

A Wisconsin Forest Product Cluster: A catalyst for sustainable, enduring transformation

Overarching Narrative

Synopsis

This first-time EDA investment in our Coalition will fund component projects to implement our Vision and deliver four buildings, governance, strategic direction, workforce development, innovation and entrepreneurship, and waste mitigation with deployment across the forest-rooted communities of the northern half of Wisconsin for a federal request of \$56.9 million.

Our regional growth cluster is focused on Wisconsin's forest products' sector which stands at a crossroads: it either fulfills the expectations of its dissenters and becomes a legacy industry, or it pivots and embraces its future as a major contributor to a low-carbon, sustainable economy that brings quality of life, good paying, family-supporting jobs and equity to its overwhelmingly rural, forest-rich communities. Nations around the world are recognizing the huge economic and environmental benefits of sustainable forest management in creating economic growth, mitigating climate-change and supporting circularity; our cluster embraces this prospect.

In our Phase 1 concept proposal we set out the vision below and while our guiding North Star was implicit in our concept proposal, it behooves us to share both here:



Our Coalition comprises Wisconsin's two major trade associations representing the logging and paper industries: the Great Lakes Timber Professionals Association and the Wisconsin Paper Council. The Coalition is enhanced by participation of Wisconsin's Department of Natural Resources which is the state agency responsible for protecting and sustainably managing Wisconsin's forest ecosystems for economic, social and economic benefits. Technical and scientific expertise is brought to the Coalition by the inclusion of Mid-State Technical College (MSTC) and the University of Wisconsin-Stevens Point (UWSP). MSTC offers associate degrees, technical diplomas, and certificates in a variety of high-demand careers designed to meet local workforce needs. UWSP is the region's primary forest products-focused institution of higher education, offering the state's only 4-year paper science and engineering bachelor's program. UWSP's Wisconsin Institute for Sustainable Technology is a long-standing provider of industry engagement, thought leadership at the interface of business and academia and translating research into new products.

Our Coalition has identified six imperatives to help fulfill our vision, guided by our North Star:

1. Build innovation and entrepreneurship infrastructure to inspire and implement change;

2. Increase and improve our capacity and capability to drive innovation;
3. Increase workforce skills and participation;
4. Provide sustained, consensus-building, and coherent leadership and direction;
5. Make more and better use of our abundant natural resources;
6. Showcase commercial possibilities of diversification in the forest products sector.

Many of our rural communities are often referred to as forest-reliant or timber-dependent which implies a fatalistic outcome for them. To transform and revitalize the outcomes for our industry we need to change this dependency ethos to one that recognizes that our forests are an incredible natural asset that, with smart and sustainable interventions, can play a huge part in re-charting the future of those communities and their members.

Some of our Cluster's largest companies are headquartered overseas and operate plants in different continents and countries. This transformational investment will help us revitalize and re-cast our innovation infrastructure, our natural assets and our workforce to substantively differentiate our region from others. In doing so, we will create the most favorable business and environmental conditions that make our region the preferred region in which those companies should continue to invest. There is a much at stake: a single mill closure can result in the loss of 1,000 direct jobs with significant knock-on effects in the community.

The imperatives set out above will be addressed through six component Coalition projects:

1. Upholding our Forest Products Cluster North Star: engagement, equity, governance & analytics

This project will provide overarching governance of our Coalition and will capture, analyze and disseminate industry benchmarks. It will track key performance indicators, gather market intelligence, and coordinate industry horizon-scanning and inform overall strategic direction of our other component projects.

2. A Forest-Fiber-Paper-Packaging Nexus Building

This project will construct of a multidisciplinary research, innovation entrepreneurship and commercialization building and will provide highly tangible evidence that a transformation of our sector is underway.

3. Advanced Manufacturing Engineering, Technology and Apprenticeship Centers

This project will construct two new advanced manufacturing, engineering and technology workforce training centers providing both the technical and soft skills required of employees.

4. Re-casting the Future of a Tribal Sawmill

This project will diversify and modernize the operations of a Tribal sawmill to produce maple syrup. More than just an economic diversification project, the goal is to begin to address the abhorrent levels of poverty in the Menominee Nation, address male-female wage disparity and kick-start a thriving maker-economy.

