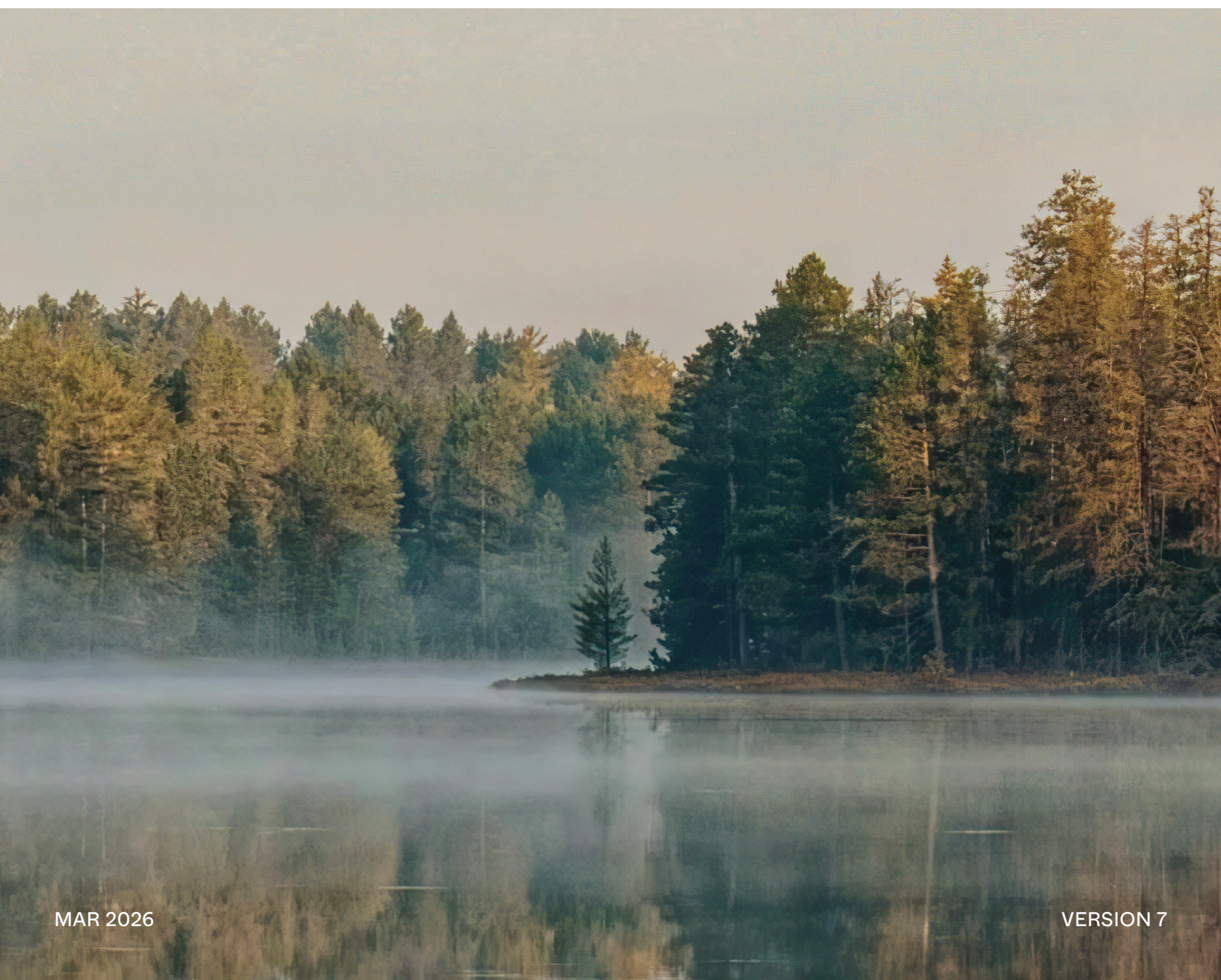




# **GREAT LAKES MASS TIMBER COLLABORATIVE: A REGIONAL VISION**



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# II. FOREWORD

GREAT LAKES MASS TIMBER



**Bill Parsons**

Chief Operating Officer

WoodWorks – Wood Products Council

Mass timber is no longer a concept on the periphery of the construction industry—it’s a movement gaining powerful momentum across the United States. Interest in this innovative building material continues to surge as developers, designers, and communities seek sustainable, modern alternatives to traditional steel and concrete. WoodWorks has been at the forefront of this shift, documenting the progression of projects in the U.S. and publishing quarterly updates to the mass timber map on our website. The data makes it clear: mass timber is the most exciting innovation for the design and construction industry in decades.

As of March 2025, we’re tracking 2,427 mass timber projects, 1,244 of which have been constructed. This activity signals more than curiosity—it reflects a market increasingly ready to invest in the aesthetic, performance, and environmental advantages of mass timber. WoodWorks has witnessed the growth of this emerging industry firsthand as we’ve educated and assisted project teams. What started as a few corporate office buildings has expanded beyond spec offices and into nearly every building segment. Key growth has occurred in multi-family, commercial, and educational projects (including early learning, K-12, university, and laboratory spaces). From coast to coast, mass timber is finding ways to compete in every type of building.

To meet this growing demand and realize the full potential of this material, we must build a diversified and resilient domestic supply chain. That means increasing production capacity, yes—but it also means addressing upstream and downstream systems holistically, from sustainable forest management and regional sourcing to design education and construction workforce development.

Most importantly, we must work regionally, such as with the Great Lakes Mass Timber Collaborative, to envision and implement mass timber ecosystems that reflect each part of the country’s unique strengths, needs, and opportunities. The promise of mass timber is not limited to its carbon benefits or beauty—but also in its ability to connect people, places, and purposes in a way that traditional building materials cannot. The chapters ahead explore this promise and the path forward.



# PREFACE

The Great Lakes Region is poised to lead a bold new era in sustainable manufacture and construction—and mass timber is at the center of it. With abundant forests, world-class research institutions, deep manufacturing expertise, and a rich legacy of innovation, this region has everything it needs to shape a future that unites healthy, resilient forests with low-carbon communities in America.

Around the world, communities are already demonstrating what's possible. From East Africa to British Columbia, governments, universities, and industries are aligning to harness the power of mass timber—building stronger local economies, reducing emissions, and creating resilient supply chains. These global models offer valuable lessons.

But the solutions for the Great Lakes will be our own—rooted in our unique landscape, talent, and commitment to both economic opportunity and environmental stewardship. The moment is here. The momentum is here. And the Great Lakes Region is ready to rise—leading a national transformation in how we build, live, and grow with mass timber.



**A fully realized mass timber ecosystem benefits regional stakeholders—from forester to manufacturers, policymakers to developers, designers to builders, and communities in cities, suburbs, and small towns—in five key ways:**

## KEY BENEFITS:

### 1. COST SAVINGS AND REVENUE DIVERSIFICATION

Mass timber products can be tailored to various uses and preferences, creating more revenue streams for manufacturers. Builders can also optimize costs and efficiencies through waste reduction and shorter build times.

### 2. CARBON SOLUTIONS IN FORESTS AND BUILDINGS

Mass timber - a value-added wood product - provides a powerful economic incentive to keep forests as forests and to plant more trees. These trees sequester carbon through photosynthesis, and mass timber extends these benefits, locking up carbon in buildings for decades or centuries.

### 3. JOB CREATION AND REGIONAL ECONOMIC DEVELOPMENT

Expanding the mass timber industry drives economic growth by creating jobs in harvesting, milling, processing, manufacturing and transportation. It also strengthens local economies by supporting businesses across the supply chain, from forestry operations to construction.

### 4. LOCAL FOREST MANAGEMENT AND CONSERVATION

A localized mass timber industry fosters sustainable forestry practices and incentivizes the maintenance of healthy, resilient forests.

### 5. REDUCED RELIANCE ON GLOBAL SUPPLY CHAINS

Sourcing mass timber from regional forests reduces dependence on international logistics and shortens supply chains. In contrast, materials with production concentrated in a small number of regions makes countries that rely on imports vulnerable to geopolitical tensions, trade restrictions and price volatility.



# III. EXECUTIVE SUMMARY

GREAT LAKES MASS TIMBER COLLABORATIVE

## A MULTI-STAKEHOLDER INITIATIVE

The Great Lakes Timber Collaborative is a multi-stakeholder initiative that seeks to develop a robust mass timber ecosystem in the Great Lakes region. It aims to leverage the Great Lakes' manufacturing legacy to establish the area as a leader in mass timber. Additionally, the collaborative seeks to remove state-level silos by sharing knowledge, integrating existing resources, and developing strategies.

This Regional Vision represents both the culmination of research, positioning and prioritization for the region, and a framework for establishing a formal industry body. It serves as a mechanism to drive action and a foundation for future development. As the Real Estate, Architecture, Engineering, and Construction (RAEC) industry increasingly recognizes the environmental and economic advantages of mass timber, this regional vision may also serve as a model for other hyperlocal mass timber ecosystems worldwide.

This document results from collaboration by constituents from eight Great Lakes States: the Great Lakes Region is defined by the constituent states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin (regionally relevant Canadian provinces may be engaged at a later date). These states share both common histories and cultural personas, as well potential strategic geographic and economic positioning(s) to capitalize on the emerging global mass timber ecosystem.

Six core objectives to develop a holistic and robust Great Lakes mass timber ecosystem are identified: coordinated economic development, workforce training, collaborative research, widespread adoption of mass timber, healthy forest management, and streamlined communication. Nested within these objectives are actionable tactics aimed to advance the framework in meaningful ways through tangible metrics

Potential frameworks for a formal industry body are identified, based on current and projected opportunity needs within the ecosystem, and based on core values established at a convening held in Detroit, Michigan in 2024; these reflect input from the AEC industry, state and federal agencies, and Institutes of higher education.

This regional vision document establishes the foundation for an interstate, cross-sector coordinating entity to facilitate the objectives defined herein. However, it is not the definitive founding or governing articles of such an industry body. As identified in the "Beyond this Document" section, this work must be advanced through collaborations and 'Sprint Teams' to actualize the potential of a Great Lakes Regional Mass Timber Ecosystem.

# PART 01

## FOUNDATION, OBJECTIVES, & TACTICS

The Great Lakes Region is well poised to become a leader in the growing mass timber industry. With its strong manufacturing history, world-class research universities and abundant forests, the region already boasts significant mass timber projects, including the world's tallest mass timber structure. As regional and national demand for mass timber continues to rise, the Great Lakes States—through a coordinated effort—are well-positioned to capitalize on this growth by expanding production and creating new jobs in forestry and manufacturing.



# OPPORTUNITY CASE

GREAT LAKES MASS TIMBER COLLABORATIVE

## THE RISE OF MASS TIMBER IN THE GREAT LAKES REGION

Mass timber demand and production are increasing across the United States. The Great Lakes Region—with its rich manufacturing history, world-class universities dedicated to innovative forest management research, geographic advantages and existing infrastructure—is well-positioned to lead the next wave of growth in this industry.

Modern mass timber construction entered the United States in the 2010s, first gaining traction in the Pacific Northwest. In Oregon, universities ramped up research, architects embraced the material, the first domestic cross-laminated timber (CLT) manufacturer emerged and the state government created a model to fast-track early mass timber buildings. As a result, both demand and production in Oregon surged, spreading throughout the region with additional suppliers in Washington and Montana, and the highest mass timber consumption in California.

As the West continues to foster its growing mass timber ecosystem, national demand has exploded. The number of projects designed or completed rose from 439 in 2018 to 2,338 by 2024.<sup>1</sup> Of these, at least 375 are in the Great Lakes Region. Significant milestones include Minnesota's T3—the nation's first tall wood building—which opened in 2016, Michigan State University's STEM Teaching and Learning Facility becoming a mass timber learning hub in 2021 and the completion of the world's tallest mass timber structure, the Ascent Tower apartments in Milwaukee, in 2022. The region's mass timber pipeline is diverse, ranging from single-family homes to skyscrapers, and includes affordable housing, luxury condos, schools, offices and more. Communities of all types are recognizing the value of mass timber for their building projects.

