The Future of Wisconsin's Forest Products Economy

Summary of Focus Group Discussions

A Report for the Wisconsin Council on Forestry

Extension
UNIVERSITY OF WISCONSIN–MADISON

Wisconsin Economic Development Corporation

WISCONSIN COUNCIL ON FORESTRY
councilonforestry.wi.gov

WISCONSIN DEPT. OF NATURAL RESOURCES

February 2022

TABLE OF CONTENTS

Acknowledgements

We would like to acknowledge UW-Madison Division of Extension staff Evelyn Hammond, Bill Klase, and Ayse Okur Ozdemir, for writing this report, and Dr. Samuel Pratsch for his individual and his team's contribution to this project. This effort would not have been achieved without the significant contributions and assistance of the Wisconsin Economic Development Corporation Office of Rural Prosperity and the Wisconsin Department of Natural Resources, Forest Products Services program. We also appreciate the focus group participants whose views on the topic were used to write this report. Lastly, we thank members of the Wisconsin Council on Forestry and the REDS Strategic Planning Committee for their guidance and their role in data analysis.

REDS Strategic Planning Committee

Tom Hittle - Chair, Wisconsin Council on Forestry
Matt Dallman - Vice Chair, Council on Forestry
James Yach – Wisconsin Department of Natural Resources
Heather Berklund – Wisconsin Department of Natural Resources
Ram Dahal – Wisconsin Department of Natural Resources
Scott Lyon – Wisconsin Department of Natural Resources
Sam Rikkers – Wisconsin Economic Development Corporation
Rachel Best – Wisconsin Economic Development Corporation
Kietra Olson – Wisconsin Economic Development Corporation
Crystal Rohde –Northwest Regional Planning Commission
Kevin Englebert –East Central Wisconsin Regional Planning Commission
Sydney Swan –Bay Lakes Regional Planning Commission
Dennis Lawrence –North Central Wisconsin Regional Planning Commission
Paul Fowler - Wisconsin Institute for Sustainable Technology
Brian Conlan – Senator Tammy Baldwin's Office

Production Team

Tom Hittle - Chair, Wisconsin Council on Forestry
Matt Dallman - Vice Chair, Council on Forestry
Heather Berklund – Wisconsin Department of Natural Resources
Collin Buntrock – Wisconsin Department of Natural Resources
Scott Lyon – Wisconsin Department of Natural Resources
Marcy West – Wisconsin Economic Development Corporation
Kietra Olson – Wisconsin Economic Development Corporation
Stacey Johnson – Wisconsin Paper Council
Paul Fowler - Wisconsin Institute for Sustainable Technology

Wisconsin Council on Forestry

Tom Hittle, Chair
Matt Dallman, Vice Chair
Heather Berklund
Michael Bolton
Senator Janet Bewley
Senator Mary Felzkowski
James Hoppe
Buddy Huffaker
James Kerkman
Rebekah Luedtke
Representative Beth Meyers
Representative Jeff Mursau
Kenneth Price
Adena Rissman
Erik Rantala
Henry Schienebeck
Paul Strong
Jordan Skiff
Jason Sjostrom
William Van Lopik

EXECUTIVE SUMMARY

Wisconsin's forest industry plays a critical role in supporting the sustainable management of the state's 17 million acres of forest land, which cover 46% of the state's total area. The industry has a substantial potential for growth and presents opportunities for investment. This project is a cross-sector collaboration aimed at engaging stakeholders across Wisconsin's forest products economy to identify priorities that will help the state better understand, enhance, and capitalize on existing timber industries and establish new market opportunities for Wisconsin's forest products. Due to the forest industry's contributions to the state economy, it is important that the industry receives the necessary support and investment to enable it to thrive sustainably.

In May 2021, the Wisconsin Council on Forestry, in its efforts to prepare for a Regional Economic Diversification Summit (REDS), held a series of two listening sessions during which a cross-sector group of landowners and forestry stakeholders from industry, community, education, government, environmental groups, and nonprofits met and discussed various issues concerning the industry. In addition, these listening sessions are part of a broader effort the Council is leading, along with our partners, to develop actionable strategies leading up to a REDS and other collaborative forestry initiatives.