5. Functional and High-Performance Paper and Packaging

This project will develop and commercialize second and third generation performance papers and packaging to fill unmet demand, capitalizing on global trends in packaging which favor the use of natural resources. This project will also support the Coalition's HUSTLE Bar to deliver

structured engagement events; entrepreneurship advice and support; one-on-one meetings and networking opportunities throughout our 35-county region.

6. Recovered Paper and Recycled & Fresh Fiber Advancement

This project will address not only new uses for fresh fiber from the region's vast maple fiber resources but also target efficiency and circularity gains in the use of recovered fiber.

Description of how the proposed component projects support the economic development needs and objectives outlined in regional CEDS.

Our Cluster's region overlays almost completely the constituent regions of four of Wisconsin's Regional Planning Commissions (RPCs). These include the Northwest RPC, The North Central RPC, the East Central RPC and the Bay Lake RPC. Minor overlap occurs with the Mississippi River RPC and the West Central RPC. Each RPC is responsible for creating its own CEDS. A review of paper and forest sector location quotients for our Cluster's Region reflect the concentrated nature of these industries within the boundaries of the RPCs. Unsurprisingly, the CEDS of the RPCs direct their focus to support of the sector. The Northwest RPC has an objective to 'fully utilize the potential of the forest, encouraging value-added product development leveraging technology and resources.' The North Central RPC identifies paper and packaging as the top cluster in its region calling out the cluster's GRP of \$932 million. The Bay Lake CEDS has a goal to encourage and support business, business development and entrepreneurship specifically calling out the region's top industry clusters including paper and packaging. The East Central RPC's CEDS is underpinned by environmentally sound and responsible practices, enhancing an effective workforce and broad-brush economic development. These strategic goals fully align with those of our Coalition to undertake transformative, enduring sustainable economic development with an engaged workforce and smart utilization of our natural capital and assets.

This alignment, and Coalition partnership, coupled with the transformational Regional Challenge investment in our future, allows us to project that 2,500 new jobs will be created in a five-year period, alongside the most comprehensive and committed plan for equity, value, and justice ever implemented in our region. Wisconsin will not only retain its #1 paper-making state in the nation status but will also become a recognized leader in ground-breaking discoveries, new market advancement, data and analytics, and the cultivation of a sought after, elite and diverse workforce comprising the brightest minds and most valued and diverse employees.

Funding from the Build Back Better Regional Challenge will secure both a guaranteed multi-million-dollar state match commitment to our Cluster as well as enhanced investments and commitment to the region by our private sector partners – investments and growth that may otherwise have been directed to other states or countries. Our Cluster's private sector businesses and organized labor have bought into this approach committing to supporting and hiring employees, participating in collaborative research and innovation, increasing the number of women and other underrepresented groups in the workforce, and addressing wage disparity.

Additional Complementary Initiatives

We have begun discussions with the Heron Foundation and the US Endowment for Forestry and Communities that is focused on their support of programming to help and enable communities that are homes to major forest products companies develop and sustain synergistic relations

with those companies’ corporate leadership. Such programming would complement the community engagement activities that will be undertaken by the Coalition’s HUSTLE Bar.

Specific Metrics of Success

Δ # of jobs	Δ labor income	Δ total output	Δ maple wood sold	Δ of recycled paper
2,500	\$250,000,000	\$2,000,000,000	500,000 tons	200,000 tons

Timeline for implementation

Project	Date					
	1/9/22	1/9/23	1/9/24	1/9/25	1/9/26	1/9/27
Upholding our North Star	[Solid blue bar]					
Nexus Building	[Light blue bar]					
AMETA Centers	[Solid blue bar]					
Functional paper and packaging	[Light blue bar]					
Fiber advancement	[Solid blue bar]					
Re-casting the future of Tribal sawmill	[Light blue bar]					

Description of Geographical Regions Served

The region comprises the 35 counties that make up roughly the northern half of the state of Wisconsin bordered by Lake Superior and the Upper Peninsula of Michigan to the north, the St. Croix and Mississippi rivers to the west and Lake Michigan to the east. The southern border comprises the southern boundaries of the counties that traverse a line starting in Trempealeau County to the west and ending in Manitowoc County in the east. Specific counties and their associated FIPS codes are documented in the attached spreadsheet. The communities served are those that are home to or support the operations of a pulp or paper mill, sawmill or downstream convertors.

