Materials will be available at:
www.eesi.org/092320workforce

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CONGRESSIONAL BRIEFING

Growing Green Industry and Innovation:
Mass Timber

Briefing Series: Workforce Wednesdays

Wednesday, September 23, 2020
About EESI...

**NON-PROFIT**
Founded in 1984 by a bipartisan Congressional caucus as an independent (i.e., not federally-funded) non-profit organization

**NON-PARTISAN**
Source of non-partisan information on environmental, energy, and climate policies

**DIRECT ASSISTANCE**
In addition to a full portfolio of federal policy work, EESI provides direct assistance to utilities to develop “on-bill financing” programs

**SUSTAINABLE SOCIETIES**
Focused on win-win solutions to make our energy, buildings, and transportation sectors sustainable, resilient, and more equitable
...About EESI

HILL BRIEFINGS
Video recordings and written summaries of Congressional briefings

CLIMATE CHANGE SOLUTIONS
Bi-weekly newsletter with all you need to know including a legislation tracker

SOCIAL MEDIA (@EESIONLINE)
Follow us on Twitter, Facebook, LinkedIn, Instagram, and YouTube

FACT SHEETS
Timely, science-based coverage of climate and clean energy topics
Mass Timber Workforce Benefits

Jennifer Cover | WoodWorks
September 2020
Architects, Engineers & Developers

35,000+ Practitioner Education Hours Annually

400 Building Projects Supported Annually
Growing Market Demand

921 Projects
- 384 built
- 537 in-design
Construction Workforce

➢ Construction Management
➢ Installer Training

Photo: Marcus Kauffman, Oregon Department of Forestry
Construction Management

2020
4 In-Person CM Workshops – 216 Participants
2 Online CM Workshops – 440 participants
Installer Training

2020 Seed Training Centers
- Chicago Carpenters Training Center 2,432 training hours
- Northwest Carpenters Institute 136 hours
- HITT Construction
Promote Workforce Skillset

We’re stronger together.

Our network of affiliated professionals offer a wealth of shared knowledge, expertise, and opportunity for growth. Find experienced professionals who share a mutual interest in the future of timber design and construction.

<table>
<thead>
<tr>
<th>ARCHITECTS</th>
<th>ENGINEERS</th>
<th>CONTRACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTALLERS</td>
<td>DEVELOPERS</td>
<td>VIEW ALL</td>
</tr>
</tbody>
</table>

Photo: Marcus Kauffman
2021 Workforce Training Expansion

Dead Lead Study
Not Enough Trained GCs and Installers

3 Year Program in Development
- MT Construction Manual
- 16 Hour Installer Training Package
- 10 Training Centers
- 10 Community Colleges
- Engage with 50 GCs
- Virtual or In-Person Workshops
Market Growth Opportunity

17,000 Buildings Annually
Thank you
From Then…

Founded in 1922 by TG Freres
Sawmill on the North Fork of the Santiam River
Moved to current location in 1950’s
Converted to veneer manufacturing in the late 1950’s.
… To Now
FLC Operates

Two Veneer plants
Veneer Drying Facility
Plywood Plant
Cogeneration Facility
Stud mill
Fleet of Log and Highway Trucks

Mass Ply Panel Facility
Operational December 2017
At Freres Lumber we:

Employ 430 full time people
TRYING TO HIRE 50 MORE!
Sustainably manage more than 17,000 acres of timberland
Gross Annual Sales Revenue of $150 million

Products
- Variety of residuals
- Electricity
- Lumber
- Plywood
- Veneer

Specialize in veneer for engineered wood products
Mass Timber Panel Facility Operational
December 2017
Beachie Creek Fire

- 192,531 acres at 8:00pm 9/19/20
- 32% Containment
- 60% was on Federal Land- Consistent with Federal Ownership %
- On our own land, we estimate 100mmbdf salvage volume
  - 15 months supply for Freres Lumber
  - 7 years supply at our historical sustained yield harvest rate
2018 Farm Bill

In Section 207, the FY2018 omnibus authorized FS and BLM to enter into 20-year stewardship contracts or agreements, if the majority of the federal lands are located in areas classified in Fire Regime Groups I, II, and III. The law also authorized the Secretary to give a procurement preference to a contractor that promotes an innovative use of forest products as part of the contract.
Sustainability

Fiber Recovery
- Higher Recovery of usable fiber than lumber
- Zero-waste!
  - Any non-saleable wood product is used to generate electricity!

Carbon Sequestration
- 1 cubic meter of concrete offset by 1 cubic meter of wood sequester 1 ton of atmospheric carbon!

Timber Availability
- Ideal timber for engineered veneer products is suppressed 2nd growth trees
- Average block diameter for our engineered veneer plant is 9”
Our 2 biggest hurdles!

**Timber**

**Labor**

Adrian Gregory, Plywood Superintendent
Alain Kiel, Plywood Supervisor
Arturo Pelays, Veneer Supervisor

Bill Childress, Plywood Plant Manager
Chris Harpole, Plywood Maintenance Manager
Chris Roth, Rolling Stock Manager
Growth, mortality and harvest 2011-2015

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>Harvest</th>
<th>Mortality</th>
<th>Net Change</th>
<th>Total Growth (million cubic feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEDERAL</strong></td>
<td>9%</td>
<td>29%</td>
<td>62%</td>
<td>1,326</td>
</tr>
<tr>
<td><strong>STATE</strong></td>
<td>58%</td>
<td>18%</td>
<td>24%</td>
<td>167</td>
</tr>
<tr>
<td><strong>PRIVATE</strong></td>
<td>75%</td>
<td>11%</td>
<td>14%</td>
<td>1,167</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>41%</td>
<td>21%</td>
<td>38%</td>
<td>2,660</td>
</tr>
</tbody>
</table>

Forestland Acreage by Owner (2015)

- 60%
- 20%
- 14%
- 4%
- 2%

Timber Harvest by Owner (2015)

- 63%
- 15%
- 12%
- 9%
- 1%
Historical Timber Harvest

Oregon Timber Harvest
Millions of Board Feet

Source: Oregon Department of Forestry, Oregon Office of Economic Analysis
The Forest Sector Contributes:

- More than 61,000 living-wage jobs
- An average wage of $50,000
- $12.5 billion in annual sales of timber and wood products
Solutions

• 20-year Stewardship Contracts
  • Don’t just sign it into law, make it happen!
    • Employ our rural community actively managing the forests in their region!

• Manage our forests!
  • Must increase footage from Federal Lands-
    Our private lands are maxed out at sustained yield.
  • Timber availability is the single largest obstacle to increased rural employment!

• Encourage locally sourced products- Forest to Frame
  • Lower raw material prices would discourage imports from less sustainable regions of the world.
CLT Manufacturing: Creating Careers Through Empowerment and Community
OUR VISION

To foster harmony between the environment and construction with world-class site access solutions. This inspires our mission.

OUR MISSION

Sterling provides environmentally favorable access solutions to energy infrastructure by embracing a culture where thoughtfulness and sincerity allow our 4C’s to thrive.
We employ 500 employees at two facilities which have the capability to manufacture up to 800,000 $M^3$ of TerraLam CLT panels per year.
Sterling participates in community-based events that build awareness among high school students of available employment options.
Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.

-Chinese Proverb
Employee Development
Employee Development
Creating a Community Among Our Colleagues
Connecting with Our Communities
Connecting with Our Communities
THANK YOU
What did you think of the briefing?

Please take 2 minutes to let us know at:
www.eesi.org/survey

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