An evaluation team from the University of Wisconsin–Madison Division of Extension Natural Resources Institute analyzed data from 11 focus group discussions held on May 6th and 11th, 2021. The recorded discussions were transcribed using a transcription software, Otter.ai, and analyzed by the evaluation team. In summary, the themes that emerged from the focus group discussions from the questions posed to the participants are highlighted below:

1. What's working well in Wisconsin's forest industry

- Long history of forestry and availability of resources in Wisconsin
- Availability of infrastructure and equipment for the forest industry
- Availability of markets for certain forest products
- Sustainable forest management supported by laws and stewardship programs
- Collaborations within the industry and good relations between the state and industry

2. Challenges facing the forest industry

- Support of and improvements to mills in the state
- Limited or non-existent markets for some forest products
- Attracting and retaining workers in the forest industry
- Barriers associated with high costs and limited transportation
- Restrictions to practicing forestry and use of forest products
- Public perceptions of forests and forestry
- Climate change and associated mitigation practices
- Maintaining healthy and productive forests

3. Opportunities for growth

- Increase engagement of communities and cooperatives with their forest industries
- Identify new markets for the forest industry
- Specialty products and products with increasing demand
- Paper products replacing plastics

4. Recommendations

i. Policy

- Support industry and woodland owners by prioritizing sustainable forest management and cost-effective practices
- Support ongoing success in forest industry and encourage new investments

ii. Communication

- Promote and expand collaboration and communication among stakeholders towards improved working relations, productive discussions, and statewide commitment and involvement
- Increase public awareness of the quality, sustainability, and benefits of forest products to individuals and communities

iii. Collaborations with educational institutions

- Invest in education, workforce development and youth outreach by involving parents and teachers in educational efforts. Also, strengthen connections between industry and all levels of education
- Promote scientific, research-based improvements and learn from local and global best practices

iv. Products

- Diversify and upgrade production and product types, follow market changes to remain competitive, and be prepared to adapt to new disruptions including natural disasters

v. Transportation and infrastructure

- Improve infrastructure and transportation
- Provide high speed internet
- Build more concentration yards
- Create shorter hauls
- Lessen road regulations

5. Food for thought – Questions to explore in further discussions

- Impact of natural disasters
- Transportation
- Making mills economically viable
- Role of community in the forest industry
- Creation of niche markets
- Building partnerships
- Impact of regulations

INTRODUCTION

Forests play a vital role in national economies. They provide various production inputs, environmental goods, food, fuel, medicines, household equipment, building materials, and raw materials for industrial processing. Healthy and vigorous forests provide essential wildlife habitats, help to ensure clean water and air, and are critical in mitigating the effects of climate change. In Wisconsin, the forest industry also supports the sustainable management of the state's 17 million acres of forest land, which cover 46% of the state's total area. Research shows that the industry provides over 60,000 full- and part-time jobs, a total output of about $25 billion and value-added of over $7 billion (Wisconsin Department of Natural Resources, 2021). Among industries in Wisconsin, the forest products industry is ranked 11th in terms of the number of full- and part-time jobs, third in industry output, and ninth in value-added in the state (Wisconsin Department of Natural Resources, 2021). Considering the contributions the forest industry makes to the state's economy, it is important that the industry receives the necessary support and investment to enable it to thrive sustainably.

The Wisconsin Council on Forestry and its partners, at the request of Governor Tony Evers, initiated a collaborative process to facilitate a Regional Economic Development Summit (REDS) with the goal of helping the state better understand and capitalize on enhancing existing timber industries and establishing new market opportunities for Wisconsin's forest products. Through REDS, the U.S. Economic Development Administration (EDA) works directly with stakeholders to leverage and align federal, state, and local project implementation resources for specific economic development strategies and priorities.

In May 2021, the Council on Forestry held a series of two listening sessions to develop actionable initiatives as a critical component of the REDS process. During these listening sessions, a cross-sector group of landowners and forestry stakeholders from industry, community, education, government, environmental groups, and nonprofits met and discussed various issues concerning the industry. This evaluation report highlights the key findings from the discussions.

METHODOLOGY

Representatives from the Council on Forestry, the Wisconsin Department of Natural Resources (WDNR) the Wisconsin Economic Development Corporation (WEDC) and the Evaluation Unit from the UW–Madison Division of Extension Natural Resources Institute developed an interview guide with five questions (Appendix A) for the focus group discussions (listening sessions), which were held on May 6th and 11th, 2021 on Zoom. The discussions from 11 breakout rooms were recorded and transcribed using transcription software Otter.ai.