While there is a significant population center in our region’s southeast corner comprising metro areas around Green Bay and the Fox River Valley, much of the region is overwhelmingly rural. Its northern most part comprises the Wisconsin Northwoods a vast area of lakes and forests interspersed with small timber-rich communities. The Menominee Forest on the Menominee reservation is the largest single tract of virgin, native timberland in the Great Lakes region and it exemplifies long-term, active and sustainable forest management. The region also comprises some of the smallest and most disadvantaged communities in not only the state, but the nation. As part of our overarching approach to equity and governance, we commit to valuing each member of these communities in the same manner as we would those that comprise major metropolitan areas. Although the total population count may be low, the impact of this investment is enormous.

One such community is Neopit, in Menominee County, home to the Menominee Tribe and sawmill that is the focus of the maple syrup diversification project. When we consider the purpose and the potential of the Build Back Better challenge, we would be hard pressed to find a scenario that better exemplifies why this challenge was created and why together we are making history in terms of how economic development will be addressed going forward.

Cluster Assets

Our Cluster's region comprises 73% of all Wisconsin's forest lands (12,366,697 acres), 83% of all forestry and logging operations (212), 41% of all sawmills (337) and 94% of all pulp and paper mills (29). Academic assets in the region include UWSP's College of Natural Resources (CNR) which is home to the state's only Paper Science & Chemical Engineering Department and boasts 100% placement of its graduates into jobs upon graduation. The CNR also houses an accredited Forestry Discipline and the Wisconsin Institute for Sustainable Technology – a business and industry-facing program that collaborates with the paper and packaging industry. Mid-State Technical College is one of 16 regional colleges in the Wisconsin Technical College System with four campuses in the region. It offers associate degrees, technical diplomas, and certificates in a variety of high-demand careers designed to meet local workforce needs.

Detailed Overview of Private-Sector

Private-sector engagement has been a long-standing feature of coalition partner practices long before they came together to build the Wisconsin Forest Products Cluster. Both the Great Lakes Timber Professionals Association and the Wisconsin Paper Council are membership-driven organizations with boards and policies populated and crafted by private sector companies. Mid-State Technical College has a long-standing history of engagement with the private sector, nimbly refining and repositioning its classroom and training offerings to meet the changing needs of the future employers of its students. The Wisconsin Institute for Sustainable Technology at UW-Stevens Point had its origins in the provision of services to the paper industry and has evolved its laser focus on private sector engagement to encompass contract research and development and consultancy.

The Coalition has secured commitments from Ahlstrom-Munksjö, Green Bay Packaging, ND Paper, Pixelle Specialty Solutions and ST Paper to hire and train graduates from the program. They have also committed to research collaboration and commercialization around increasing the quality and quantity of recycled fiber as well as new innovative uses of fresh fiber and the development of new plastic-beating paper-based packaging. These companies have additionally committed to procure technical and analytical services that will be offered within the overall project.

Businesses have furthermore committed to provide key performance data and indicators for the development and tracking of baseline and benchmark metrics and to act in advisory capacities to ensure the Coalition stays on the path guided by its North Star.

Ahlstrom-Munksjö, MacDonald & Owen, and ND Paper have completed beneficiary forms attesting to the construction projects supporting 1,315 positions, the potential to create 115 new jobs and \$10,000,000 private sector investment.

Mid-State Technical College has secured over 100 private sector donors to provide cash match funding to construct its AMETA Centers.

The United Steel workers union has committed to the Coalition in an advisory capacity and also is committed to engaging with university, technical college, industry, community, tribal, and political partners in support of economic development in our 35-county region.

Some 50 other businesses have expressed their enthusiastic support for the Cluster as evidence by the letters of support attached to this Overarching Narrative.

