MASS TIMBER MOMENTUM IN NORTH AMERICA: TRENDS, INITIATIVES, AND POLICIES TO GROW THE MARKET

Sandra Lupien, MPP

Director, MassTimber@MSU, Michigan State University Fulbright Finland Scholar, University of Eastern Finland

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MassTimber@MSU leverages research, education, outreach, communications, policy, and partnerships to advance sustainable mass timber construction and manufacture in Michigan, the Great Lakes region and beyond.

canr.msu.edu/masstimber/ #MIMassTimberMomentum















U.S.A. MASS TIMBER MILESTONES

Pre-1980s 1980s **Early 2010s 2015** 2016 **2016** 2016 2018 **2022**



Glulam, naillaminated timber in code and in use for many decades



CLT emerged ~40 years ago in Austria and Germany



Early 2010s – CLT interest sparks in U.S.A.



First certified CLT panels manufactured in U.S. – D.R. Johnson



First International Mass Timber Conference (~500 attendees; in 2024 3500+ attendees)



First "tall"
mass timber
high-rise
completed in
the U.S.



First building completed using U.S.-made CLT



First multi-family mass-timber skyrise completed



Tallest mass timber building in the world completed

HOW ABOUT PRODUCTION?

United States & Canada in 2023

Production

• 393,000 cubic meters (estimate)

Capacity

• 604,000 cubic meters (estimate)

(Now expected to be closer to 1MM m3)

https://masstimberconference.com/wp-content/uploads/2024/10/MT2024_Mass-Timber-Performance-Index.pdf?utm_source=chatgpt.com



U.S. MASS TIMBER DEMAND

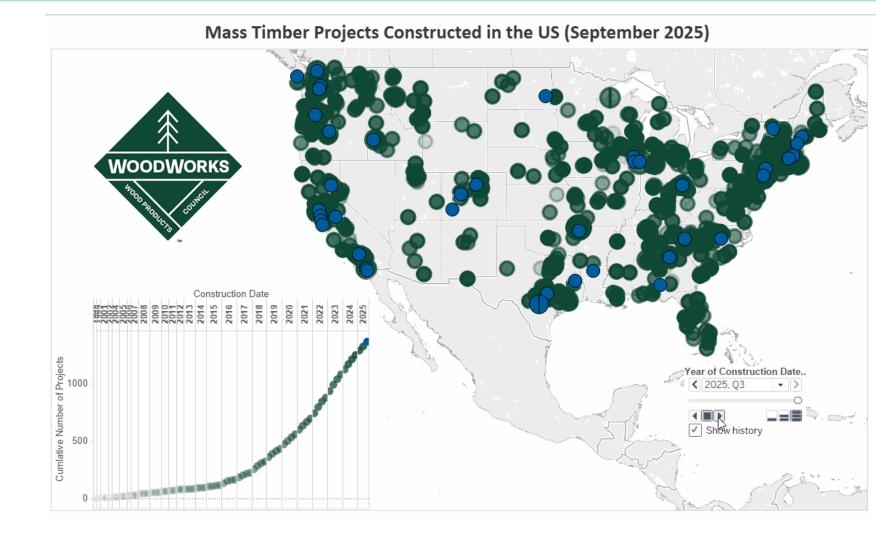
As of September 2025

Total projects: 2595

(Complete or in Development/Construction)

Projects in 2018: 439

Increase ~ 6x





CANADA MASS TIMBER DEMAND

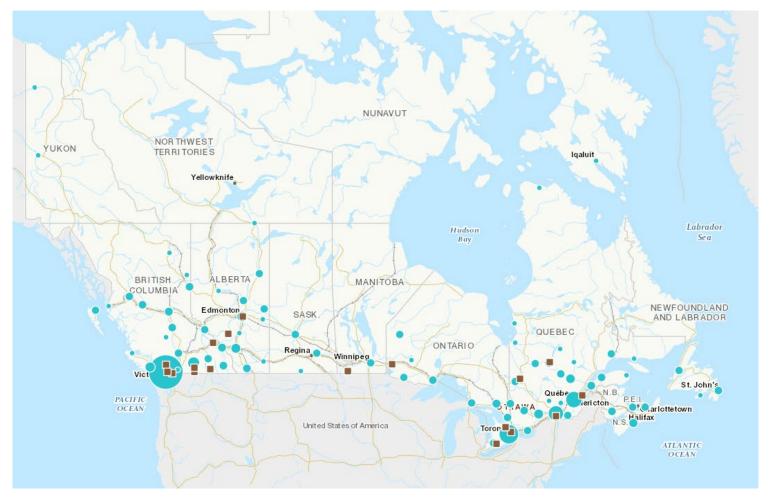
As of September 2025

Total projects: 855

(Complete or in Development/Construction)

Projects in 2018: 652

Increase ~ 25%





State of Mass Timber in Canada Map; Green Construction Through Wood Program, Natural Resources Canada https://experience.arcgis.com/experience/58e313c4ac0247138ba5057d655ed1d4

SILLY, BUT INTERESTING, STATISTIC

United States

- Total Projects: 2595
- Increase between 2018-2025: 6x
- Population: 340.1 Million
- Mass Timber Buildings Per Capita: 0.000008

Canada

- Total Projects: 855
- Increase between 2018-2025: ~25%
- Population 41.29 Million
- Mass Timber Buildings Per Capita:
 0.00021

Canada has 26X more mass timber buildings per capita than the U.S.