As demand grows, many heavily forested Great Lakes states are eager to expand mass timber production. This could provide a value-added use for softwood lumber and, as research advances in this hardwood-heavy region, pave the way for new mass timber products. The sector holds strong appeal due to the potential for new forestry and manufacturing jobs, particularly in rural areas. Economic analysis shows that a small to medium-sized mass timber facility in Michigan, producing 50,000m<sup>3</sup> of mass timber annually, could add nearly \$153 million to the state's GDP, create 318 jobs and generate almost \$9 million in tax revenue.<sup>2</sup> With its leading universities dedicated to forest management, manufacturing heritage and geographic favorability, the Great Lakes Region is well-positioned to succeed in mass timber, ensuring that growing demand translates into substantial benefits for the region's economy, businesses, people and forests.

# THE “WHY”

GREAT LAKES MASS TIMBER COLLABORATIVE

## ESTABLISHING A GREAT LAKES MASS TIMBER COLLABORATIVE

The idea for a Great Lakes Mass Timber Collaborative arose from the realization that each state in the region was engaging with mass timber to some degree. More mass timber buildings were emerging, and industries such as architecture, engineering and construction needed resources and information to navigate early projects. Public agencies were increasingly aware of the economic and forestry benefits of mass timber and were actively exploring its viability while reaching out to recruit potential manufacturers. University programs in construction, design, wood science, forest economics and engineering were advancing mass timber research, developing curricula and forming strong networks. Skilled trades were also preparing for mass timber construction by creating training mock-ups and curriculum.

However, communication across state lines remained limited. The Great Lakes Region shares a manufacturing legacy, similar forest contexts and universal priorities like rural economic development, job creation, quality housing and climate change mitigation. Without collaboration, the region was missing an opportunity to expand mass timber research, manufacturing, fabrication and design capacity. A Great Lakes Mass Timber Collaborative could help break down state silos, share knowledge and build a diverse and coordinated ecosystem to meet the growing demand for mass timber across the region and beyond.



# OBJECTIVES

GREAT LAKES MASS TIMBER COLLABORATIVE

Develop a coordinated and robust Great Lakes mass timber ecosystem—from forestry to construction—that mobilizes the specific assets and contexts of the region, based on **six core objectives.**

OBJECTIVE

1

Coordinated Economic Development

OBJECTIVE

2

Mass Timber-Ready Workforce

OBJECTIVE

3

Collaborative Research

OBJECTIVE

4

Widespread Mass Timber Adoption

OBJECTIVE

5

Healthy, Resilient Forests

OBJECTIVE

6

Streamlined Mass Timber Communications

## OBJECTIVE #1 Coordinated Economic Development

**Economic development, tools and messaging are coordinated across states to stimulate mass timber industry investment, policy and incentives.**

### TACTICS:

- Provide an overarching structure/convening service for interstate economic development collaboration
- Identify and implement promising collaborative economic development models that appropriately engage public, private and academic stakeholders
- Conduct a systemic landscape analysis and map the mass timber attributes and opportunities of each state, and then across the region
- Facilitate and broker relationships that maximize the strengths of each state or subregion for the benefit of the entire mass timber ecosystem
- Commission a regional mass timber supply chain analysis and demand survey



## OBJECTIVE #2 Mass Timber-Ready Workforce

**A skilled workforce is prepared to implement mass timber throughout the supply chain—including forestry, manufacturing, and construction.**

### TACTICS:

- Identify and promote existing workforce training opportunities
- Facilitate collaborations to develop new workforce training opportunities in academia, skilled trades, manufacturing and the AEC industry
- Identify and facilitate funding opportunities to expand the mass timber workforce



## OBJECTIVE #3 Collaborative Research

**Engage multi-state academic, private and public partners to innovate on mass timber production and construction, bridging economic, social and scientific knowledge gaps.**

### TACTICS:

- Identify research gaps relevant to the region
- Foster applied research on regionally specific product development and construction innovation
- Facilitate the creation of a joint mass timber institute involving universities and colleges from multiple states
- Identify and facilitate collaborative funding opportunities



## OBJECTIVE #4 Widespread Mass Timber Adoption

**Coordinated outreach and advocacy removes barriers to increase adoption of mass timber across the region.**

### TACTICS:

- Participate in or lead policy advocacy to address barriers, such as slow building code adoption and unfavorable insurance premiums, and to secure incentives like grants and tax breaks
- Organize a network of mass timber tours for AEC professionals, decision-makers and others, developing partnerships to facilitate these tours
- Identify opportunities to exhibit at conferences and events, and equip and facilitate a network of staff to manage exhibits in their respective states



## OBJECTIVE #5 Healthy, Resilient Forests

**A Great Lakes mass timber production model prioritizes, maintains and improves forest health and resilience.**

### TACTICS:

- Aggregate resources on the relationship between mass timber and forest health and resilience
- Develop and advocate for public policies and industry practices that advance this objective
- Help connect mass timber production opportunities to State and Federal forest management priorities



## OBJECTIVE #6 Streamlined Mass Timber Communications

**Mass timber stakeholders have ready access to messaging, resources and a unified brand and voice for regional collaboration.**

### TACTICS:

- Aggregate and create coordinated, regionally relevant branding and mass timber messaging
- Develop a website and social media channels
- Create and host a Great Lakes mass timber resource hub
- Amplify relevant events, initiatives and resources



# PART 02

## PARTICIPANT STATES

Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania Wisconsin are the constituent states of the Great Lakes Mass Timber Collaborative. By sharing information, building capacity and coordinating efforts across research, manufacturing and construction, the initiative seeks to break down operational silos between these states and establish a robust regional mass timber ecosystem. The Collaborative will leverage the unique strengths of each state to meet the growing demand for mass timber construction in the Great Lakes Region and beyond.



# PARTICIPANT STATES

GREAT LAKES MASS TIMBER COLLABORATIVE

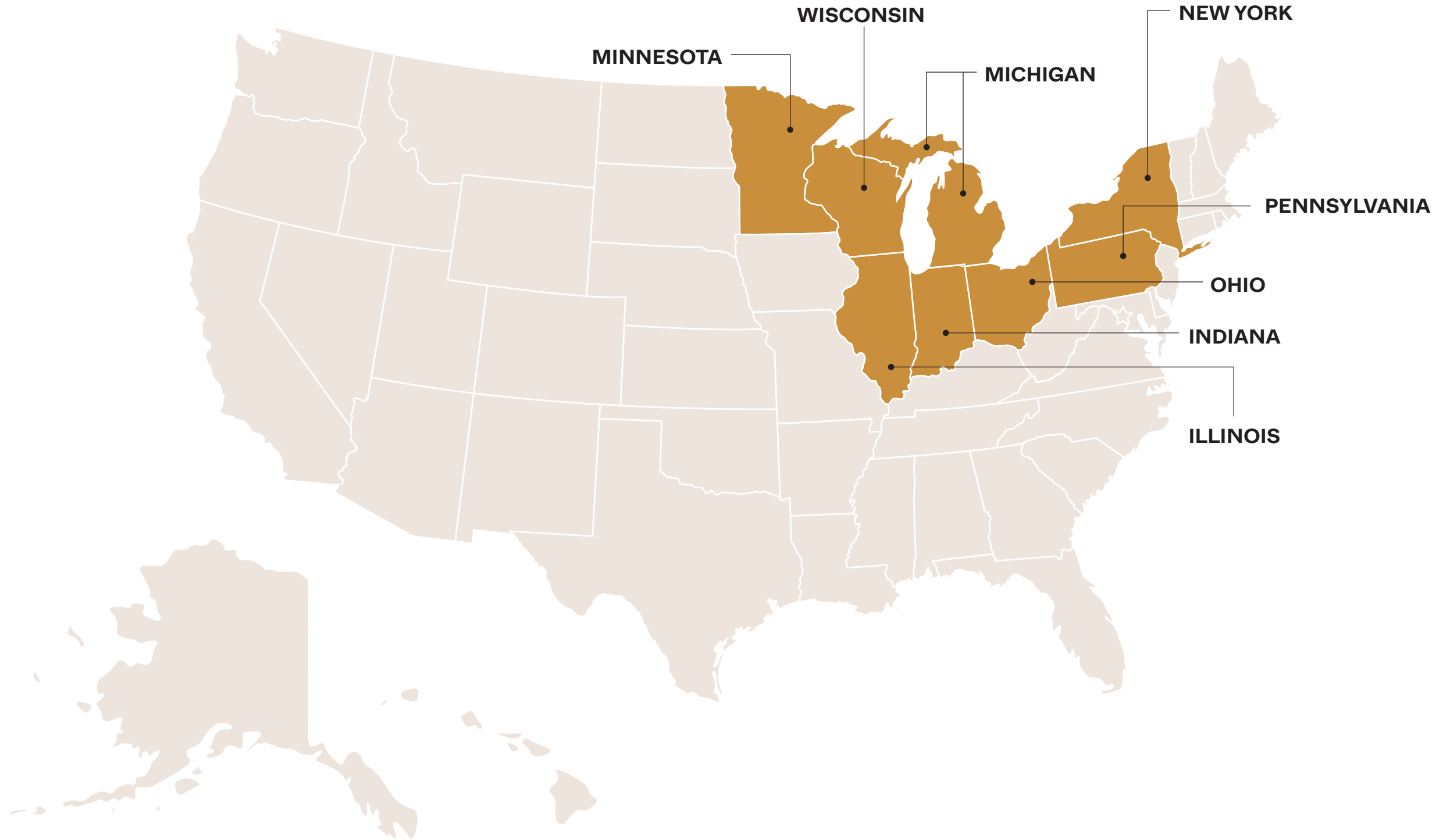
## THE GREAT LAKES MASS TIMBER (GLMT) ECOSYSTEM

### Shared Strengths and Opportunities

- + Manufacturing culture and heritage
- + University engagement
- + High percentage of forested acres and established forest products industries
- + Growing mass timber awareness and knowledge, but with a strong need to increase significantly
- + State or municipal climate and sustainability goals

### Shared Weaknesses and Threats

- + Slow adoption of building codes that include mass timber
- + Insurance policies unfavorable to mass timber<sup>3</sup>
- + Hardwood species common in the region not yet in mass timber production certifications
- + Reduced milling and trucking infrastructure and capacity
- + Few or no existing policies and incentives for mass timber



# ILLINOIS

## GREAT LAKES MASS TIMBER COLLABORATIVE

**Illinois has a strong presence in manufacturing, labor, design and engineering. To fully realize its potential and expand its influence in mass timber, the state must develop strategic partnerships with neighboring states to address key challenges, such as forestry management and comparatively slow code adoption. By joining a Great Lakes-based mass timber partnership, Illinois can leverage its strengths to not only meet the regional demand for mass timber buildings, but also position the region to serve broader markets across the United States and North America.**

### DISCUSSION OF STATE'S INTERESTS IN GLMT ECOSYSTEM

Illinois is an ideal example of a state that could greatly benefit from, and be integral to, a regional mass timber ecosystem. While its strengths are substantial, its weaknesses may prevent it from establishing a robust mass timber industry independently. However, through strategic partnerships with other states, Illinois could focus on its strengths in ways that benefit the entire region. By leveraging its established large-scale manufacturing, skilled workforce, design expertise and testing laboratories, Illinois could become a key contributor to a regional mass timber ecosystem. Its lack of in-state forestry resources could be balanced through partnerships with neighboring states like Wisconsin and Michigan.

To bring this together, collaborations from key stakeholders would be needed: code officials in major cities like Chicago to streamline the approval of mass timber projects; municipal and state level policymakers to foster interstate cooperation; developers and investors to bring projects to life; and members of the supply chain—foresters, manufacturers and builders—to utilize regional geographic advantages and synergies. In short, Illinois has much to offer within a Great Lakes-based mass timber ecosystem, but it is clear that success will require collective effort and regional collaboration.

### STRENGTHS

Illinois possesses several notable strengths, particularly in the areas of human and knowledge capital. The state boasts a wealth of expertise in manufacturing, design and engineering. Population hubs like Chicago also provide access to substantial financial capital for funding projects and manufacturing efforts. Illinois benefits from strong existing infrastructure, including the UL testing laboratory in Northbrook, a valuable resource for testing assemblies and providing fire data. Sterling Structural's plant in the south Chicago suburbs can produce significant quantities of CLT panels, and the state's existing transportation network facilitates swift access to the broader Great Lakes region and beyond. Furthermore, Chicago's code adoption for mass timber projects has enabled large-scale projects to move forward, with 1038 Fulton marking the city's first new construction mass timber office building in 2019, and numerous other large-scale projects in the pipeline.

