Co-Chair
Representative Ricki Ruiz, Co-Chair
Joint Committee on Ways and Means Subcommittee on Education
H-178, State Capitol
Salem, OR 97301

Dear Senator Sollman and Representative Ruiz:

We are writing to express our support for the proposal to increase the current service level of funding to the TallWood Design Institute (TDI) by 9.54%, in line with that of the Oregon Public Universities. State of Oregon funding over the last ten years has been essential to the important work the Institute has been doing to support and grow Oregon's wood products and mass timber industries.

Launched in 2015, TDI brings together a unique collaboration between leading architecture, wood science, and engineering programs at Oregon State University and University of Oregon to focus on the development and application of innovative wood products and building components produced in Oregon. The Institute engages extensively with Oregon design and construction professionals and wood products manufacturers to conduct research and testing and drive innovation. This has been pivotal in enabling our state to attain a leadership position in the rapidly growing US market for mass timber products and buildings. When TDI was established in 2015 there were only a handful of mass timber buildings completed in the United States. Today the number of mass timber buildings completed or in design/construction is 2,338 and increasing rapidly, and the products and services of Oregon architecture, engineering, manufacturing, and construction firms are in demand across the nation.

As architects, engineers, contractors, wood products businesses, and civic and nonprofit organizations, we share a collective interest in building on Oregon's North American leadership in sustainable building design and manufacturing. In the last few years TDI has successfully leveraged state funding through a combination of federal, local, and industry funds to significantly extend its impact. TDI played a critical role in winning an EDA Build Back Better Regional Challenge award of $41.4 million given to the Oregon Mass Timber Coalition in 2022, which includes the University of Oregon and Oregon State University, the Port of Portland, Business Oregon, the Oregon Department of Forestry, and the Oregon Department of Development and Land Conservation. With that funding, TDI has been working to support innovation and new product development, build new R&D infrastructure and develop open-source affordable housing designs using mass timber. In 2023 the cumulative work of TDI and its many partners was recognized with the designation of the Pacific Northwest mass timber industry as an EDA Tech

Hub, led by OSU, and the award of a National Science Foundation Engines Development Award to advance mass timber technologies to University of Oregon. Private sector investment in mass timber in Oregon continues to accelerate, with factory announcements in the last 12 months alone representing a value of over $250M.

TDI's extensive portfolio of applied research and testing is eliminating barriers to the manufacture and application of wood products, and TDI's impact is extended by its industry consortium that includes 20 innovative design and manufacturing companies that contribute their own resources to fund testing and applied research. TDI's work supports the growth of high value manufacturing jobs in our rural communities and design and construction jobs in our urban centers through workforce training and education. A key component of its R&D program is the generation of objective, science-based data on the sustainability of the supply chain, essential for the future health of our forests and environment. And critically, it is leading research into viable commercial applications for low-value, small-diameter timber from forest thinnings – work that will help ensure that the catastrophic forest fires our state experienced in 2020 become a thing of the past.

TDI's state-of-the-art A.A. Emmerson Advanced Wood Products Lab at Oregon State University will be augmented in 2027 with a fire testing facility and by a University of Oregon acoustic research lab, both funded in large part by significant federal grants. The opportunities to utilize these facilities in the next few years to drive even greater economic development and sustainability impacts for Oregon are tremendous. We therefore urge you to support TallWood Design Institute at the funding levels proposed.

Sincerely,

William P. Silva, Director of Pre-Construction
Swinerton Builders

Chris Evans, President
Timberlab

Brad Nile, Project Executive
Andersen Construction Co., Inc.

Stefan Schneider, Partner
Cut My Timber

Mike Steffen, Preconstruction Services
Walsh Construction Co.

Tyler Freres, Vice President of Sales
Freres Engineered Wood

KayCee Hallstrom, Vice President
Zip-O-Log

Jacob Dunn, Sustainability Leader
ZGF Architects LLP

Eric McDonnell, Director of Mass Timber
Holmes US

Adam Jongeward Principal
DCI Engineers

Reid Zimmerman, Technical Director
KPFF Consulting Engineers

John Flynn, AIA, President
American Institute of Architects Oregon

Thomas Robinson, Founder and Principal
Lever Architecture

Lisa Petterson, Principal, Office Practice Leader
SRG + CannonDesign, Inc.

Ian Gelbrich, Partner
Richard R. Grace, Partner
Christine Rumi, Partner
Edward W. Running, Partner
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Dr.Anthony Davis, Lab Testing Manager
Dr. Dan Tingley, Senior Engineer and Wood Technologist
Wood Research & Development

Stephen Adams, Policy Director
Lane County

Lianne Thompson, Clatsop County Commissioner District #5
Clatsop County