BUILDING CODES – U.S. & CANADA

United States

National Model? No.

- Most states base a state model on the International Building Code (IBC)
- Jurisdictions usually adapt, adopt, enforce

Most Permissive: 2024 IBC

- Mass timber up to 18 floors
- Exposure: 100% Ceilings; 40% Walls
- Effective in 5 states and a few cities

Next-Most Permissive: 2021 IBC

- Mass timber up to 18 floors
- Exposure: 0%-40%; more with lower bldgs.
- Effective in 28 states



Photo: WoodWorks Innovation Network

National Model? Yes.

- National Building Code of Canada (NBCC)
- Provinces/territories adapt, adopt, enforce

Most Permissive: 2020 NBCC

- Focus on Encapsulated Mass Timber Construction (EMTC)
- Up to 12 floors; exposure limited, based on fire-resistance ratings in specific buildings
- Effective in 12 of 13 provinces/erritories

More Permissive: 2025 (Pending)

- Up to 18 floors; still based on EMTC
- Effective in one province



U.S. FEDERAL POLICIES & INITIATIVES

Forest Service photo by Preston Keres

Wood Innovation Program (2015 – Present) Overview

Agency/Department

Department of Agriculture/Forest Service

Origins and Expansions

- Launched 2015 (Administrative Initiative)
- Extended/Expanded 2018 (Legislation: Timber Innovation Act in U.S. Farm Bill)

Grants/Award Amounts

- Wood Innovations Grant: \$250-\$300K
- Community Wood Program: ~\$1MM
- Wood Products Infrastructure: ~\$1MM

Wood Innovation Program Investments

Total Investment in Mass Timber Production & Construction Projects 2015-2022 (per U.S. Forest Service)

- 139 Grants
- \$31 Million

Example Projects (in Michigan only)

- Cost/time estimating for mass timber construction
- Pilot Michigan wood in NLT
- Increasing acceptance for MI hardwood in MT
- Expanding mass timber outreach
- Designing a MT long-term care facility

U.S. FEDERAL POLICIES & INITIATIVES

Photo by LEVER Architecture

U.S. Army Corps. of Engineers Policies Status: In effect

Mass Timber In Construction Projects (Directive ECB 2023-14)

Key Features:

- Requires specific consideration of mass timber when designing new buildings
- Budget for MILCON in 2025
 - \$17.5 Billion USD

Engineering Research Development Center Key Feature:

 Ongoing testing to qualify and mature mass timber solutions for Army defense needs Mass Timber Federal Buildings Act of 2025 (S.1094) Status: In Committees (not adopted)

Key Features:

- Would establish a contracting preference for buildings that use domestically sourced and manufactured mass timber and other innovative wood products
 - Prioritizes wood sourced from wildfire resilience management or other forest restoration
- Requires a life cycle assessment of building's GWP and a report on the results

U.S. STATE-LEVEL POLICIES & STATEWIDE INITIATIVES

Oregon

Early Catalyst

- Tallwood Design Institute
 - Two Public Universities U of O and OSU
 - Direct Partnerships with Industry
 - Testing, Product & Building R&D, Ecosystem Development

Major Initiatives

- Oregon Mass Timber Coalition (OMTC)
 - \$60MM in Federal, State, Private Funding
 - Develop MT value chain to build housing
- Oregon Mass Timber Innovation Engine
 - \$1 MM Federal development grant; implementation would expand OMTC

Michigan

Investments – Legislature & Department of Natural Resources ~\$392 Million in:

- Demonstration Buildings
- Research (product, economic, construction)
- Outreach/engagement to develop markets
- MI Mass Timber Catalyst Program

MassTimber@MSU – Michigan State Univ.

- Grow demand to attract manufacture
- Develop a statewide ecosystem
- Technical assistance/community of practice
- Public communication & education
- University research and teaching

U.S. STATE-LEVEL POLICIES & STATEWIDE INITIATIVES

Washington

Washington State Legislature, 3SHB 1491 — Transit-Oriented Development Act

- Applies to Buildings in TOD Zones in cities and counties
- Extra height and density allowed for mass timber use

State Business & Occupation Tax Preferential Rate

- Applies to timber & wood products manufacture
- Incentive for mass timber production

Washington Mass Timber Accelerator

- Designs and advocates for policy
- Produces and aggregates mass timber resources

Colorado

Colorado Mass Timber Coalition

- Working to advance a mass timber economy across the value chain
 - Convenes five strategy subcommittees on:
 - Supply Chain
 - Affordable/Workforce Housing
 - University Research
 - Policy and Demand
 - Workforce Development
- Hosts annual conference