### WEAKNESSES

Despite some mass timber projects in Chicago, slow code adoption has hindered the pace of construction, causing Illinois to lag behind other Great Lakes states. In terms of forestry, Illinois currently devotes most of its available agricultural land to farming. This leaves little area for forestry relative to its neighbors. Additionally, much of the state's forests are deciduous and hardwood, which limits the availability of suitable timber resources for mass timber production.

### OPPORTUNITIES

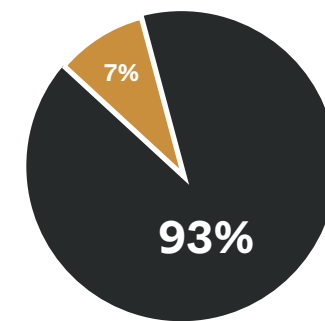
As code adoption accelerates in key metropolitan centers like Chicago, Illinois stands to benefit from significant growth opportunities in mass timber construction. With its strong foundation in design and manufacturing expertise, the state is well-positioned to become a hub for mass timber design innovation. Illinois can leverage this knowledge to build a reputation as a leader in mass timber design and engineering. The state's large population base also presents opportunities to export construction expertise to other Great Lakes states and beyond, as well as develop scalable solutions for efficient single-family housing. Strategic partnerships with neighboring Great Lakes states, particularly those with robust forestry industries, could offer mutual benefits, balancing Illinois' strengths in manufacturing, design and engineering with its relative weaknesses in supply chain and forestry resources.

### THREATS

The slow pace of code adoption in Illinois poses a significant threat to the state's ability to be a 'first mover' in innovative mass timber design. As a result, in-state design and engineering talent may be directed to projects outside of Illinois, potentially stalling local progress. Additionally, other states may develop their own knowledge base and expertise in mass timber, diminishing Illinois' standing as a leader in mass timber design, engineering and manufacturing.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

4.8M

### CURRENT MASS TIMBER PRODUCERS

1

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

2

### MASS TIMBER BUILDINGS COMPLETED

17

### MASS TIMBER PRODUCERS

- Sterling Structural

# INDIANA

## GREAT LAKES MASS TIMBER COLLABORATIVE

**Indiana is well-positioned to grow a mass timber ecosystem, leveraging both its economic strengths and its natural resources. Industrial growth can be fueled by adopting technologies like CNC milling, robotics and automation in mass timber secondary processing, while diversifying sawmills to focus on mass timber production. This can create jobs, benefit the skilled labor force and revitalize manufacturing facilities. Indiana’s hardwood industry, paired with university partnerships, can be a key asset in advancing mass timber production. Ongoing university research into using low-grade hardwoods, small-diameter materials and sawmill residuals can drive innovation in mass timber systems. Additionally, research on measuring carbon storage in mass timber buildings can help establish a credible carbon-offset marketplace, further promoting sustainable practices and environmental stewardship in the state.**

### DISCUSSION OF STATE’S INTERESTS IN GLMT ECOSYSTEM

Indiana possesses several strengths that can be leveraged to promote a mass timber strategy. With its robust manufacturing base, skilled labor force, existing infrastructure, research and development capacity, sustainable forestry practices and a well-established hardwood industry, Indiana is uniquely positioned to further mass timber innovation. The state can harness its economic strengths and natural resources to grow and adopt a mass timber ecosystem. By leveraging its hardwood industry, collaborating with universities on R&D, adopting sustainable practices and addressing housing needs through mass timber and prefabrication, Indiana can emerge as a leader in the sector. Indiana has the potential to attract new industry, create jobs, promote sustainability and support affordable housing, all while contributing to climate change mitigation.

Achieving mass timber adoption and implementation in Indiana requires a multi-faceted approach involving higher education, infrastructure investment, regulatory updates, financial incentives and the promotion of successful mass timber projects. The recent construction of the Elanco Animal Health headquarters and research facility in Indianapolis, designed by Ratio Architects and built by F.A. Wilhelm Construction—both Indiana-based companies—serves as a valuable precedent for mass timber projects. Additionally, there is growing interest among code officials in adopting mass timber provisions in the 2021 IBC.

Collaboration among Purdue, IU and Ball State University can strengthen Indiana’s position in the mass timber sector by focusing on the development of innovative building systems that integrate design with manufacturing, while developing mass timber products tailored to local needs. Integrating mass timber design and construction into architecture, engineering and construction management curricula can equip the next generation of professionals with the skills needed to push mass timber forward.

Key organizations and individuals that can be engaged in mass timber efforts in Indiana include the forest sector (Indiana State Department of Agriculture), Indiana Department of Natural Resources, Division of Forestry, Indiana National Association of State Foresters, private forest landowners and the hardwood products industry (Indiana Hardwood Association).<sup>5</sup> Professional organizations such as AIA, ALA, UPA, USGBC, LEED and Phius, along with the Indiana Department of Workforce Development and the AEC, and developer and construction sectors, also play vital roles.

To establish a strategic and coherent approach to mass timber adoption in Indiana, it is essential to formalize enabling mechanisms across both the public and private sectors. Building leadership capacity through collaboration with universities, hardwood manufacturers, forestry services and economic development organizations will be key to fostering a successful mass timber ecosystem in Indiana.

### STRENGTHS

Indiana boasts a robust manufacturing history, a skilled workforce and underutilized factories that can support the secondary processing and manufacturing of mass timber. Three higher education research institutions—Purdue, IU and Ball State—offer applied scholarship in forestry, natural resources, architecture, engineering and construction management.<sup>6</sup>

Research and development efforts focus on expanding the biodiversity of mass timber through mixed-species investigations, low-grade hardwood CLT use, material testing in wood science, the application of bio-based glues and advancements in building science, including life-cycle assessments, carbon metrics and the promotion of a circular economy.<sup>7,8</sup>

Well-managed sustainable forestry practices ensure Indiana maintains a balance between habitat, timber and resilience. Timber growth exceeds both harvest and tree mortality by 2.3 times, and the state’s deciduous forests can support expanded biodiversity and forest land use. Indiana’s high-quality hardwood forests, a well-developed hardwood industry and strategic logistics infrastructure contribute to the success of its manufacturers, including:

- The largest hardwood veneering manufacturer in the U.S.
- The second-largest wood office furniture and kitchen cabinet producer
- The fourth-largest offsite of prefabricated wood buildings in the U.S.

### WEAKNESSES

Indiana faces several challenges in advancing mass timber production. Ninety-five percent of the state’s wood fiber is hardwood, with no softwood sawmills present. Additionally, 84% of Indiana’s 4.9 million forest acres are privately owned, and only 10% of these private tracts are actively managed. Low-grade hardwoods and underutilized hardwood species are under performing.

Competing industries such as concrete and steel dominate construction, and there are currently no significant models of innovative mass timber buildings in the state. Limited awareness and skepticism about mass timber, along with financial barriers—such as market-rate rents in Bloomington and Indianapolis not justifying the cost—create obstacles to widespread adoption.

The high investment required for new technology in mass timber manufacturing and post-production fabrication is also a deterrent. There is a significant lack of incentives for developing mass timber biodiversity, and outdated building codes make hybrid mass timber construction challenging. Furthermore, there is a gap in standards for embodied carbon sequestration and life-cycle cost analysis in mass timber projects. Developers, contractors, architects, engineers and suppliers in Indiana lack experience with mass timber projects, which hinders an understanding of its value proposition and advantages.

## OPPORTUNITIES

Economically, Indiana is well-positioned to attract new mass timber industry, after decades of industrial decline in the Rust Belt. Opportunities abound for secondary processing and manufacturing through technologies like CNC milling and robotics, which can support the development of post-production mass timber industries. Indiana hardwood could become a key resource for mass timber if research and development (R&D) with universities focuses on innovating with low-grade hardwoods in CLT, DLT, NLT, hardwood veneer laminated CLT panels and mass plywood panels. Strategic investments in R&D at universities could position Indiana as a leader in the Great Lakes Mass Timber ecosystem.

Interest in mass timber outside the Midwest has sparked a desire to replicate similar initiatives in Indiana. By looking to states that are further along in mass timber adoption—especially those with advanced building codes and established mass timber projects—Indiana can gain valuable insights and knowledge. Collaboration between universities and industry could create integrated systems that link design, manufacturing and assembly. This requires deeper collaboration than typical construction practices but with engaged research institutions, it is achievable.

The growing demand for multi-family housing and affordable urban infill housing presents an opportunity for mass timber’s use in Indiana, especially with the speed and sustainability of constructing modular systems. By innovating in mass timber prefabricated modular housing, Indiana could address the statewide housing shortages and contribute to solving the affordable housing crisis. The increased emphasis on sustainable building practices fosters a favorable environment for mass timber adoption.

There are significant opportunities to expand mass timber education in universities, where student interest in sustainable practice can connect the next generation of design professionals with mass timber construction. Universities can also serve as hubs for research on carbon capture and storage in mass timber, developing metrics to measure these benefits and incentivize timber use. This research could drive the expansion of mass timber in Indiana and the Great Lakes region. Additionally, there are opportunities to strengthen connections with the AEC community, increase local design support for sustainable buildings, highlight how Indiana’s forests contribute to climate change mitigation and enhance hardwood and softwood product supply chains. By fostering innovation with mills and start-ups seeking to diversify and expand into the mass timber market, Indiana has the potential to position itself as a leader in this emerging industry.

## THREATS

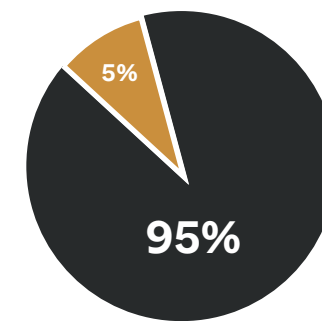
Indiana’s continued use of the outdated 2018 International Building Code (IBC) poses a major threat to mass timber adoption. There is little incentive or movement toward adopting the 2021 IBC, which includes provisions for mass timber. Currently, mass timber, engineered wood, advanced framing and structural insulated panels fall outside the 2018 IBC and require engineered design and variances for approval. Additionally, mass timber project permitting is time-consuming, and contractors face difficulties obtaining insurance coverage for mass timber construction. Certification for new mass timber products, even those developed using Indiana’s low-grade hardwoods or veneered hybrids, is a slow and lengthy process.

Training a workforce to assemble mass timber panels is challenging, compounded by a lack of experience with and understanding of mass timber construction among architects, engineers and developers. Furthermore, Indiana’s mass timber supply chain is underdeveloped. With 95% of Indiana’s forests being hardwoods and only 10% actively managed, there is limited availability of suitable materials for mass timber construction. This shortage leads to a reliance on out-of-state suppliers, making mass timber more expensive and less efficient to source.

The current mass timber industry does not integrate multiple wood species in fabrication, posing a risk of incentivizing monocultures. Existing hardwood forest products companies in Indiana view mass timber as a competitive threat, particularly against steel and concrete. Neighboring states with more business-friendly environments are actively recruiting forest industry investment, putting Indiana at a disadvantage. Finally, consumer trends may pose a threat, as many value Indiana’s forests more for their recreational and carbon sequestration benefits than for their potential as building products and materials.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

4.9M

### CURRENT MASS TIMBER PRODUCERS

0

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

7

### MASS TIMBER BUILDINGS COMPLETED

11

### MASS TIMBER INITIATIVES:

- Indiana’s first mass timber projects include Elanco Animal Health Headquarters in Indianapolis (Mercer CLT) and Amazon’s Delivery Station in Elkhart (Sterling CLT)
- Mass timber projects in development include Milo’s Market, a mass plywood convenience store, Proscenium Tavern Carmel, Big Woods Village Westfield, and REV Fishers Multi-family housing
- The Madera, a three-story mass timber structure located in Broad Ripple, is under construction
- Ball State University faculty explored advanced LWF construction in the 2023 Solar Decathlon Build Challenge project, Alley House
- Mass Timber design studios have been introduced at both Ball State University and Indiana University’s architecture design programs
- Indiana Wood Utilization Team, by Purdue University researchers, expands the use of Indiana’s \$17 billion hardwood industry in construction, using low-value Indiana hardwood for structural mass timber
- A research collaboration between Purdue University and Virginia Tech (VPI) are investigating the feasibility of using Yellow Poplar in CLT panel construction

# MICHIGAN

## GREAT LAKES MASS TIMBER COLLABORATIVE

**Michigan has the strongest mass timber momentum in the Great Lakes Region, driven by significant state investment, a mobilized and diverse community of practice and more than 70 mass timber projects either complete or in the pipeline. The state benefits from increasingly supportive codes and policies, along with leadership and engagement from at least four universities. A recent mass timber supply chain analysis highlights the regional feedstock model as the most advantageous. With neighboring states adopting smart economic development strategies, Michigan stands to both contribute to and gain from collaboration with other Great Lakes states.**

### DISCUSSION OF STATE'S INTERESTS IN GLMT ECOSYSTEM

Michigan's mass timber industry shows strong momentum, thanks to significant state investment, strong university leadership, a large and engaged community of practitioners, and a diverse ecosystem of stakeholders. With more than 70 projects completed or in progress and active involvement from universities, research institutions, and industry leaders, the state's strategic investments, including about \$400 million toward mass timber buildings, initiatives and university-led outreach and research, lay a strong foundation for growth. Furthermore, Michigan's advantageous geographic location—surrounded by the Great Lakes and adjacent to Canada—boosts its trade and manufacturing potential.<sup>10</sup>

While Michigan red pine is already in use in a certified cross-laminated timber product and there is sufficient Spruce Pine Fir (softwoods) available, access to this feedstock can be complex due to existing commercial uses and distributed land ownership. Scaling mass softwood mass timber production will likely require a combination of tapping into non-commercial private lands and sourcing from neighboring states. At the same time, in this hardwood-dominated state, the expectation that hardwoods will soon be added to mass timber product certifications combined with ongoing R&D efforts focused Michigan hardwood mass timber layups creates a pathway to commercializing a new family of mass timber materials that could become a niche for Michigan and several other Great Lakes states.