Detailed Plan for Regional Growth Cluster Sustainability

Sustainability of our Regional Growth Cluster is being built on strong foundations of leadership, trust and goals that have already been laid in the intensity of development of our applications. Aspects of sustainability addressed are: (1) Programmatic; (2) Organizational; (3) Financial.

1. Programmatic sustainability

Programmatic Sustainability demands that the Cluster remains relevant and value-creating for its diverse stakeholder groups. We will achieve this by:

- a. **Stakeholder engagement** — We are committed to involve our Cluster stakeholders and know that it is key to creating long-term impacts from our work. Before even the Build Back Better program was announced, Cluster members participated in and presented at virtual state-wide listening sessions to gather information about the industries challenges and opportunities. Findings have been incorporated into every aspect of this program.
- b. **Involving local, state and federal government departments** — While the coalition itself will be the primary driver of change and transformation in our Forest Products Cluster, we also recognize that involvement of key local, regional and federal departments will facilitate improved access to government initiatives in our area.

2. Organizational sustainability

We will maintain and increase the relevance of the Cluster with the following efforts that are an integral part of the Cluster's work from day 1:

- a. **Explore new opportunities** — A foundational principle of the establishment of our Cluster was the recognition that customer needs and consumer trends are creating substantial disruption in traditional supply chains and product demand. Our collective projects will assist in the identification of new opportunities.
- b. **Develop new partnerships** — We firmly believe that the strength and endurance of our Cluster will come from the active development of new, and likely non-traditional partnerships such as philanthropy, community organizations and impact investors.
- c. **Nurture existing relations** — Alongside the development of new partnerships, we will invest in the engagement of existing funding agencies, stakeholders and beneficiaries.
- d. **Communication and engagement** — We have called out the importance of communicating our project results to a large audience in our Phase 2 component project portfolio and have developed a strong communication and engagement strategy to do this.

3. Financial sustainability

- a. **Sales of products and services** — Maple syrup production on the Menominee reservation will generate new income at the end of the project that will support the work of the coalition. Mid-State Technical College and University of Wisconsin-Stevens Point will increase student numbers and the sale of technical services.
- b. **Membership fees** — Wisconsin Paper Council and Great Lakes Timber Professionals Association operate membership based financial models. Increasing membership by

demonstrating the value that they bring through the Forest Products Cluster will strengthen individual members and also provide sources of funds to support the Cluster.

- c. **Intellectual property** – The Coalition is targeting 4 new patents from which license fees and/or royalties will accrue.

Detailed Plan for Engaging Specific Organizations

Mid-State Technical College and the University of Wisconsin System use two supplier diversity programs which qualify disadvantaged groups for design and construction projects. The first is Wisconsin Supplier Diversity website which includes minority-owned businesses, disabled veteran-owned businesses, and woman-owned businesses. The second program is the State of Wisconsin, Department of Transportation list of Disadvantaged Business Enterprise (DBE) certified firms.

For Architect & Engineer (A/E) Design Team Selection:

The University of Wisconsin System will develop and issue a Request for Qualification (RFQ) to solicit experienced architectural and engineering (A/E) firms for design and construction supervision of the Nexus facility. Qualifications Based Selection is used for design team procurement. The project scope will be detailed in a Request for A/E Services document. During the development of the RFQ, the Nexus project leadership will develop the degree of weight factor given to each team's responses to the requests listed below. Standard language in the solicitation document will include the following:

1. The consultant team should strive to include at least 5% + participation by disadvantaged groups who are certified by the two organizations listed above.
2. As part of the submittal stage, we ask each team to describe the organization and partnering at the organization level, and on an individual employee level, and how your firm will address inclusion by under-represented people?