The Evaluation team cleaned the transcripts to ensure that what was said in the recordings reflected what was captured by the software in the transcripts. The transcripts were then analyzed and evaluated. To facilitate the data analysis process, the evaluation team created themes based on the interview guide (Appendix A). Using these themes, each team member coded the first transcript (Breakout Room 6 of May 6) separately. The team then met and discussed the codes. After a robust discussion, team members agreed on rephrasing some of the themes and codes. This step was important to create a standard coding scheme and codebook. Subsequent transcripts were coded using the coding scheme and codebook. As data analysis continued, more themes emerged and were included in the codebook.

To enhance validity of thedata analysis process, a “data jam” was performed after three transcripts from the focus group discussions had been analyzed. During the data jam, the analysis process was explained to Council members and other participants. Feedback from the data jam was incorporated into the process and informed analysis of subsequent transcripts.

This report is a summary of the responses from the 11 breakout focus groups. Themes mentioned in only a single breakout group were not covered in this report but were captured and provided in tabular format to the Council on Forestry. The intent of this report is to highlight the emerging themes shared by a majority of forestry stakeholders. The final list of themes included the following:

1. What’s working well in Wisconsin’s forest industry
2. Challenges facing the industry
3. Opportunities for growth
4. Recommendations
5. Food for thought - Questions to explore in further discussions

LIMITATIONS OF THE EVALUATION

Although the transcription software captured most of what was recorded during the discussions, there were a few instances where the recording was indecipherable. However, this did not affect the entire transcript since the preceding and subsequent portions of the discussion were correctly captured and transcribed. In addition, the listening sessions represent a snapshot in time, and therefore do not capture every perspective or opinion among the forestry community. It should be noted that responses may be represented across multiple themes since respondents represented different sectors of forestry and areas of the state. Furthermore, quotations included in this report are intended to provide specific insights regarding conversations that took place during the listening sessions but may only represent the viewpoint(s) of a specific individual or organization.

KEY FINDINGS

In this section we discuss the key findings based on the emerging themes from the focus group discussions.

1. WHAT'S WORKING WELL IN WISCONSIN'S FOREST INDUSTRY

- **Long history of forestry and availability of resources in Wisconsin**

Participants noted that the forest industry has a long history in Wisconsin. One of them described logging in the following way:

> *"... It's part of our heritage, it's part of just our fiber, our fabric of the way that our state has been for so long. It's kind of a rich history. And it's something that, like logging, it's something that is generational, it keeps going forward, year after year, generation after generation..."*

This rich history was attributed to the availability of the resources (forests), diversity of tree species in the state, and a culture that supports harvesting of timber. Additionally, the state has a good wood basket, and most tree species are well utilized and managed. Because of their high quality, Wisconsin's timber and forest products has advantages over species and products produced in other parts of the country.

- **Availability of infrastructure and equipment for the forest industry**

A well-established and robust infrastructure for managing timber (logging and trucking firms) was touted as being responsible for the flourishing industry in Wisconsin. A participant clarified that the infrastructure makes logging easier, and the availability of trucking firms enhances the transport of timber to buyers not only across the state but also across the country.

Coupled with available infrastructure are secondary industries that support forest products industries. A participant elaborated how these two factors work together for the benefit of the industry:

> *"...The positive then is the total integrated systems. Okay, in addition, and I say ... the amount* [sic] *of companies that are making support equipment, rollers, bearings, whatever, felts, and shipping stuff all over the world, gives us a huge advantage..."*

- **Availability of markets for many forest products**

Many of the participants noted that there is a strong market for certain forest products, such as hardwood timber, chips, sawdust, bark, pulp, and low-grade forest products. This has been made possible by established and stable sawmills in the state. Some of these mills were recognized for diversifying their products to adapt to market demands. This has strengthened the forest products industry. However, market challenges exist in certain situations and in some parts of the state.

Participants also identified the impact small family businesses have had in support of the industry. Some of these family businesses operate sawmills, which ensures a constant supply of products for the market.