The State's commitment to decarbonization and mass timber's lower carbon emissions and carbon-storing property position it as a key player in achieving the state's climate goals. Local incentives, such as those in East Lansing and Ann Arbor, help create early adoption models that could be replicated across Michigan and the Great Lakes Region.

Collaborating with other Great Lakes states could offer mutual benefits, especially in addressing challenges like outdated building codes, uncoordinated economic

development. It could also help increase the efficiency and consistency of woody feedstock supply across the region. Michigan's proactive stance and infrastructure make it a valuable contributor to regional collaboration, sharing knowledge on mass timber innovation and industry development while gaining access to shared resources like feedstock, funding, and policy advocacy. Such collaboration could strengthen the entire region's competitive advantage in the growing mass timber sector.

### STRENGTHS

The State of Michigan has invested about \$400 million in mass timber projects and initiatives with a goal of furthering in-state mass timber production. Of this, \$900,000 supports Michigan State University's MassTimber@MSU, which focuses on research, education and stakeholder engagement, including convening an active, cross-sector mass timber community of practice with hundreds of participants, including state building and fire code officials. Michigan Technological University's (MTU) Hardwood Mass Timber Institute is engaged in research, development and testing of wood species, while three universities offer mass timber-specific courses: the University of Michigan and Lawrence Technological University in architecture and MSU in construction management. Additionally, union carpenters and ironworkers provide formal mass timber installation training to their Michigan members. Michigan's geography—surrounded by the Great Lakes and connected to Canada via Detroit—offers key shipping and trade advantages that complement its strong manufacturing and forest products culture. A state-commissioned mass timber supply chain analysis and demand survey, conducted by MSU, suggests that the region's wood feedstock and transportation infrastructure make mass timber production highly feasible. In 2025, Michigan Department of Natural Resources and MassTimber@MSU launched the Michigan Mass Timber Catalyst Program providing cash support and one year of technical assistance to a cohort of 10 early-stage mass timber projects.

### WEAKNESSES:

Although it is the nation's fifth-most heavily forested state with a \$16.2 billion annual forest products industry, Michigan is only third in forestry jobs among the six other Collaborative states. At the same time, all mass timber materials currently certified in North America are made from softwood species; Michigan's forest mix is 30% softwoods and 70% hardwoods, the latter of which are not yet included in mass timber product certification standards. And, although MSU's supply analysis finds adequate softwood across the region, access to this feedstock might not be straightforward: Mills in the state currently process softwood readily available from private commercial and State forestlands into lumber, posts and poles, and other products. To avoid competing with these markets, softwood feedstock for mass timber may need to come from non-commercial private lands, access to which could come with significant transaction costs, including intensive outreach to these landowners.

## OPPORTUNITIES

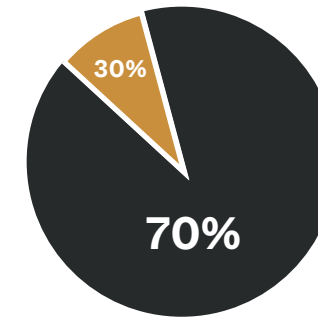
The Michigan Healthy Climate Plan, the state's roadmap to achieving net-zero carbon by 2050, highlights mass timber as a tool for decarbonizing buildings, maximizing forest carbon storage and creating new jobs.<sup>9</sup> This plan can serve as a foundation for incentives and initiatives to advance mass timber. Bipartisan legislative support recognizes mass timber's economic benefits for rural economies, industries and urban and suburban development. In East Lansing, the city offers developer incentives for mass timber use, while Ann Arbor Public Schools specify the material in new construction projects. These local policies serve as models for other Michigan jurisdictions. With a 190,000-unit housing deficit, mass timber's efficiency presents a major advantage. A new Michigan Department of Natural Resources building in the Upper Peninsula features Michigan's first CLT panels made from red pine, helping de-risk a key softwood for commercial products. Additionally, MTU's research provides a pathway to commercializing hardwood and hybrid mass timber, as product certifications are expected to soon include hardwoods.<sup>11</sup>

## THREATS

Outdated fire and building codes are sometimes perceived as a barrier to mass timber adoption in Michigan. Although the 2021 International Building Code (IBC) recently took effect in Michigan, removing a major hurdle, it still lags behind other leading mass timber states, such as Oregon and Washington, which have already adopted the 2024 IBC. Michigan's Bureau of Fire Safety continues to use the outdated 2012 National Fire Protection Association Life Safety Code, which does not account for mass timber. Although state building code and fire safety officials actively participate in Michigan's mass timber community and provide training to plan reviewers, outdated codes remain a challenge. Michigan's economic development strategies also lack the coordination seen in other Great Lakes states and could benefit from stronger inter-agency alignment, such as the collaboration between Team NEO and NOACA of Northeast Ohio. Outdated institutional procurement policies further hinder mass timber adoption. As in many states, continued sawmill closures pose an ongoing risk.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

19.3M

### CURRENT MASS TIMBER PRODUCERS

3

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

55+

### MASS TIMBER BUILDINGS COMPLETED

15

### MASS TIMBER PRODUCERS

- Soloway & Sons – Emerging NLT producer
- Stealth Mode Mass Timber Fabricator
- Timber Systems – Designs, builds, and sources timber buildings. Does not manufacture, but does some fabrication

### MASS TIMBER INITIATIVES

- MassTimber@MSU, a leading program at Michigan State University dedicated to advancing the use of mass timber in construction
- The Hardwood Mass Timber Institute at Michigan Technological University (MTU), a program focused on advancing the use of hardwood mass timber, specifically cross-laminated timber in construction
- Mass Timber design studio have been introduced at both the University of Michigan and Lawrence Technological University's architecture and design programs
- The Michigan Mass Timber Catalyst Program, launched by MassTimber@MSU and Michigan Department of Natural Resources, provides cash support and one year of technical assistance to a cohort of 10 early-stage mass timber projects
- The MI Healthy Climate Plan, which aims for 100% carbon neutrality by midcentury, includes mass timber as a tool to reaching net zero carbon
- The City of East Lansing has adopted a mass timber development incentive

# MINNESOTA

## GREAT LAKES MASS TIMBER COLLABORATIVE

**Minnesota has a strong foundation in its natural resource values, workforce capacity and established wood industry. However, to fully capitalize on mass timber innovations, the state must address knowledge gaps across the building sector, overcome market barriers and implement enabling policies and codes. By expanding its manufacturing and fabrication capabilities, Minnesota could become a key player in mass timber, serving regional, multi-state and international markets with a strategic supply-chain network.**

### DISCUSSION OF STATE'S INTERESTS IN GLMT ECOSYSTEM

Minnesota has a number of established assets that can be leveraged to promote a mass timber strategy, engaging diverse stakeholders and interests. These include existing mass timber examples, a robust forest industry, legislative support and a statewide climate plan. The state also benefits from strong AIA and USGBC leadership with knowledge and experience in mass timber. Previous research studies have identified both the barriers and opportunities for mass timber adoption in Minnesota, highlighting the state's potential for research and training in this area.

The experience of major construction company Kraus Anderson further supports the state's ability to scale mass timber activity. Additionally, there are knowledgeable code officials and growing interest in incorporating mass timber provisions into the 2026 code adoption cycle. Key stakeholders who can contribute to mass timber efforts in Minnesota include the state's forest industry (Minnesota Forestry Industries, MFI, Timber Producers Association, TPA), the Minnesota Forest Resources Council, AIA, USGBC, LEED, Minnesota Department of Employment and Economic Development, construction and building trades, as well as forest landowners and managers across federal, tribal, state and private sectors.

Overall, Minnesota has the core elements for enabling mass timber adoption, which is why some activity in the sector has already occurred. However, to develop a more coherent, strategic and impactful approach, the state will need to formalize the enabling mechanisms within both the public and private sectors and establish leadership capacity through agency directives and collaborative partnerships.

### STRENGTHS

Minnesota's competitive advantages include a strong manufacturing history, a skilled workforce and well-developed educational programs that support diverse trades. Its colleges and universities foster research, innovation and career development in natural resource industries. The state's assets include both small and large sawmills, the T3 building as a regional model for mass timber construction and a robust transportation network.

Minnesota is known for its established expertise in logging, long history of engineered wood products manufacturing and strong public support for the responsible use of natural resources. The state also boasts thriving rural, suburban and urban communities, where residents have extensive experience integrating land uses for recreation, mining, farming and forestry.

### WEAKNESSES

Opportunities for improvement include the development of additional innovative mass timber models, addressing forest health concerns and leveraging underutilized species. Furthermore, Minnesota needs to build the capacity to scale its available fiber resources for commercial mass timber production. A challenge Minnesota faces is its abundance of hardwoods, which are more plentiful than softwoods, and the slower growth rate of its forest resources compared to other regions. Additionally, the state lacks experience among developers, contractors, architects and suppliers in mass timber projects, including design considerations, product development and pricing. This gap in expertise also extends to a broader understanding of the mass timber value proposition and its potential advantages. While Minnesotans recognize the importance of natural resources, this awareness has not yet translated into widespread recognition of the benefits of timber as a building material.

## OPPORTUNITIES

Minnesota has several opportunities to advance mass timber, drawing on learnings from other states that have made greater progress in its adoption. Expansion and export opportunities can be found by aligning mass timber objectives with Minnesota's climate resiliency goals, building on local design community support for sustainable buildings and leveraging the social license-building capacity of the Minnesota Forest Resources Council. Additionally, the state can capitalize on its rail port of entry to link U.S. and Canadian supply chains, and complete the legislature's request for a report on how Minnesota's forests can help mitigate climate change.

New market segments that Minnesota can explore include addressing the statewide housing shortages through mass timber, strengthening wood product supply chains, improving the use of sawmill residuals and increasing the use of small-diameter materials. Mass timber also presents opportunities for existing mills interested in diversifying or expanding their markets.

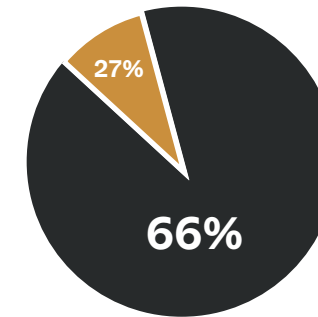
## THREATS

Several factors limit the adoption of mass timber in Minnesota, including the current building code, uncertainty surrounding insurance coverage and the perception of mass timber as potential competition by some existing forest products companies. Additionally, the state's lengthy permitting process and resistance from special interest groups have slowed the approval of new projects.

