Increasing Mass Timber Consumption in the U.S. and Sustainable Timber Supply

Two UW SEFS organizations, CINTRAFOR and NRSIG (https://nrsig.org) worked together last year on research funded by the Binational Softwood Lumber Council (http://www.softwoodlumber.org) to investigate if forecasted growth in mass timber consumption (using the Softwood Lumber Board’s high volume 2035 projections) could be sustainably supplied from U.S. timber inventories.

That work has now been published here: https://www.mdpi.com/2071-1050/14/1/381

We believe it could help alleviate some architect concerns about designing with wood.

This article belongs to the Special Issue Mass Timber and Sustainable Building Construction

Abstract
Mass timber products are growing in popularity as a substitute for steel and concrete, reducing embodied carbon in the built environment. This trend has raised questions about the sustainability of the U.S. timber supply. Our research addresses concerns that rising demand for mass timber products may result in unsustainable levels of harvesting in coniferous forests in the United States. Using U.S. Department of Agriculture U.S. Forest Service Forest Inventory and Analysis (FIA) data, incremental U.S. softwood (coniferous) timber harvests were projected to supply a high-volume estimate of mass timber and dimensional lumber consumption in 2035. Growth in reserve forests and riparian zones was excluded, and low confidence intervals were used for timber growth estimates, compared with high confidence intervals for harvest and consumption estimates. Results were considered for the U.S. in total and by three geographic regions (North, South, and West). In total, forest inventory growth in America exceeds timber harvests including incremental mass timber volumes. Even the most optimistic projections of mass timber growth will not exceed the lowest expected annual increases in the nation’s harvestable coniferous timber inventory.

Keywords: mass timber; cross-laminated timber (CLT); embodied carbon; sustainable timber supply; forest inventory; reforestation; seedlings; replanting

Thank you!
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