- **Sustainable forest management supported by laws and stewardship programs**

The forestry industry in Wisconsin is doing well because of a culture of conservation and strong support for responsible, active forest management. A participant remarked that most landowners in Wisconsin have a good understanding of the need for forest management and the benefits it provides for other forest uses such as recreation, wildlife habitat, etc. Participants found the Forest Crop Law, Woodland Tax Law, and Managed Forest Law agreeable due to advantages such as low taxes for landowners:

> *"... There's a long history in Wisconsin, a partnership with our legislature, going back to the Forest Crop Law, Woodland Tax Law, Managed Forest Law now, that has led to this culture of promoting harvesting in Wisconsin for sustainable forestry. And those tax laws require that these forests be managed sustainably, and that we do our best when they're young to get that small wood out so that we can move towards the quality of the forest..."*

Some participants pointed out that although there are some disadvantages to the laws, they make long-term sustainable forest land ownership achievable due to low taxes. The laws also guarantee habitat protection and sustainable forest management.

The Knowles–Nelson Stewardship Program was recognized for preserving natural habitats, protecting water quality, and increasing opportunities for outdoor recreational activities. The forest certification systems adhered to by businesses and landowners in the state were commended for ensuring sound forest management and maintaining water quality throughout the state. Additionally, the state's long term forest action and wildlife plans were commended for ensuring that forests are well managed not only presently but also in the future.

- **Collaborations within the industry and good relations between the state and industry**

Participants noted that the existing good relations between landowners, industry, and the state; and their ability to come together to share ideas and experiences have worked well for the industry. Also, the strong support from the state exemplified by good work relations between the Wisconsin Urban Forestry Council, the Department of Natural Resources (WDNR), and the industry and landowner associations emerged as one of the things working well in the industry. A participant explained that the partnerships between industry, the WDNR, County Forests, and the United States Forest Service have worked well to provide a constant supply of timber for the market. Another described the role of the DNR to direct landowners towards sustainable forest management:

> *"...The partnership of individual DNR foresters in each county working with the landowners in that county and getting them started. Not serving in their current role, not necessarily taking over the role of a private consultant or an industrial forester but making that initial contact and kind of doing some hand-holding to move landowners along the path of sustainable management. And I think that alone has made a huge difference in the state..."*

The WDNR's role in supporting forest products businesses was mentioned as working well for the industry. A participant described the personal relationship he has with the WDNR:

> *"... I have a direct line to our DNR forest products. And I have a direct line to our DNR urban forestry... So those things are working. And having that direct line and having always an ear is something very important to me..."*

Furthermore, collaboration and coordination between local, state, and federal forest management agencies were cited as important contributors to the regular supply of forest products:

> *"... Cross-ownership coordination, you know, Good Neighbor Authority, stewardship, contracting, the coordination that we're now seeing between federal and state and county and local governments. I think that that's absolutely critical because we can't manage our land based on ownership, property lines..."*

2. CHALLENGES FACING THE INDUSTRY

- **Support of and improvements to mills in the state**

Most participants stated how important the mills in the state are and how the loss of one has significant impacts on the practice of forestry, rural communities, the forest industry, and other related industries. Additionally, many recognized that the industry cannot change quickly to react to market conditions. Some identified the lack of political will to support converting mills to other products, while others stated that communities are not prepared to support a changing forest industry. There were frequent discussions on ownership of and investments in the mills, and these centered on the profit-driven viewpoint of out-of-state/foreign investors. Participants noted a lack of investment in the industry and a lack of empathy for local communities and industries.

> *"... There's some areas where we are not evolving or where we're challenged to evolve, and that is in the area of adapting the existing mills, the mills that we have in Wisconsin. I said that that our mill is continually working to develop new products. Well, that has to be happening across the board and some way of supporting industries to do that. Some way of attracting investment capital from large corporations to be invested in the state..."*

- **Limited or non-existing markets for some forest products**

Many of the participants recognized that Wisconsin is fortunate to have markets for pulpwood, and cited examples of other states that do not. Still, they acknowledged that there were parts of the state and situations where you cannot find buyers for pulpwood.

Additionally, participants mentioned that there were few or no markets for some species (e.g., white pine), low-grade or small-diameter wood, tops of trees/biomass, and milling residues. Some pointed to high wood costs in the lake states and cheaper alternatives in other countries for the lack of markets in Wisconsin. Others stated that the improvements in harvesting technology have resulted in an overproduction of pulpwood:

> *"...In order to get good management and new forests growing on our landscape, we have to deal with a lot of low-grade lumber and lower value wood, such as pulp wood, and those markets have gotten worse, if not better at all, we always hoped. And access isn't the issue, it's markets that are the issue. There's a misconception that we* [Southwest Wisconsin] *don't, it's too hard to get it out of the woods here, that's really not the case, it's, in some cases, we can't give wood on the roadside away down here, because they just don't have a place to take it..."*

- **Attracting and retaining workers in the forest industry**

The age of the current work force and the lack of trained replacements were mentioned many times. Some of the comments regarding fewer people entering the forest industry or considering it as a career were related to people's perception of the industry (see "Public perceptions of forests and forestry"). This has resulted in declining enrollment in training and educational programs (either at high schools or technical colleges) for the industry and fewer pursuing advanced degrees in forest industry related fields from Wisconsin's universities.