Minnesota faces competition from states that are actively recruiting forest industry investments. Furthermore, other regions can produce more competitive feedstocks, with lower costs and faster-growing trees. Shifting consumer trends also prioritize trees for their carbon sequestration benefits, rather than as a resource for building products and materials, which can further hinder mass adoption.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

17.7M

### CURRENT MASS TIMBER PRODUCERS

1

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

22

### MASS TIMBER BUILDINGS COMPLETED

17

### MASS TIMBER PRODUCERS

- Alamco (Bell Structural) Glulam manufacturer

### MASS TIMBER INITIATIVES

- Minnesota's latest mass timber project is a service center that engaged leadership from the North Central States Regional Council of Carpenters for onsite training
- USDA Forest Service-funded research from the University of Minnesota Duluth and the Bureau of Business and Economic Research identifies key barriers to new engineered wood products in Minnesota
- Research on the Economic Feasibility of Mass Timber Manufacturing in Minnesota provides an understanding of mass timber barriers and opportunities
- Forest Markets grant funding was awarded to Wood Innovations for a mass timber extension on a public contemporary art library
- The Minnesota's Climate Action Framework's Clean Energy and Efficient Buildings initiative offers opportunities for alignment with mass timber priorities

# NEW YORK

## GREAT LAKES MASS TIMBER COLLABORATIVE

**New York State (NYS) is leveraging its extensive forest resources and innovative manufacturing capabilities to drive mass timber adoption, addressing climate change, forest health and housing shortages. Despite bureaucratic challenges, initiatives from SUNY, the NYC Empire Development Corporation and NYSERDA are fueling growth. With strategic collaboration and policy advancements, NYS has the potential to lead in sustainable, low-carbon construction.**

### STRENGTHS

NYS's commitment to technical and economic development, coupled with its ability to attract innovative manufacturers and startups, positions it well for growth in mass timber. The state boasts a heavily forested stock of under-harvested softwood and hardwood species, a collaborative forestry and educational ecosystem supported by SUNY, and leadership in the AEC community with many internationally renowned practitioners headquartered in the state. Additionally, NYS benefits from a strong transportation network with access to key trading partners and a commitment to strengthening the upstate-downstate connection through manufacturing job training, job creation and support for disadvantaged communities. These factors set the stage for resilient growth in the mass timber sector.<sup>12,13</sup>

### WEAKNESSES

NYS can sometimes be its own worst enemy. Political short-sightedness, bureaucratic inefficiencies and an overly restrictive environmental regulatory environment often hinder progress. A lack of commitment to fully understanding its forest resources—both scientifically and in terms of urgency—further weakens the state's ability to implement low-carbon policies and incentives that could otherwise amplify its unique strengths.

### OPPORTUNITIES

Awareness of mass timber's potential is growing, particularly its ability to address three of today's most pressing challenges—forest health, climate change mitigation and housing shortages. As the only renewable structural building material that stores carbon rather than emitting it, mass timber has the potential to revolutionize construction, while promoting more sustainable building. By developing a robust upstate-downstate mass timber supply chain—from sustainable harvesting to sophisticated mass timber product manufacturing and fabrication—New York can realize its ambitious goals and unlock significant economic and environmental benefits.

### THREATS

While challenges remain—such as timber stock supply, developing resilient business models and building the necessary manufacturing infrastructure—the cost of inaction is far greater. The inertia that slows progress must be overcome, as New York has the resources and potential to establish itself as a global leader in the mass timber industry. The question is not whether the state can lead, but whether it will take the steps to do so.

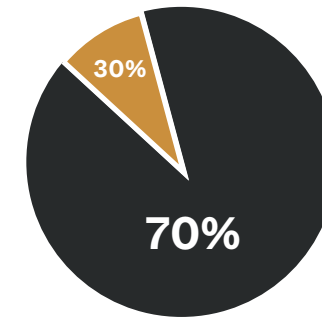
## DISCUSSION OF STATE'S INTERESTS IN GL MT ECOSYSTEM

The NYS timber stock is part of a regional forest ecosystem—one of the nation's three primary forestry regions, alongside the Pacific Northwest and the Southeast. This vast, forested area extends from Wisconsin to Maine and includes Ontario and Quebec.

Achieving NYS's mass timber objectives requires recognizing that forests transcend state boundaries. Collaborating with neighboring states and provinces and leveraging existing strengths can drive innovation, expand opportunities and build a more resilient and sustainable mass timber industry.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

19.3M

### CURRENT MASS TIMBER PRODUCERS

3

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

47+

### MASS TIMBER BUILDINGS COMPLETED

13

### MASS TIMBER PRODUCERS

- Johnson Lumber, Ward Lumber, Mead Lumber, Phillips Angelica, Unalam, New Energy Works, Digifabshop, Commonwealth Plywood

### MASS TIMBER INITIATIVES

- NYC Empire Development Corporation's Mass Timber Studio aims to establish clear processes and project metrics to guide developers and owners exploring mass timber
- The State University of New York College of Environmental Science and Forestry's Mass Timber Discovery Challenge is a combined research/outreach effort to remove barriers, lower costs and reduce risks for mass timber construction
- The NYS Energy Research and Development Authority's Buildings of Excellence competition provides up to \$1 million in funding for multifamily housing projects, with updated criteria now including embodied carbon and mass timber

**Ohio has a strong manufacturing base and a supportive business environment, but must address resource limitations and knowledge gaps to advance mass timber adoption. To succeed, Ohio needs to develop reliable supply chains through new partnerships, progress the use of hardwoods, overcome perception and training challenges and translate its manufacturing capability into mass timber production.**

### DISCUSSION OF STATE'S INTERESTS IN GLMT ECOSYSTEM

Ohio has the foundational components for a viable mass timber ecosystem, but they remain largely disconnected. Unlocking this potential requires stronger integration between research, supply and industry application.

There is clear interest in mass timber exposure and teaching within AEC programs, with structural courses at The Ohio State University and Kent State incorporating mass timber into their curriculum.

Despite this academic engagement, a gap remains between researchers in forestry, architecture and construction, and the practical application of their expertise in mass timber projects. Bridging this gap is essential for translating research into real-world innovation. Existing models, like the Center for Design and Manufacturing Excellence at The Ohio State University, demonstrate how institutions can successfully link researchers, companies and students to drive market-ready solutions.

Beyond research, the lack of reliable softwood supply presents a challenge to mass timber production in Ohio. Because softwoods have already been tested and approved for structural use, the state must either import them from neighboring northern states or explore alternative materials. A promising solution is testing select hardwoods like yellow poplar, which is abundant in Ohio and being studied by West Virginia University for structural mass timber applications. Ohio has an opportunity to develop an alternative approach to mass timber manufacturing, provided that research and industry efforts align.

Building on these research and supply-chain efforts, Ohio must also establish the market conditions necessary to drive mass timber adoption. The state has a strong track record of supporting manufacturing and attracting large companies, but for mass timber to succeed, key stakeholders—such as Jobs Ohio, the Department of Agriculture, the Homebuilders Association and private developers—must actively be engaged. These entities can link economic benefits to sustainable forest management and mass timber production, driving investment in the sector. While Ohio currently lacks the demand and incentives needed to develop a full-scale mass timber ecosystem, it has the resources, infrastructure and enthusiasm to do so once the market is ready.

### STRENGTHS

Mass timber has gained a foothold in Ohio. In 2023, the high-end residential INTRO project in Cleveland became one of the first to leverage the tall wood provisions in the 2021 IBC, featuring eight stories of mass timber over a concrete podium. Since then, The Cleveland Foundation and Cincinnati Public Radio, and a student housing project in Columbus, have also used mass timber as their primary structural system. Interest in mass timber construction is growing, bolstered by Ohio's higher education institutions. Universities are integrating mass timber into AEC courses, researching its environmental impact and sustainable forestry, and hosting exhibitions to raise awareness nationwide.

Ohio's pro-business environment and robust wood products industry strengthen its potential. With existing distribution networks, Great Lakes shipping access and a strong manufacturing mindset, the state is well-positioned to contribute to the Great Lakes mass timber ecosystem.

### WEAKNESSES

A significant challenge is that 87% of Ohio forests are privately owned, with over 50% in parcels under 10 acres, making sustainable management and large-scale harvesting difficult.<sup>14</sup> Additionally, 97% of Ohio's forests are hardwoods, which remain mostly untested for mass timber and are denser and more challenging to process. Ohio lacks the necessary wood stock, specialized equipment and technical expertise to produce mass timber at scale. While the state has demonstrated its use in construction, uncertainties remain around mass timber design, insurance and broader application in larger projects.

## OPPORTUNITIES

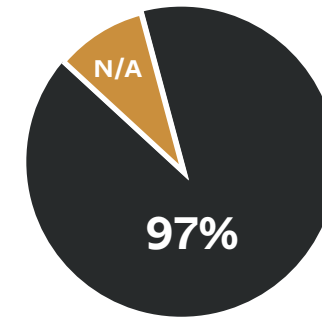
Ohio's experienced wood products workforce and manufacturing infrastructure could pivot to mass timber if market demand increases. If hardwood species are tested and approved for mass timber, Ohio's forests—currently growing at twice the rate of removal—could provide a valuable resource. Additionally, Ohio's strong background in steel manufacturing makes it well poised for hybrid construction and large-scale mass timber production. Many Ohio cities also face a need for urban, high-density housing, creating an opportunity for mass timber's sustainable, fast-construction advantages.

## THREATS

Demand for mass timber construction in Ohio remains low, with builders and developers often defaulting to conventional materials. A general lack of awareness, confusion around harvesting regulations and misconceptions about environmental impact further hinder adoption. Leadership in advancing mass timber production and use is lacking. Moreover, Ohio's hardwood-dominant forests have yet to be validated for mass timber applications, forcing the state to rely on external suppliers for raw materials, which slows industry growth.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

7.8M

### CURRENT MASS TIMBER PRODUCERS

0

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

4

### MASS TIMBER BUILDINGS COMPLETED

14

### MASS TIMBER INITIATIVES

- The INTRO project in Cleveland, The Cleveland Foundation and Cincinnati Public Radio have incorporated mass timber into their building designs, demonstrating early adoption in the state
- Dr. Lameck Onarigo and Dr. Anthony Mirando are promoting mass timber awareness through the traveling exhibit "Managing Mass Timber: From Forest to Future."

# PENNSYLVANIA

## GREAT LAKES MASS TIMBER COLLABORATIVE

**Pennsylvania has a strong foundation in forest resources, wood products manufacturing, and cross-sector coordination that positions it to be a meaningful contributor to a regional mass timber ecosystem. The commonwealth leads the nation in hardwood forest inventory and supports a robust forest products sector through the Pennsylvania Hardwoods Development Council, regional hardwood utilization groups, active industry associations, nonprofits, academic institutions, and technical centers serving private forest owners. Together, these entities form a cooperative ecosystem connecting forestry, manufacturing, research, and market development.**

**While Pennsylvania does not currently host full-scale mass timber manufacturing, its private sector has demonstrated readiness to innovate through early project experimentation, applied research partnerships, and investments in new wood-based products. Pennsylvania's Forest Action Plan, a 10-year strategy document produced by Pennsylvania's Department of Conservation and Natural Resources Bureau of Forestry, underscores the importance of management approaches that acknowledge the strong relationship between forest health and the economic vitality of rural communities.**

**Through collaboration with Great Lakes partners, the state can help advance hardwood utilization, strengthen regional supply chains, and support coordinated mass timber market growth across the region**

### DISCUSSION OF STATE'S INTERESTS IN GLMT ECOSYSTEM

Pennsylvania is well-positioned to play an important role in the Great Lakes Mass Timber ecosystem due to the depth of its forest resources, longstanding industry expertise, and a robust building, design, engineering, construction, and trades network. With approximately 16.6 million acres of primarily hardwood forestland, the state's natural resources support an extensive network of sawmills, secondary manufacturers, and forest-related businesses. This resource base, combined with Pennsylvania's legacy in advanced manufacturing and construction, provides a solid foundation for expanding mass timber adoption and related value-added wood products.

The commonwealth's hardwood-dominant forests present an opportunity to help diversify the U.S. mass timber market, which remains largely centered on softwood species. Next-generation research into hardwood utilization, hybrid systems, and other mass timber products is emerging across academic and applied research institutions. Institutions such as Villanova University, Lehigh University, Carnegie Mellon, and Penn State are contributing through industry partnerships and R&D on hardwood innovation and low-grade wood utilization. However, this work remains distributed and has not yet translated into commercial-scale manufacturing; Pennsylvania does not currently host a dedicated mass timber producer.