For Construction Contracting:

All contract documents and specifications will be posted on the public websites of those Coalition members undertaking construction project. Included in the front-end documents will be the following language:

1. This project will require Federal Minimal Wage Rate Requirements as per Davis-Bacon and Related Acts. The project will comply with Department of Labor rules as per the timeline of the project and will submit confirmation of compliance with each request for payment.
2. For the Nexus project: in awarding construction contracts, the University of Wisconsin System Administration shall attempt to ensure that 5% of the total amount expended in each fiscal year is awarded to contractors which are minority businesses.
3. Should a qualified, responsible, certified disadvantaged enterprise submit a bid that is no more than 5% higher than the apparent low bid, the Contract may be awarded to submitter.
4. For the AMETA Centers: Mid-State technical College may award a competitive solicitation to a certified diverse supplier if the supplier has submitted a bid that is no more than 5% higher than the lowest bid or the proposal is no more than 5% lower than the high point score. A contract award based on diverse supplier preference may only be made if the business is certificate at the time of bid/proposal opening.

Detailed Plan on Engaging Equitably

A critical component of the success of our project centers on the ability to recognize and address the lack of alignment pertaining to the definition of value and justice. To effectively achieve our promise to deliver equitable access and benefit of the transformational investment EDA is entrusting to us, we believe we must start from the beginning and provide an opportunity to learn and to explore the fundamental reasons as to why, as leaders in our communities and businesses, enhancing our understanding is critical to the generational success we aim to achieve.

As part of this experience, we will bring the knowledge, experiences, and methods Justice Sustainability Associates and America Achieves have effectively accomplished to our 35-county region that historically has not had exposure at the level it takes to evoke enlightenment.

We intend to address this in a manner of ways including:

- Small group interactive events where we can review webinar materials collected via the TA lessons provided during the EDA BBB Phase 2 development process. These sessions will be hosted throughout the region.
- Gathering of those that represent Equity and Inclusion in the state to listen, learn, and evaluate their depth of understanding and their version of the definition of equity, justice, value, injustice, and what their efforts and commitments are to their purpose.
- K-12 and College-age engagement specific to their experiences, fears, successes, and understanding of the definition of value and how it pertains to them, their peers, their parents, their community, and their prospects of the future.
- After we have a platform of understanding to where our strengths are in-terms of partnering organizations and individuals, convene scheduled sessions with this team to begin in-depth assessment.
- Assess communities in terms of equitable understanding and value definition in terms of leaders and community members.
- Assess business for the same, including hiring practices, procurement procedures, HR practices, behavior absent the workplace- do they simply say, or do they live by?
- Convene with the guidance of our partner in this effort to review the assessments, develop an executable plan of community engagement and advocacy, establish procedures for accountability and commitment to continued learning and evaluation.
- Execute with quarterly check-ins and possible redirection.

Additional activities underway to ensure inclusion to this process area:

- Established relationship with Tribal leadership to assist in translation of learning materials in the Menominee language.
- Translation budget allotment is included in our proposal and connection has been made to Hmong leadership and to those supporting our recent addition of Afghan refugees.
- Sub-award documentation has been drafted so we can act immediately to engage our non-profit partnering organizations strategically located throughout the region to have access to facilities and virtual meeting equipment to begin this work.

Detailed Overview on Expected Outcomes

The driving force for our Coalition and the 35-county region it represents is a transformation of an industry from a collective mindset of survival and resilience to one that is optimistic, certain of the future, risk-taking and ready to compete for the opportunities that the 21st century global economy presents.

Implementation of the projects proposed will create tangible evidence that the industry expects to change, pivot and re-position itself for good in the regional and global economy

Our baseline industry data and metrics are sourced from the new IMPLAN Economic Impact Data set released in January 2022. These data reveal the substantial reliance of our 35-county region on the forest products industry. In 2020, The Forestry and Logging industry employed 2,139 people (down 4.5% from 2019); the sawmill and wood products industry employed 17,946 people down 8.4% from 2019) and the pulp and paper industry 20,462 (down 4.9% from 2019). Collectively the sector accounted for 40,546 direct jobs in the region supporting an additional 23,770 indirect jobs with another 21,417 induced for a total contribution of 85,734 employed. Sector output in 2020 was \$26,101,620,000 (down 1.7% from 2019).

