

UNIVERSITY OF OREGON School of Architecture and Allied Arts

April 15, 2015

Senator Arnie Roblan Senator Tim Knopp Senate Committee on Education Oregon State Capitol Salem, Oregon

RE: Senate Bill 950

Dear Chair Roblan, Vice Chair Knopp, and Members of the Committee:

As Head of the Department of Architecture at the University of Oregon School of Architecture and Allied Arts, I am please to offer this testimony in support of SB 950 which seeks to appropriate lottery funds toward the operation and research budget of the National Center for Advanced Wood Products Manufacturing and Design.

Demand in Asia and North America for "green" building products continues to grow, and wood is an excellent and often overlooked complement to the suite of sustainable building components that architects incorporate into new commercial, mixed-use, and multi-story buildings. Recently, a new trend is beginning to change the way design professionals view wood's potential for use as a structural component of buildings in addition to its routine use as a finish or aesthetic element. Structural use is commonplace in Europe, and is growing quickly both here in the United States and in global markets (particularly across Asia and Australia).

Here in Oregon, our timber industry is perfectly positioned to participate in these new markets, along with our Oregon-based building design profession that already has a stellar worldwide reputation for sustainable design. Engineered wood building components create a host of new building design opportunities (especially when paired with other materials such as concrete), and the proximity of Oregon's design professionals to our forest products industry offers a synergy of expertise and story that cannot be duplicated anywhere else in the world.

In response to this unique time and opportunity, Oregon State University and the University of Oregon are joining forces to launch the National Center for Advanced Wood Products Manufacturing and Design. The Center is truly a one-of-a-kind collaboration between leading architecture, wood science, and engineering programs to focus on development of innovative wood products and building components capable of being produced in Oregon. Through the Center, we will actively partner with Oregon building design professionals and wood products manufacturers to drive innovation and testing for engineered wood materials, allowing Oregon to compete in emerging domestic and global markets, and establish our state as the North American "hub" for research and innovation on use of wood materials in building design.

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Testimony offered by OSU College of Forestry Dean Maness on SB 950, sets forth much of the detail surrounding the Center, its budget, and the scope of its research and educational programs, and I will not repeat that information here. Please know however, that the University of Oregon through the School of Architecture and Allied Arts is and will continue to be an enthusiastic and equal partner with OSU in the vision, formation, direction, and operation of the Center. Together with OSU's College of Engineering, we have a unique opportunity to link the expertise of wood science, architecture and engineering to address the entire building supply chain connecting research, manufacturing, design and engineering, and construction. Doing so will unlock significant new opportunities for architects here and in other countries to specify and use wood materials in new ways in their buildings, which will in turn drive demand for wood-based products that can be produced in communities of our state that truly need the family-wage jobs that come with expanding manufacturing capacity. New international markets in particular will drive this game changer for Oregon because of our location relative to the Pacific Rim and the quality of our raw materials. The interest is great in the design community, but it will take a combination of wood science research, design research and engineering research to grow the number and types of new wood-based building materials and components that our Oregon companies can produce.

Already, UO Architecture department is undertaking design research in partnership with structural engineers to produce demonstration projects that explore how new wood products can be used in new ways here in Oregon. With OSU's help, we are collaborating on planned private and public sector projects ranging from an innovative modular classroom design utilizing CLT that an Oregon manufacturer wants to introduce to market, to a planned mass timber parking garage the City of Springfield would like to build as a demonstration project. Both of these initiatives hope to source their materials from an Oregon company now seeking to establish itself in the manufacture of cross laminated timber panels (with assistance from researchers at the OSU College of Forestry), and both are great examples of the need for technical expertise and a research funding that can be applied to help address specific design questions and structural testing that must be done for the projects to come to fruition.

This is precisely the work that the Center for Advanced Wood Products Manufacturing and Design will provide if funded as proposed by SB 950, and in doing so help to firmly establish the link between manufacturing of these products here in Oregon, and routine cost effective use of innovative wood materials in building design.

Thank you for the opportunity to support SB 950 today, and I look forward to your questions.

Sincerely,

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Judith E. Sheine Professor and Department Head University of Oregon Department of Architecture