

# Smart Forestry: Paving the Way from Forest Restoration to Mass Timber

AWARD AMOUNT:

**\$4,400,000**

NON-FEDERAL MATCH

**\$1,100,000**



## What is smart forestry?

Smart forestry uses technology and science-based solutions to source wood from forest restoration activities to supply mass timber and housing industries. Technological advancement of traditional forestry will also improve the safety and efficiency of forest restoration work, support workforce development, and revitalize forest-dependent rural communities.

## Why smart forestry?

Many of Oregon's forested areas are in urgent need of forest restoration to mitigate wildfire risks and climate change. Yet, forest restoration remains challenging due to labor shortages, inefficient processes, and the low value of wood to be removed.

New value-added mass timber wood products will ensure financial viability for forest restoration projects while creating high-paying jobs to strengthen Oregon's forest sector and rural communities. New smart forestry technologies aim to facilitate efficient supply of raw materials for mass timber industries and transform traditional, labor-intensive forestry jobs into high-paying, technology-driven professions, providing a win-win outcome of both resilient forests and resilient communities.

## Planned actions

The project seeks to improve economic and technical feasibility of using low-value forest restoration materials. Creating economic opportunities in Oregon's rural communities is feasible by applying innovative technological solutions.

Four technology solutions will be explored to overcome the ongoing forest restoration, wood supply and workforce challenges.

- (1) advanced forest inventory and wood procurement mapping;
- (2) smart machine vision, real-time communication and exoskeleton technologies for safe and efficient forest operations and wood supply;
- (3) new mass timber design specifications and manufacturing technologies; and
- (4) digital pedagogy tools, contents and curriculums for workforce education and training.



**Oregon  
Mass Timber  
Coalition**



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