The criticality of a single sawmill or pulp/paper mill to a rural town or community is demonstrated by the following scenarios:

- The loss of a 25-employee sawmill in Rusk County (FIPS 55107) would result in the loss of an additional 25 positions and total output impact of \$10,190,170. A paper mill employing 375 in Oneida County (FIPS 55085) would result in the loss of 502 indirect jobs with the loss of a further 282 induced positions for a total effect of 1,158 positions in Oneida and surrounding counties. The total effect on output would be a loss of \$430,287,752.
- In Lincoln County (55069) with total county-wide employment of 14,134, closure of a 390-employee paper mill would impact another 579 jobs for a total impact on 968 positions. This would have a negative impact on total output of \$400,938,313. A closure of this magnitude would on its own reduce the county’s job count by 2.76%!

By pivoting the traditional production of such forest product mills to the new opportunities afforded by the new paradigms of the global economy, we will not only secure these jobs but create the opportunity of opening new mills and factories to fill unmet needs as shown by the following scenario:

In Oneida County (FIPS 55085), opening of a new molded fiber packaging plant would create 500 new jobs, induce another 343 and result in a total output of \$237,614,188.

Collective outcomes from our Coalition in the next five years are as follows:

Δ # of jobs	Δ labor income	Δ total output	Δ maple wood sold	Δ of recycled paper
2,500	\$250,000,000	\$2,000,000,000	500,000 tons	200,000 tons

Overview of Work conducted in Phase 1

Work conducted in the period between submission of the Phase 1 proposal and this Phase 2 proposal falls into several broad categories: project and Cluster engagement; governance

planning; engaging equitably; construction project readiness; and solidifying state legislative and gubernatorial support.

Project and Cluster engagement — Refinement and confirmation of overall project goals has taken place through stakeholder meetings and presentations held between October 15th and March 15th. Stakeholders include forest products companies, the Wisconsin Governor’s Council on Forestry, philanthropic organizations, and trade associations and non-profits. We have strengthened our alliance with organized labor represented by USW which has committed a seat at the table in our governance structure.

Governance Planning —Coalition partners have been researching best practices in coalition governance and cooperative project management. A model of cooperation from the UK requires that awardees of publicly funded collaborative prepare and agree terms of a standalone, legally binding collaboration agreement. We propose to follow this model.

Engaging Equitably —We have been inspired and moved by the presentations, perspectives and change-making described by JSA and America Achieves. We intend to engage with both these organizations at the start and periodically throughout the implementation of Phase 2 to bring their world-class expertise to our communities to be similarly inspired to action and to train our trainers in inspiring and action-oriented ways.

Construction Project Readiness — Our Cluster will undertake three construction projects. Architect and Engineering teams were rapidly assembled, and concerted, significant efforts have ensured that we have met the obligatory proposal submission requirements.

Solidifying State Support — Our Cluster lead partner worked with the State’s Legislature to secure bipartisan support of the Wisconsin Forest Products Cluster. Our Coalition lead also engaged the Wisconsin Governor’s Office to secure a cash match commitment for the project to ensure that 20% of the total project costs are covered from non-federal funding sources.

Detailed list of changes to the vision/proposal to Phase 1 Concept Proposal

Reframing Component Projects — Since submission of our Phase 1 proposal, we have become more certain of our vision to inspire and implement a sustainable, enduring transformation of our industry. In further development and refinement of component projects it became clear that opportunities and synergies existed to consolidate goals and outcomes within fewer projects. New markets for maple fiber naturally aligned with recovered fiber advancement. Additionally, we saw immense benefit to reframe and broaden our originally proposed benchmarking and baselining project as the place to formalize our governance. We view this project as foundational in steering and driving the direction not only of the other component projects but also to stimulate, catalyze and drive change throughout the industry.

This reframing does not reduce the scope of vision or goals. It did however prompt a complete overhaul of our anticipated total federal grant request from \$92.5 million in our Phase 1 concept proposal to a total federal request \$56.9 million in the Phase 2 submission.

Programming to encourage more women to enter the industry — We have advanced discussions with Ahlstrom-Munksjö to inaugurate a scholarship targeting female students to attract more women in STEM careers.

Translation of engagement equity and social justice material for Hmong communities — We have taken steps to translate equity and engagement material into Hmong which is the third most spoken language in the state.