Despite these gaps, market interest is growing. Architectural, institutional, and higher-education projects have signaled increased interest in sustainable wood construction. At the same time, Pennsylvania's private sector has demonstrated readiness to innovate, with manufacturers experimenting with new wood-based products and processes, including limited non-structural glulam production and emerging bio-based applications such as biochar. These efforts, advanced independently and outside of formal incentive structures, signal market readiness while highlighting the need for enabling conditions to support scale.

To more fully participate in the Great Lakes Mass Timber economy, Pennsylvania will need to attract and develop regional manufacturing, invest in supply chain infrastructure capable of supporting new product types, and support market readiness by engaging designers and builders in education and early pilot projects. With these elements in place, the state could serve as both a raw material supplier and a value-added producer, supporting rural economic development, urban construction markets, and sustainable building practices through regional collaboration.

### STRENGTHS

Pennsylvania's most significant strength lies in the scale and composition of its forest resources. The commonwealth hosts the most acreage of hardwood forestland in the United States and is the top national producer of hardwood lumber. These forests support an interconnected network of sawmills, secondary manufacturers, and forest-related businesses that provide a strong base for expanding value-added wood products, including mass timber.

Equally important is Pennsylvania's coordinated hardwood ecosystem. Statewide leadership through the Pennsylvania Hardwoods Development Council, regional Hardwood Utilization Groups, active industry associations, and a technical center supporting private forest owners (71% of forest ownership) creates a collaborative framework that connects forestry, research, manufacturing, and domestic and international market development. The Council also serves as a mechanism for deploying state resources and aligning partnerships across industry priorities at state and regional levels.

Pennsylvania benefits from applied research and development efforts oriented toward market and industry applications. Work led by Penn State and other institutions emphasizes low-grade wood utilization and hardwood product innovation, while parallel exploration of bio-based markets, including biofuels and biochar, supports broader forest product value-chain resilience.

A skilled labor force and forest-career-specific workforce development resources (e.g. [www.paforestcareers.com](http://www.paforestcareers.com)) ensure labor is met. Deep manufacturing heritage further strengthens the state's position. Pennsylvania has a robust network of trade schools, community colleges, advanced manufacturing facilities, and building trades, as well as energy assets that could support future mass timber facilities with reliable and increasingly renewable power.

### WEAKNESSES

Despite these strengths, Pennsylvania faces challenges that limit near-term mass timber deployment. The state's forest resource is overwhelmingly hardwood, and, while Yellow Poplar has been incorporated into the 2025 PRG-320 CLT standard, certified hardwood CLT species and commercially available products remain limited. Although research into hardwood mass timber is advancing, scalable commercialization pathways remain limited.

Supply-chain fragmentation presents an additional challenge. Sawmill closures, aging transportation and logistics infrastructure, and limited secondary processing capacity have weakened portions of the forest products value chain, complicating efforts to move materials efficiently from forest to finished product. Regulatory and policy barriers—common across much of the Great Lakes region—further complicate mass timber market growth. Inconsistent local code adoption and slow permitting processes create uncertainty and delay for projects, while statewide code updates have not yet kept pace with the most recent mass timber provisions. As of January 1, 2026, Pennsylvania has adopted the 2021 International Building Code, which includes expanded mass timber construction types but does not reflect later updates that further refine requirements and expand approval pathways.

Of note, current market structures don't incentivize low-grade wood removal, limiting opportunities to better align forest health objectives with economic outcomes.

## OPPORTUNITIES

Pennsylvania has significant opportunities to advance mass timber by building on existing initiatives and regional collaboration. Advancing Pennsylvania's Forest & Wood Products Industry Strategy (August 2025) provides a coordinated, data-driven framework for aligning critical economic development infrastructure around new market development for hardwoods and clearly identifies mass timber as a top opportunity. Structural grading changes the game for hardwoods and the industry. It enables hardwood material to move beyond being valued for aesthetics alone and into a high-performance, structurally reliable, and sustainable construction material, unlocking entirely new applications in advanced building systems. Urban growth centers such as Pittsburgh and Philadelphia offer near-term opportunities for mass timber across various applications (e.g. multi-family, institutional, commercial construction). Rural regions stand to benefit from expanded demand for value-added wood products, as they reinforce important place-based connections between forestry, manufacturing, and the building trades.

Separately, recent private-sector activity, including Rothoblaas' establishment of mass timber hardware solutions in the state, signals growing confidence in mass timber construction and demand for related components.

Cross-state collaboration offers additional opportunities. By engaging with Great Lakes partners on research, manufacturing scale-up, policy alignment, and certification pathways, Pennsylvania can help advance markets and technologies that no single state could develop independently. Additionally, connecting the Great Lakes region to the eastern seaboard, Pennsylvania's geographical location is an asset for cost and logistics in supplying projects from Boston to Washington, DC.

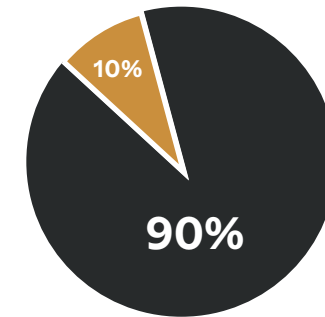
## THREATS

Market volatility within traditional wood-products sectors, including the decline of pulp processing, poses ongoing risks to industry stability and forest-sector resilience. Environmental pressures (e.g., invasive species, poor forest management practices, changing environmental conditions) further threaten long-term forest health.

A lack of scalable investment represents an additional risk. Without targeted capital, innovation in low-grade wood utilization and value-added forest products may remain limited in scale. As Great Lakes states advance manufacturing siting, applied research, and product certification pathways, Pennsylvania risks underleveraging shared regional momentum if it sits out on deeper coordination.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

16.6M

### CURRENT MASS TIMBER PRODUCERS

4

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

10

### MASS TIMBER BUILDINGS COMPLETED

~10

### MASS TIMBER PRODUCERS

- RigidPly Rafters
- Bingaman Lumber
- Quality Buildings, LLC, designs, builds, and sources timber buildings, does not manufacture

### MASS TIMBER INITIATIVES

- Advancing Pennsylvania's Forest & Wood Products Industry Strategy
- Pennsylvania Forest Action Plan

# WISCONSIN

## GREAT LAKES MASS TIMBER COLLABORATIVE

**Wisconsin has a robust forest products and forestry industry that complements its abundant forest resource. There is growing momentum in the state for utilizing mass timber. Currently, Wisconsin is home to the world's tallest mass timber building, the Ascent building in Milwaukee, and an even taller mass timber structure is planned for the Edison building, also in Milwaukee. However, much of the mass timber construction in the state does not utilize locally sourced materials. To become a more effective partner in the Great Lakes Region and a better steward of its own forest resources, Wisconsin must address challenges in the forest products supply chain and fill the communication gaps in the overall mass timber supply chain.**

### DISCUSSION OF STATE'S INTERESTS IN GLMT ECOSYSTEM

Wisconsin possesses a range of strengths that can be leveraged to expand mass timber production and utilization. There is manufacturing already occurring on a small scale in Wisconsin, and a large CLT manufacturer is located just south of Wisconsin's border in Illinois. Although the state's forests are largely dominated by hardwoods, there is still a substantial softwood resource, particularly red and white pine. Wisconsin also benefits from key testing laboratories, regional economic development support, existing buildings that demonstrate the potential of mass timber and a design community with substantial expertise in the field.

A wide array of stakeholders can be engaged to advance mass timber in Wisconsin, including code officials, secondary manufacturers, CNC operators, state economic development personnel, testing labs, insurance representatives, tribal nations, finance professionals and investors, labor unions, lumber graders, developers, glued-laminated timber manufacturers and supply chain experts. Overall, Wisconsin is well-positioned to increase both the production and utilization of mass timber. However, significant steps must be taken to ensure the long-term success and widespread adoption of mass timber in the state. While the Great Lakes Mass Timber Collaborative marks an important first step, Wisconsin's stakeholders will need to streamline many of the manufacturing, transportation and building code processes, which currently present challenges for those looking to utilize mass timber in the state.

### STRENGTHS

Wisconsin benefits from a well-established forest products industry that thrives alongside millions of acres of sustainably managed forests. A notable feature of the state's publicly owned forests is the county forest program, which is mostly unique to Wisconsin and includes 30 county forests covering 2.4 million acres. Additionally, Wisconsin's long history of building with wood and incorporating timber in architecture has fostered a positive attitude toward wood structures, including large buildings. This mindset, coupled with developers who possess progressive ideas about utilizing wood in large-scale building construction, has made mass timber adoption increasingly popular in the state.

### WEAKNESSES

Though Wisconsin has a vibrant forest products industry, much of the state's forest resource is dominated by hardwoods. Although there is growing interest in developing a commercial market for hardwood mass timber, no such market yet exists. Furthermore, the state's transportation infrastructure presents challenges including limited rail access in many areas and road weight restrictions that are more stringent than those in neighboring states. Moreover, the upper Midwest, and Wisconsin in particular, faces higher costs for transporting logs from landowners to mills, compared to many other parts of the country.

## OPPORTUNITIES

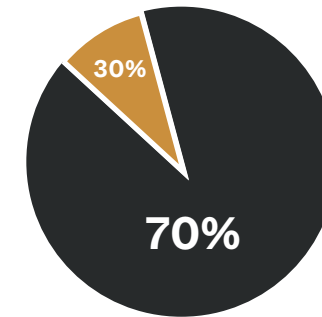
In addition to an existing forest products industry, Wisconsin is home to the USDA Forest Products Laboratory (FPL) in Madison. As a world-leading research laboratory, the FPL conducts extensive research on emerging wood products, including a wide array of mass timber applications. This presents a significant opportunity for increased collaboration between manufacturers and the FPL as the state advances its mass timber production. Furthermore, Wisconsin boasts a significant amount of federal, state, county and tribal lands, all of which are managed in accordance with sustainable forestry practices, with many even holding certifications from the Sustainable Forestry Initiative and/or the Forest Stewardship Council. These are valuable in securing LEED and other green building certifications.

## THREATS

While there has been some synergy between industries, there has also been push back from sectors, such as concrete and steel, that compete for dominance in the tall building market. These industries often question the safety and efficacy of constructing tall wood buildings. A significant design or production flaw in a mass timber building could severely damage the public perception of the mass timber movement. In addition, many of the mass timber buildings currently under construction, or already completed, have used European-built panels instead of those produced in the United States. It is still cheaper to produce CLT panels in Europe and have them shipped to American ports than to purchase American-made panels in much of the country.

## DATA POINTS

### FOREST COMPOSITION



■ HARDWOOD ■ SOFTWOOD

### ACRES OF FOREST LAND<sup>4</sup>

17M

### CURRENT MASS TIMBER PRODUCERS

1

### MASS TIMBER BUILDINGS IN DEVELOPMENT<sup>1</sup>

13

### MASS TIMBER BUILDINGS COMPLETED

34

### MASS TIMBER PRODUCERS

- Timber Technologies

### MASS TIMBER INITIATIVES

- The Department of Safety and Professional Services is revamping state building codes to better accommodate tall mass timber structures
- A research collaboration between the Wisconsin DNR, USDA FPL and Michigan Technological University is exploring the feasibility of using Eastern white pine in CLT panel construction
- USDA Forest Products Laboratory, located in Madison, conducts extensive research on emerging wood products, including mass timber

# PART 03

## RESEARCH AND METHODOLOGY

To ensure broad industry and state representation in the formation of the Great Lakes Mass Timber Collaborative, various methods of engagement, facilitation and peer reviews were utilized throughout the formation of this initiative. These included the creation of a steering committee composed of state representatives, virtual stakeholder engagements and an in-person convening.



# TIMELINE

## GREAT LAKES MASS TIMBER COLLABORATIVE

The Great Lakes Mass Timber Collaborative is a joint initiative involving eight constituent Great Lakes state stakeholders from Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Wisconsin, Pennsylvania as well as MassTimber@MSU, The USDA U.S. Forest Service and 80+ co-authors and participants.

To maximize industry and state representation in the creation of the action plan, a steering committee was established, consisting of one representative from each constituent state. This group of “state leads” was tasked with setting goals and objectives for the collaborative, identifying opportunities for participation within each state and engaging additional stakeholders and subject matter experts for the convenings.