Participants further noted the high costs of equipment for harvesting and extraction of timber was a barrier for many, especially younger people who may lack collateral to get a loan. The high cost for training and worker compensation for forestry employees was also recognized, along with people leaving the industry due to it being hard work and the long hours:

> *"... Labor is a challenge. I've got, again, peers that aren't running at full capacity, because they can't get enough labor,... I've got peers that right now, that have eliminated their attendance policies, because if they enforce them, they wouldn't have enough people to run their mills, that's, that's how dire of a situation it is..."*

- **High costs and limited transportation**

There was a good amount of discussion on the impacts of the high costs for the forest industry and lack of some infrastructure. High costs for landowners included expensive management plans, equipment purchase and maintenance, insurance, and high property tax rates. Some stated that even enrolling in the Managed Forest Law program (which was recognized as something not everyone wanted to do) did not bring property taxes down to a level on par with agricultural lands.

Many participants identified the limited services provided by railroads as being a problem. A lack of access to rail service, loading facilities, and container yards leads to more reliance on trucking and subsequent higher costs. Other barriers recognized were a lack of high-speed internet throughout the state and higher production and transportation costs due to a focus on 100-inch sticks versus tree-length systems.

- **Restrictions to practicing forestry and use of forest products**

Some participants noted that state or federal regulations (primarily due to insect and disease restrictions but others as well) were making it difficult/expensive to manage timber and potentially deterring investors.

Additionally, regulatory hurdles and building codes were limiting biofuel industries and mass timber use, respectively. The challenge of maintaining SFI and FSC certification was raised, and that the introduction of other restrictions was causing problems:

> *"... Currently between, you know, insect and disease or oak wilt restrictions, we certainly have a lot of challenges with maintaining our certification, whether it's SFI or FSC. And the requirements there...."*

- **Public perceptions of forests and forestry**

There were many comments regarding the public's disconnectedness from the forests and forest industry in Wisconsin. Citizens were said to be unaware of the status of Wisconsin's forest resources, their sustainable management, and the products that come from it. This has led to a decline in the desire to enter the industry, the use of alternative materials/products other than those from forests, and more people wanting to preserve forests rather than sustainably manage them. Some participants concluded that these factors were why there was little awareness/interest in mill closures and the impacts those have on local communities. Additionally, participants mentioned the use of forests for recreation is growing in the state. Citizens see forests as a place to play and see wildlife and not necessarily for timber production.

- **Climate change**

The impacts of a changing climate were recognized by several participants. Some mentioned that less severe winters and reduced snowfall were limiting the ability to conduct harvests in winter-only habitats. Others noted that predicted increases in rainfall amounts and bigger weather events could restrict harvesting to winter months only.

- **Maintaining healthy and productive forests**

Although many participants acknowledged that the forests in the state were in good condition and, in general, sustainably managed, there were some comments on problems with the forests as well. Many of the problems identified revolved around the regrowth/regeneration of forests and the impacts of invasive species, pests, and deer on forests. There were also some comments on how there is a growing imbalance in age classes with a preference for older trees. Some recognized that it is difficult for Wisconsin’s forests to compete with the growth rate of forests in the southern states let alone tropical countries.

3. OPPORTUNITIES FOR GROWTH

- **Increase engagement of communities and cooperatives with their forest industries**

A few participants expressed their support for the ongoing efforts to develop a cooperative that takes ownership of the Verso paper mill. Additionally, participants noted the need for political, technical, and financial support for communities and organizations to become more aware of and involved with the forest industries in their locale. Community support (up to and including outright ownership of local mills and industries) was seen as a way for citizens to become more engaged by having some sense of control over their own future and that of their community:

> *“... It's maybe premature to say it's a success story, but I like the idea of a different model of operating the mills. And right now, as most people are aware with Verso, the Consolidated Cooperative, has formed to get that mill up and running. So, I think, like I said, it's probably premature to call it a success story. But I feel that's moving in the right direction right now.”*