U.S. REGIONAL/MUNICIPAL POLICIES & INITIATIVES



Developer Incentives

Build Higher, Build Denser with MT

- Emeryville, California
- · East Lansing, Michigan
- Boston, Massachusetts
- Redmond, Washington
- New Haven, Connecticut



Accelerator Programs

Provide Funds and Technical Assistance

- Boston, Massachusetts
- New York City
- Santa Monica, California
- Georgia (Statewide)
- Michigan (Statewide)

CANADA NATIONAL POLICIES & INITIATIVES

Photos: 2021 State of Mass Timber in Canada (SMTC)



Green Construction Through Wood Program

Demonstration & Incentive Program

- \$55 Million from 2819-2023)
- Awards up to about \$1.5 MM
- Covers tall timber and low-rise wood buildings, timber bridges, manufacturing R&D

Investments in:

- Community Buildings
- Workforce apartments
- Pavilions
- NLT production line
- · Prefab housing design



Mass Timber Roadmap

A vision and strategy document

Targets

 Increase market to \$1.2B by 2030, and to \$2.4B by 2035

Action Areas

- With public and private collaboration, develop and advance supportive policy
- Standardize building types, wood specifications, hardware
- Implement skills development plants across the value chain

CANADA PROVINCE-LEVEL POLICIES& INITIATIVES



British Columbia

BC Mass Timber Action Plan

- Sets goals and strategy for a mass timber ecosystem
- Three pillars:
 - Demonstrate mass timber; incl. supporting R&D, actual construction, codes and policy
 - Maximize benefits for people, such as through jobs and training
 - Support a low-carbon future

Mass Timber Demonstration Program

- Grants up to \$500,000
- ~\$11MM invested (catalyzed \$460MM)

 Photo: StructureCraft Builders Inc



Ontario

Ontario Advanced Wood Construction Action Plan

Four Key Goals:

- Raise awareness & increase demand
- Advance codes/standards research to remove barriers
- Build supply side capacity
- Demonstrate success through showcases

Photo: Element5

MORE CANDADA PROVINCIAL, REGIONAL, MUNICIPAL POLICIES & INITIATIVES

Quebec (Province)

Wood Innovation Program (2025)

- \$25.5MM investment
- Supports secondary wood production, including mass timber production

Vancouver, BC (City)

Development Bonus for Mass Timber

- 2-3 additional floors
- Increased floor area

Mass Timber Pilot Program

- Testing and implementing mass timber on city-owed properties
- Goal to increase sustainable housing

Provincial Investment in Manufacture

- For new, large mass timber producer:
 - Invested \$500K
 - Provision support of \$10MM

Nova Scotia (Province)

Toronto, ON (City)

TAKEAWAYS

Market Conditions

- Rate of growth in U.S. since 2018: 6x U.S. vs. ~25% Canada
- Market share in Canada is likely (significantly) higher: "buildings per capita"
- Production capacity is increasing, but most producers not at full capacity yet

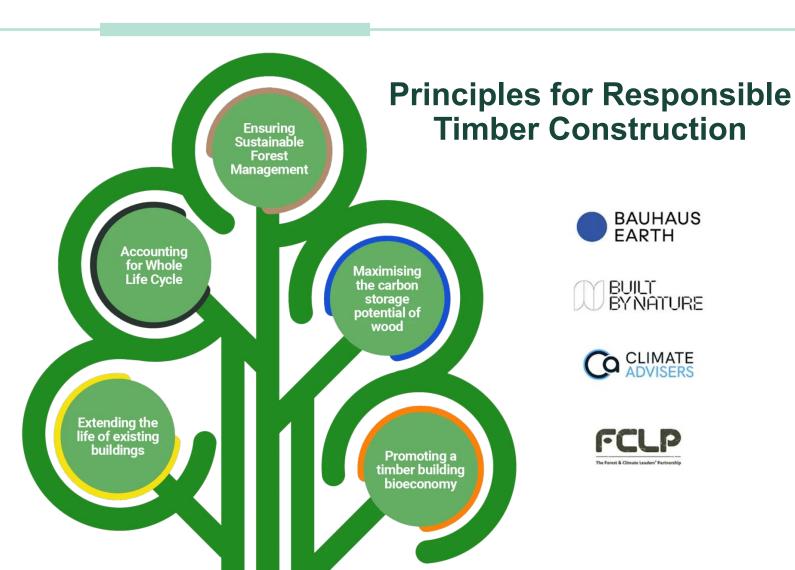
Policies/Regulations/Initiatives

- In the U.S: Military and pending federal procurement could significantly increase demand (but no real
 enforcement); federal grant helped drive early action; Some states &municipalities: promising models
- In Canada: Federal and Province-level action plans signal strong buy-in, strategy, and framework for action; Some states and municipalities: promising models
- Codes: About the same in both countries

Missing:

 Tax/financial incentives; Policies like EU Construction Products Regulation & Energy Performance of Buildings Directive.

IT ALL COMES BACK TO FORESTS



"Healthy, resilient forests are the product.

Mass timber and wood construction are byproducts."

– U.S. Mass Timber industry leader



Sandra Lupien, MPP
Director, MassTimber@MSU
lupiensa@msu.edu
+1-510-681-3171



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