<b>ILLINOIS</b>	<b>John Mitchell</b> Associate Partner, Hartshorne Plunkard Architecture
<b>INDIANA</b>	<b>Pamela Harwood</b> Professor of Architecture, Ball State University
<b>MICHIGAN</b>	<b>Sandra Lupien</b> Director; MassTimber@MSU, Michigan State University
<b>MINNESOTA</b>	<b>Kathryn Fernholz</b> President & CEO, Dovetail Partners, Inc.
<b>NEW YORK</b>	<b>Paul Crovella</b> Associate Professor of Construction Management, State University of New York
<b>OHIO</b>	<b>Allison Drda</b> Senior Associate, Pelli Clarke & Partners Architects
<b>*PENNSYLVANIA</b>	<b>Lisa Riggs</b> Senior Managing Director, Economic Growth Strategy & Partnerships; Team Pennsylvania <i>*Engagement beginning in Q3 2025</i>
<b>WISCONSIN</b>	<b>Alexander Anderson</b> Forest Products Specialist, Wisconsin Department of Natural Resources



# PRE-CONVENING

## GREAT LAKES MASS TIMBER COLLABORATIVE

### GREAT LAKES MASS TIMBER COLLABORATIVE PRE-CONVENING

The Steering Committee planned an in-person convening for late October 2024 to bring together key stakeholders from across the Great Lakes region to discuss potential mass timber alignment and collaboration. To prepare, MassTimber@MSU and the National Charrette Institute hosted a virtual pre-convening on October 8, 2024.

During the pre-convening, participants attended presentations, conducted SWOT analyses and discussed models for the collaborative's organizational structure. These activities, outlined in more detail below, helped lay the groundwork for advancing regional collaboration at the larger convening.

### PRESENTATIONS

At the pre-convening, three presentations provided participants with a deeper understanding of forestry, mass timber supply and demand in the Great Lakes Region:

#### Mass Timber's Role in Healthy Forests in the Great Lakes Region

Katie Fernholz, President and CEO, Dovetail Partners

Fernholz, a forester who leads an environmental nonprofit, discussed the Great Lakes Region's forests, emphasizing their ecological and economic significance. The region's forests thrive due to favorable climate conditions, supporting diverse tree growth, while cultural and economic systems value forestry and wood products. Forestry and agriculture dominate the landscape, with states like New York, Michigan, Wisconsin and Minnesota having substantial forest coverage.

Fernholz stressed that sustainable forest management is crucial, and while public and private lands are largely sustainably managed, there are challenges such as invasive species, wildfire risks and wildlife imbalances. Mass timber offers a sustainable solution for housing, resilient infrastructure and job creation.

The region's forest harvest levels are at historic lows, with significant underutilization of available wood. Mass timber presents an opportunity to optimize wood usage and sustainably address housing and commercial building demands. By embracing new wood products including mass timber, the Great Lakes Region can foster a sustainable future for its forests and communities.

#### Mass Timber Supply Chain Overview

Steve Marshall, Founder/President, Mass Timber Partners

After a 42-year career with the U.S. Forest Service, during which he founded the Wood Innovations Program, Steve Marshall launched his mass timber consultancy. He has focused on the growing mass timber industry in the U.S. and highlighted several key challenges and opportunities.

One significant issue is the current limitation in mass timber production capacity, particularly for larger-scale glulam and CLT products, which are essential for constructing larger buildings. Despite increased investment in production facilities, there remains a gap in large-scale production and secondary processing, which could slow market growth. While mass timber production is expanding, particularly in the Great Lakes Region, it is still largely concentrated in places like British Columbia and the Pacific Northwest. Marshall points out that although investments in larger glulam and CLT production facilities are increasing, secondary processing—such as the custom cutting of mass timber products for specific projects—has also become an important part of the industry. He identifies challenges, such as long lead times for larger orders and the insufficient capacity for large-scale production. Moreover, there is a gap in small-scale, local production facilities, which are more common in Europe. These gaps present important opportunities for the Great Lakes region.

The industry faces obstacles in using hardwood for mass timber, due to established product criteria and challenges in standardization. While hybrid construction technologies, which combine mass timber with steel or concrete, are emerging, there are opportunities to develop new, tailored hybrid solutions. Additionally, the use of mass timber in single-family homes—a prominent trend in Europe—has been limited in the U.S. due to the current business model of larger production facilities, which are not designed to handle smaller projects. Marshall emphasizes that addressing these gaps will help the sector grow and better meet market demand.

#### Mass Timber Markets in the U.S. and Great Lakes Region

Bill Parsons, Chief Operating Officer, WoodWorks

Parsons is the Chief Operating Officer of WoodWorks, a national organization that provides design and construction technical assistance and resources to support wood-based building. He discussed the growing demand for mass timber in the U.S., with a focus on the Great Lakes Region. Since 2015, the adoption of mass timber products like CLT in building codes has spurred significant growth nationwide, with a notable increase in mass timber projects in the Northeast. The Pacific Northwest has led the charge, but other regions, including the Great Lakes, are quickly catching up.

Since 2020, the Northeast has outpaced the Pacific Northwest in mass timber projects, with the Great Lakes Region also seeing steady growth. The region reports at least 375 projects completed or in progress in Illinois, Indiana, Michigan, Minnesota, New York, Pennsylvania, Ohio and Wisconsin. Parsons noted that multifamily and commercial buildings represent the largest opportunities. He also highlighted the untapped potential for mass timber in institutional, commercial and tall wood buildings, which are currently dominated by steel and concrete. The rise in sustainability goals and interest in biophilic design is driving this demand, as developers look to replace traditional building materials with mass timber. Despite challenges such as interest rates and the slow adoption of tall wood projects, Parsons expects continued growth in the mass timber market, projecting a 20% annual increase in market share. He noted that the Great Lakes Region is primed for further expansion, especially as demand for mass timber continues to rise nationwide.

## SWOT Analysis

During the virtual pre-convening, participants discussed their state's strengths, weaknesses, opportunities and threats related to developing a mass timber industry. These SWOT analyses formed the basis for each state's section in the following pages. While each state identified unique characteristics, several regional trends and challenges emerged. These include:

### Shared Strengths and Opportunities:

- Manufacturing culture and heritage
- University engagement
- High percentage of forested acres and established forest products industries
- Growing mass timber awareness and knowledge, though significant growth is still needed
- State or municipal climate and sustainability goals

### Shared Weaknesses and Threats:

- Slow adoption of building codes that include mass timber
- Insurance policies unfavorable to mass timber
- Regional hardwood species not yet certified for mass timber products
- Reduced milling and trucking infrastructure and capacity
- Few or no existing policies and incentives for mass timber

The analysis of state SWOTs played a crucial role in shaping the Great Lakes Mass Timber Collaborative's objectives, tactics, roles and structure, as outlined in this document.



# THE CONVENING

## GREAT LAKES MASS TIMBER COLLABORATIVE

On October 22 and 23, 2024, 80+ stakeholders from Michigan, Indiana, Illinois, Ohio, New York, Minnesota and Wisconsin convened in Detroit, Michigan, to begin to create a joint vision for a Great Lakes Mass Timber Collaborative. The work was preceded by efforts from the “state leads” steering committee and a virtual pre-convening of stakeholders. The objectives of the work sessions were to:

- Define the framework for the collaborative
- Develop a strategic plan for the collaborative
- Identify actionable next steps

Through state-specific SWOT analyses (Strengths, Weaknesses, Opportunities and Threats), environmental scans and collaborative visioning, the delegation laid the foundations for the following:

- Vision statement
- Core values
- Strategic framework (goals and objectives)
- Action plan

These elements are further developed in this action plan.

### DAY 1 – SWOT AND ALIGNMENT

- The first day focused on establishing a shared understanding of the current landscape.
- Pre-convened SWOT analyses developed by each state were distributed to and analyzed by state stakeholders
- Participants brainstormed industry challenges, innovations and emerging trends
- Stakeholders documented thoughts, observations and insights, which were then consolidated to inform further discussions
- Guiding question: “What shifts and trends are shaping our current reality?”

### DAY 2 – SMALL GROUP DISCUSSION

The second day centered on defining long-term goals.

- Visioning for the Future exercise: Small groups worked together to outline their collective vision for the future of the initiative.
- Guiding question: “What do we want to see in place during the next 3-5 years?”

### SUMMARY:

The convening highlighted the unique strengths of each state and sector. By bringing together diverse expertise, the Great Lakes Mass Timber Collaborative is laying the groundwork for a unified vision with greater collective impact.

## STATE AGENCIES

- \* Minnesota DNR Forestry
- \* Minnesota Department of Natural Resources, Division of Forestry
- \* Ohio Forestry Association
- \* Wisconsin Department of Natural Resources
- \* Wisconsin Department of Safety and Professional Services
- \* MACLC/St. Louis County
- \* Michigan Department of Agriculture & Rural Development
- \* Michigan Department of Natural Resources
- \* Indiana Division of Forestry
- \* Empire State Forest Products Association

## HIGHER EDUCATION

- \* Ball State University
- \* Indiana University
- \* Lawrence Technology University, College of Architecture & Design
- \* Michigan State University MassTimber@MSU, Department of Forestry, School of Planning, Design & Construction
- \* Minnesota Department of Natural Resources, Division of Forestry
- \* State University of New York College of Environmental Science and Forestry
- \* The Ohio State University
- \* National Charette Institute at Michigan State University
- \* Purdue University

## NON PROFITS & OTHER AGENCIES

- \* US Endowment for Forestry and Communities
- \* USDA Forest Service
- \* Itasca Economic Development Corporation - IEDC
- \* Softwood Lumber Board
- \* Woodworks

## INDUSTRY

- \* Northern LOG Supply
- \* Pelli Clarke & Partners
- \* Pine Haven Advisors LLC
- \* Renewable Resource Solutions
- \* Spiritos Properties
- \* Sterling Structural
- \* Studio Gang
- \* SYNECDOCHE
- \* The Beamery LLC
- \* Thornton Tomasetti
- \* Unalam
- \* Walbridge
- \* Wiss Janney Elstner Associates
- \* Arbor Wood Co.
- \* CutMyTimber, Modern Timber Homes
- \* DLR Group
- \* Korb Architecture
- \* KPFF Consulting Engineers
- \* Lord Aeck Sargent
- \* F.A. Wilhelm Construction Co., Inc.
- \* Forefront Structural Engineers / TMBR
- \* Graves Lumber Company
- \* Harbor Bay Ventures
- \* Hartshorne Plunkard Architecture
- \* HGA Architects
- \* INFORM Studio
- \* Iron Range Resources & Rehabilitation

# PART 04

## VALUES, ROLES, AND STRUCTURE

To develop a coordinated Great Lakes mass timber ecosystem—from forestry to construction—the Collaborative has identified six key objectives and 20 tactics to advance this initiative. Critically, this Collaborative does not seek to duplicate services or support already provided by established public, private and educational entities, but rather seeks to serve as a facilitator between these organizations.



# CORE VALUES

GREAT LAKES MASS TIMBER COLLABORATIVE

## ROLES AND CORE VALUES

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The purpose and objectives outlined in this document define the vision for the Great Lakes Mass Timber Collaborative and the essential frameworks required to bring that vision to life. To effectively advance these objectives, it is essential to clearly define the Collaborative's roles and core values, ensuring alignment for long-term success.

## VALUES

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The core values of the Great Lakes Mass Timber Collaborative were established during the October 2024 convening in Detroit, where participants collectively defined the guiding principles for the initiative. These values include:

- Collaboration and Inclusivity
- Creativity and Innovation
- Action-Oriented and Outcome-Driven
- Respect and Shared Decision-Making
- Continuous Learning and Reflection

These core values not only inform the tactics, but also shape the manner in which these tactics will be executed. They will play a crucial role in setting the tone and direction for ongoing planning and the continued development of the Great Lakes Mass Timber Collaborative.

## ROLES

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When considering roles, it is important to clarify the areas in which the Collaborative will focus. The Collaborative's roles should address gaps rather than duplicate efforts already in place. For example, WoodWorks currently provides high-quality technical assistance in the region. If the Collaborative identifies a need to expand the scale of technical assistance, it should not seek to provide the service directly, but instead work to secure funding and facilitate increased capacity for WoodWorks. Similarly, the Collaborative should not engage in research, but focus on identifying research needs and fostering collaborations with universities to carry out that research. In general, the roles of the Great Lakes Mass Timber Collaborative can be described as: facilitating, convening, identifying, connecting, organizing, and advocating. These roles will guide the selection and implementation of tactics.