- **Identifying new markets for the forest industry**

Another discussion point raised around opportunities for the forest industry was finding and taking advantage of new markets. Carbon sequestration and selling carbon credits were regarded as potential opportunities that could be researched:

> *“... One of the opportunities for landowners is to sell carbon sequestering credits to diversify their revenue income stream….Because we're managing it sustainably and certified. It's a great opportunity for the county to create a new revenue stream for the county from the county forest. And it's just another way we can contribute to climate change and to mitigating it...”*

Additionally, mass timber, nanotechnology, and sawing and marketing white pine products were mentioned as some of the markets that the industry could explore. Some participants, on the other hand, stated that they see recreational use of forests as a significant opportunity for expanding and balancing different uses of forestry.

- **Specialty products and products with increasing demand**

Many participants commented on how the forest industry can develop and produce specialty products and products with increasing market demand to successfully evolve and thrive in local and global markets. Some potential opportunities identified by participants were: white oak barrels and liquor storage products, nanocellulose building materials (in collaboration with the Forest Products Laboratory), timber mats, and particle boards:

> *"Southern Michigan here a couple years ago, was able to attract ARAUCO, which makes particleboard, and that was a huge game changer for being able to do a lot more forestry in southern Michigan where their markets were very weak. So, if we can attract people that use that product, whether it's softwood pulp or hardwood pulp, it makes everything else possible."*

> *"... specialty products, those are things that we should be looking after promoting and assisting the local, the Wisconsin mills in pursuing those things..."*

- **Paper products replacing plastics**

In several focus groups, participants indicated that the booming trend of paper products replacing plastics, particularly in packaging, is an important opportunity for the forest industry to grow into. Being aware of in-demand products, increasing customer willingness to use paper over plastic and kraft-pulp for packaging and packages are viewed as potential factors to consider in creating and amplifying this opportunity.

4. RECOMMENDATIONS

i. Policy

- Support industry and woodland owners by prioritizing sustainable forest management, fair taxation, and cost-effective practices, supporting ongoing success in the forest industry, and encouraging new investments.

> *"...We do know that for any of those things, what's going to position Wisconsin best is to have dynamic, diverse forests that are well managed for a balance of all the things we've talked about, across different ownership types with the continuing educational resources, the research that goes on the monitoring, the government agencies' support and you know, outreach to landowners and the MFL program, all of those things, you know, need to continue..."*

ii. Communication

- Promote and expand collaborations and communication between stakeholders towards improved work relations, productive discussions, and statewide commitment and involvement.

> *"...The internal and external stakeholders of the forest industry must continue to collaborate to maintain what Wisconsin forest industry is already doing well..."*

- Increase publicity and public awareness of the quality, sustainability, and benefits of forest products to people and communities.

> *"...Educate the consumer on the reality of this, this is a sustainable industry, this is that alternative to the plastic, and all the other good things that come with it..."*

iii. Collaborations with educational institutions

- Invest in technical education, workforce development and youth outreach programs. Include parents and teachers in educational efforts and strengthen connections between industry and all levels of education.

> *"... I think within that there's also an opportunity for the forest industry, forest products industry to be aggressive about participating and cooperating on ongoing efforts with workforce development. In our region, there are a number of initiatives, things like, you know, having high school, elementary school children actually go out and job shadow work out, you know, sort of like a field trip, a forestry field trip, to get them introduced to the what's going on, what this industry is about..."*

- Promote scientific, research-based improvements and learn from local and global best practices.

> *"...Look across the borders, see what other people are doing. Steal ideas from other states, other countries, trends in the industry..."*

iv. Products

- Diversify and upgrade production and product types. Follow market changes to remain competitive and be prepared to adapt to new disruptions including natural disasters.

> *"... I think sometimes change and innovation is always seen as a positive, but we need to take it in steps. And we need to make sure that the entire supply chain and value chain is prepared for that..."*

v. Transportation and infrastructure

- Improve infrastructure and transportation: Provide high speed internet, build more concentration yards, create shorter hauls, lessen road regulations, build more facilities

vi. FOOD FOR THOUGHT – Questions to explore in further discussions

The questions in this section were posed by focus group participants and were not answered in the discussions. They are worth exploring for the future and benefit of the forest industry.

i. Impact of natural disasters

- What is the next "tree pandemic?" When will it occur next?
- What is the impact of climate change on forests and the industry?

ii. Transportation

- How will high transportation costs influence the future of Wisconsin's forest industry?
- What will transportation look like in the future?

iii. Making mills economically viable

- What could be done to put the forest industry at the cutting edge of food packaging and keep the mills relevant?
- What could be done to prevent mills from closing?
- What could be done to restore closed mills?
- What could we do as a state to make sure that we are on the cutting edge of future packaging and production to keep existing mills relevant?

iv. Role of community in the forest industry

- What helps the community grow urgency so that it can shape its own future? And what are the things that impede that?

v. Creation of and expansion into niche markets

- What niche markets already exist in Wisconsin and can be further explored?
- What niche products can Wisconsin develop and invest in?

vi. Building partnerships

- What are the existing and potential partnerships between Wisconsin's forest industries and other states or countries around the world?
- What role can the colleges in the University of Wisconsin System play in the forest industry?

vii. Impact of regulations

- How do current/future regulations shape Wisconsin's forest industry?

NOTE

The listening session discussions were successful in bringing together diverse viewpoints and addressing the questions in the interview guide. Although many broad themes were identified for improving Wisconsin's forest industry, the scope of the sessions did not provide for time to explore these in detail. Subsequently, this effort could neither provide additional information on all items identified nor evaluate the validity of some of the ideas mentioned. Participants identified other educational institutions with which to collaborate (Appendix B); and countries, states, and businesses to emulate (Appendix C).

REFERENCE

Wisconsin Department of Natural Resources (2021). Celebrate Wisconsin's working forests during forest products week. Available on: https://dnr.wisconsin.gov/newsroom/release/50511 (Accessed in November 2021)

APPENDICES

Appendix A

Interview Guide

REDS listening sessions breakout questions

We have the opportunity to engage in the Regional Economic Diversification Summit process, partnering with the federal government. Through it, multiple federal departments will coordinate their work together to help us advance our priorities as key stakeholders in Wisconsin work together to transition and diversify our forest products economy and related industry sectors.

One of the first steps in our REDS effort is to invite and listen to ideas from stakeholders—from across forestry and related industries, as well as community, education, government, landowner, environmental, and nonprofit actors. In general, we want ideas and perspectives about the best course or courses for the Wisconsin forest-related economy to evolve. Here are the questions we plan to ask during these listening sessions to inform this inquiry:

1. What's still working in the industry that has been working for years? For each:
    - What, if anything, do you see that might either continue to propel this—or threaten it in the foreseeable future?
    - Why do you feel that this area is still successful and has lasted so long?
2. What example can you share, however large or small, of where our forest-related industry is evolving successfully in Wisconsin? For each:
    - What trend or reality do you think propelled the action in this example?
    - What made it succeed?
3. What do you consider the most critical challenge facing the industry that we can strive to overcome in order to maintain our forest-based industries? In other words, what worries you the most about keeping our forest economy a vital contributor to our state's economy and well-being?
    - Why is it important?
    - How do you see it affecting the industry?
    - Do you have an example of anyone—anywhere—who is successfully addressing this challenge?
4. What opportunity—no matter how large or small—do you consider a <u>key</u> opportunity to pursue to help Wisconsin's forest-based economy thrive into the future?
    - Why is it a key to our future?
    - How do you see it affecting the industry?
    - What are the next one or two things we would need to know, to have, or to do to pursue this opportunity?
5. Thinking over our discussion, what do we not know that would be good to know before we settle on any priorities?

Appendix B

Educational institutions

University of Maine
Northwoods manufacturing working with Hurley High School
Northcentral Technical College, Wood Technology Center of Excellence in Antigo
Natural Resources Research Institute in Duluth

Appendix C

Potential initiatives, states, countries, and companies to emulate

Michigan, Maine, Pennsylvania, and Finland forest products initiatives
Investments in forest-based recreation after mills close like those in Appalachia, and
FP Innovations in Canada
VTT in Finland
KVL in Sweden
Domtar adapting/evolving forest products
Nine Dragons Paper
Green Bay Packaging
Hayward LP mill producing dynamic, value-added products
Sappi Cloquet mill being able to switch production from week to week
Sustana Fiber
Ahlstrom-Munksjö in Kaukauna producing many different products
Midwest Paper in Combined Locks: mills converting to meet demand
Michigan company creating paper water containers
ARAUCO Wood Products producing particleboard
New Land for mass timber