## THE GREAT LAKES MASS TIMBER COLLABORATIVE

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### IS:

- A champion and facilitator of collaboration, connecting resources across the Great Lakes States to strengthen the regional mass timber ecosystem
- A research advocate, creating connections between universities, industry stakeholders and funding opportunities to address key challenges and opportunities
- An organizer of efforts, aligning stakeholders from forestry, manufacturing and construction to drive coordinated progress
- A convener, bringing together diverse groups to ensure shared goals and strategies for advancing mass timber production

### IS NOT:

- A direct provider of mass timber services or technical assistance already available through established organizations
- A research entity that conducts studies, but a catalyst for research by identifying needs and resources, and facilitating academic partnerships
- A competitor to existing public, private or educational entities, but rather a partner that enhances and supports their efforts
- A single-state initiative; it is a multi-state effort that leverages collective strengths for regional and national impact

# STRUCTURE

GREAT LAKES MASS TIMBER COLLABORATIVE

## ORGANIZATIONAL STRUCTURE

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In order to carry out the outreach, leadership, convening and advocacy roles identified in this document, the Great Lakes Mass Timber Collaborative requires a formal organizational structure that enables it to raise funds and hire personnel.

Participants were introduced to four potential models that offer insights into structuring a collaborative effort to advance mass timber ecosystems and support multi-state economic development.

## POTENTIAL MODELS

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**British Columbia's Mass Timber Action Plan** outlines a strategy to expand the mass timber industry, generate quality jobs and strengthen communities. It emphasizes collaborating with First Nations, workforce development, regulatory modernization and increasing mass timber's reach in Canadian and global markets. Developed by a multi-sector Mass Timber Advisory Council convened by the provincial government, the plan led to the creation of the British Columbia Office of Mass Timber Implementation, which is tasked with achieving the plan's goals. British Columbia's work offers an excellent framework for developing a mass timber ecosystem, but does not offer a model for multi-state collaboration.<sup>15</sup>

**Ontario's Advanced Wood Construction Action Plan** aims to increase the use of Ontario-sourced wood and boost its market presence in the construction sector. The plan seeks to position Ontario as a leader in advanced wood construction and manufacturing while supporting broader housing and sustainability goals. Provincial government agencies intend to implement the plan over a five-year period. Ontario's plan offers valuable insights for the evolution of the Great Lakes Mass Timber Collaborative.<sup>16</sup>

**Appalachian Regional Initiative for Stronger Economies (ARISE)**, a program of Appalachian Regional Commission (ARC), works to stimulate large-scale, regional economic development through collaborative projects, strengthen industries and foster new opportunities across 13 state governments and 423 counties. Although ARISE is government-led and industry-agnostic, it offers the Great Lakes Mass Timber Collaborative a powerful model for multi-state collaboration, including strategies for mobilizing funding for regional efforts. Notably, ARISE secured a \$1 billion federal implementation grant through the Bipartisan Infrastructure Law.<sup>17</sup>

**woodPoP European Wood Policy Platform** facilitates the exchange of policy ideas, knowledge and experiences between public and private stakeholders in the wood sector. Its goal is to develop policy solutions at national and regional levels and create frameworks for sustainable wood-based value chains that support a circular bio-economy. The platform organizes participants from diverse sectors into four key groups: a decision-making body led by senior government officials; a group of government subject-matter experts; a technical working group comprising industry, academic and public sector practitioners; and an informal steering committee of government representatives. Additionally, a secretariat based at the nonprofit International Union of Forest Research Organizations oversees the operational aspects of the collaboration. While the complexity and formality of woodPoP may not fully align with the Great Lakes Mass Timber Collaborative, it offers valuable insights for engaging decision makers and fostering collaboration among industry and academic partners through a centralized administrative body.<sup>18</sup>

In addition to the initiatives mentioned above, Oregon, Washington and Colorado have established mass timber coalitions. The Great Lakes Mass Timber Collaborative should examine their strategies and best practices while developing its own unique structures and approaches to support multi-state collaboration.

## RECOMMENDATION

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To carry out the roles outlined for the Great Lakes Mass Timber Collaborative, the most effective structure would likely be a nonprofit 501(c)(3) organization, led by an Executive Director or CEO and governed by a Board of Directors representing various sectors from each participating state. To support the policy advocacy efforts, a 501(c)(4) organization would be needed to facilitate lobbying activities. While determining a funding model is beyond the scope of this document, it is important to consider a paid-membership strategy as part of any funding approach.

# PART 05

## BEYOND THIS DOCUMENT

To advance the findings identified in this document, the collaborative has identified next steps towards formalization of an industry body, additional research, and funding



# NEXT STEPS

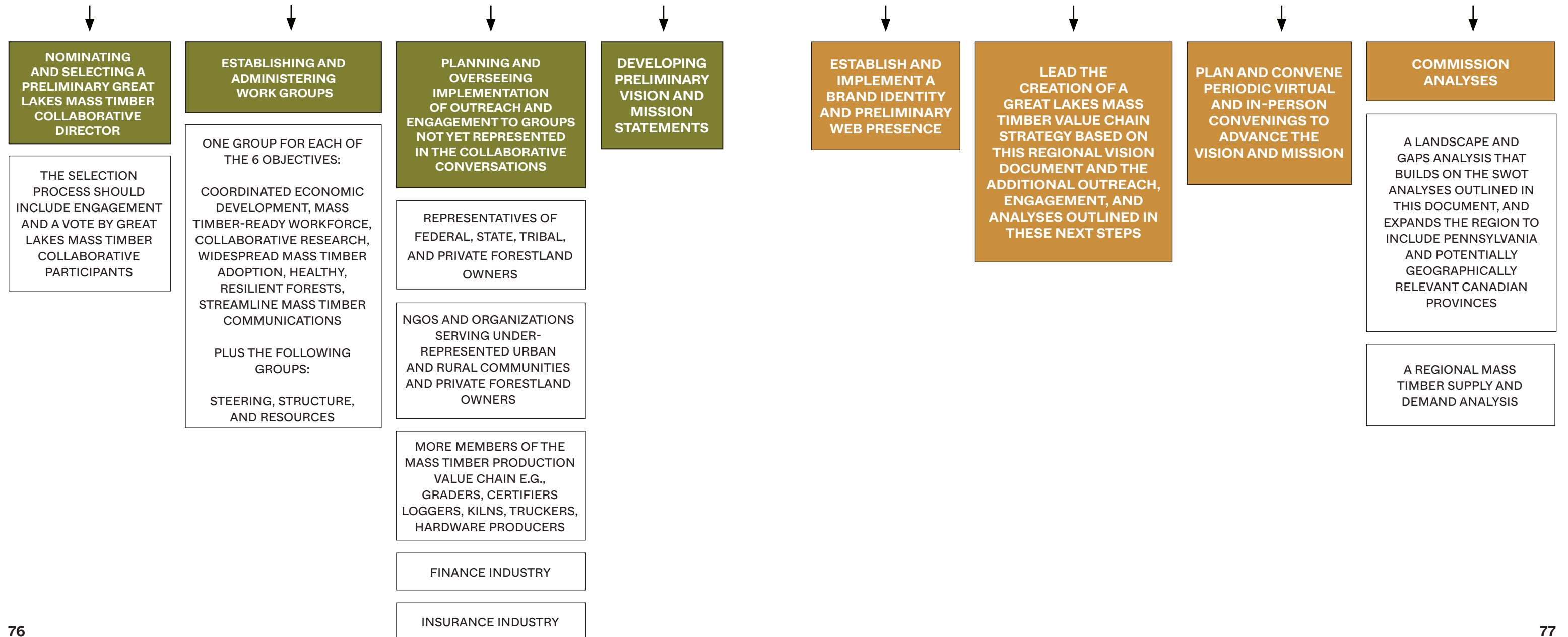
GREAT LAKES MASS TIMBER COLLABORATIVE

## COLLABORATE WITH AN EXISTING 501(C)(3) NON-PROFIT ORGANIZATION AS A FISCAL SPONSOR

### ASSEMBLE A SPRINT TEAM TO:

#### DEFINE SHORT-TERM ORGANIZATIONAL STRUCTURE AND LEADERSHIP BY:

#### RAISE SEED FUNDS TO COMPENSATE PRELIMINARY STAFF THAT:



# PART 06

## APPENDIX



# CONTRIBUTORS

GREAT LAKES MASS TIMBER COLLABORATIVE

## LEAD AUTHORS

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### **Sandra Lupien**

Director; MassTimber@MSU, Michigan State University

### **Jake Chidester**

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## CONTRIBUTING AUTHORS

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President & CEO, Dovetail Partners, Inc.

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### **John Mitchell**

Associate Partner, Hartshorne Plunkard Architecture

### **Paul Crovella**

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### **Pamela Harwood**

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### **Lisa Riggs**

Senior Managing Director, Economic Growth Strategy & Partnerships;  
Team Pennsylvania

## ACKNOWLEDGMENTS

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- \* Allegheny Hardwood Utilization Group
- \* Arbor Wood Co.
- \* Ball State University
- \* CutMyTimber, Modern Timber Homes
- \* DLR Group
- \* Doll Lumber/ Ohio Forestry Association
- \* Empire State Forest Products Association
- \* F.A. Wilhelm Construction Co., Inc.
- \* Forefront Structural Engineers / TMBR
- \* Graves Lumber Company
- \* Harbor Bay Ventures
- \* Hartshorne Plunkard Architecture
- \* HGA Architects
- \* INFORM Studio
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- \* Indiana University
- \* Iron Range Resources & Rehabilitation
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- \* KPFF Consulting Engineers
- \* Lawrence Technology University, College of Architecture & Design
- \* Lord Aeck Sargent
- \* MACLC/St. Louis County
- \* Michigan Department of Agriculture & Rural Development
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- \* Unalam
- \* US Endowment for Forestry and Communities
- \* USDA Forest Service
- \* Walbridge
- \* Wisconsin Department of Natural Resources
- \* Wisconsin Department of Safety and Professional Services
- \* Wiss Janney Elstner Associates
- \* Woodworks

# END NOTES

## GREAT LAKES MASS TIMBER COLLABORATIVE

1. Woodworks “Mapping Mass Timber” <https://www.woodworks.org/resources/mapping-mass-timber>
2. From IMPLAN, 2023.
3. This is a challenge to the mass timber industry beyond the Great Lakes Region
4. According to USFS State Forest Health Reports by state, 2022  
<https://www.fs.usda.gov/science-technology/forest-health-protection/publications-reports/forest-health-monitoring-publications/forest-health-highlights>
5. The Department of Forestry received a wood utilization grant
6. Purdue’s Wood Utilization Team continues researching the value of constructing with timber
7. Hardwood cross-laminated timber was featured in an installation for the Exhibit Columbus pavilion
8. The AIA launched the Indiana Building Code Comparison, offering extensive coverage of new wood technologies
9. The Michigan Healthy Climate Plan includes mass timber as a tool to reaching net zero carbon by 2050
10. Ports in Monroe, Detroit offer opportunities to export MT materials outside the region
11. At the time of this writing, Michigan was preparing to launch the Michigan Mass Timber Catalyst Fund – a competitive pilot program offering financial and technical support to a cohort of mass timber project teams. Funded by MDNR.
12. Amending state and local procurement requirements can accelerate efforts to update building codes for mass timber construction
13. Purchasing policies in the Office of General Services, the Dormitory Authority and the SUNY Construction Fund have the potential to drive significant growth in the sector
14. 87% of Ohio’s remaining forests are privately owned across 397,000 forest owners  
<https://www.nature.org/en-us/about-us/where-we-work/united-states/ohio/stories-in-ohio/forestry/>  
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[a. https://www2.gov.bc.ca/assets/gov/business/construction-industry/bc\\_masstimber\\_action\\_plan\\_2022.pdf](https://www2.gov.bc.ca/assets/gov/business/construction-industry/bc_masstimber_action_plan_2022.pdf)
16. Ontario’s Advanced Wood Construction Action Plan, 2025  
[a. https://prod-environmental-registry.s3.amazonaws.com/2025-01/mnr-advanced-wood-construction-action-plan-en-2025-01-28.pdf](https://prod-environmental-registry.s3.amazonaws.com/2025-01/mnr-advanced-wood-construction-action-plan-en-2025-01-28.pdf)
17. Appalachian Regional Initiative for Stronger Economies a. <https://www.arc.gov/>
18. European Wood Policy Platform  
[a. https://woodpop.eu/](https://woodpop.eu/)



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