



VERMONT FOREST FUTURE STRATEGIC ROADMAP

FINAL REPORT

STRATEGIES AND ACTIONS

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JANUARY 2024

 VERMONT





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FINAL REPORT

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JANUARY 2024

This report provides the final Vermont Forest Future Strategic Roadmap. This report was prepared by the project consultant, Future iQ, on behalf of the Commissioner, Vermont Department of Forests, Parks & Recreation, and the Vermont Forest Future Strategic Roadmap Advisory Panel. It summarizes the strategic pillars objectives, strategies, and recommended actions.

Details about the Vermont Forest Future Strategic Roadmap work and the associated data analysis are available on the project portal:

lab2.future-iq.com/vermont-forest-future

REPORT PREPARED BY:

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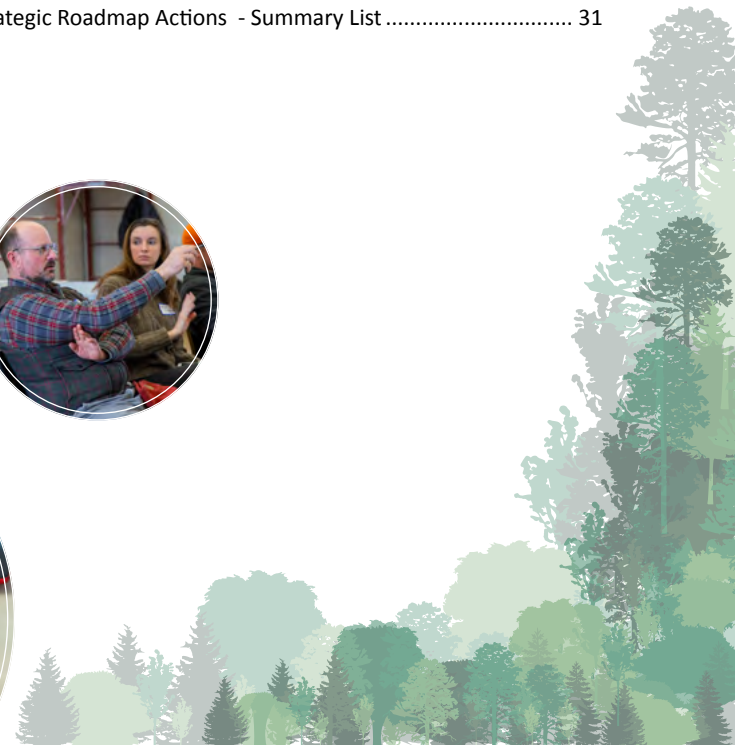


January 25, 2024



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FOREWORD BY COMMISSIONER DANIELLE FITZKO



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I am delighted to introduce the Vermont Forest Future Strategic Roadmap – a powerful demonstration of Vermont’s unwavering commitment to our state’s working forests, abundant forest products, and the dedicated Vermonters who contribute at every stage of the forest products supply chain, from landowner to consumer. Vermont’s forests are more than a collection of trees providing the scenic backdrop to our green mountain state; they are the backbone of our communities, offering climate resilience, habitat, clean water, fresh air, and a haven for recreation. Vermont’s forests also form the foundation of our forest products sector. From providing essentials like building materials, paper, packaging, furniture, and heat, the forest products sector is woven into the fabric of our daily lives. Wood, the ultimate green product, is locally grown, renewable, and necessary for our climate smart future. We depend on our forests to protect the environment, support biodiversity, fuel our economy, and provide an array of forest products. This roadmap celebrates the dynamic role our forests play in shaping Vermont’s well-being, livelihoods, and cultural identity.

Recognizing the forest products sector’s pivotal role in Vermont today and in the future, the roadmap comes at a critical time. Vermont faces challenges such as rising costs, workforce shortages, climate related disruptions, and uncertainties across the sector, including a growing misunderstanding of forest management. In response, the roadmap outlines a vision and an exciting path to build a stronger forest products sector, a greater understanding of the benefits of forest management, and a prosperous forest economy over the next ten years. It serves as a strategic guide to navigate these challenges, fostering adaptation, innovation, appreciation, and resiliency.

The creation of this roadmap was a collaborative journey that brought together experts, community leaders, industry professionals, and passionate individuals from all across the state. The diverse perspectives and wealth of knowledge that emerged have shaped a comprehensive roadmap, reflecting values and aspirations to help guide us forward. Gratitude extends to the Advisory Panel and stakeholders who played a pivotal role. Their insights and commitment were invaluable in creating a roadmap that goes beyond recommendations - it is a blueprint for action, innovation, and sustainability. The depth of engagement underscores the importance of inclusiveness, ensuring that the Strategic Roadmap truly represents a collective voice to best support Vermonters and the forest products sector.

As we move into the implementation phase, it is critical to carry forward the spirit of collaboration and commitment that guided the creation of this roadmap. The roadmap’s five interdependent pillars provide a framework for all stakeholders to unite. Together, we have the opportunity to transform our vision into tangible actions that will not only benefit us today but also leave a lasting legacy for future generations.

In closing, I extend my appreciation to everyone who contributed to the development of the Vermont Forest Future Strategic Roadmap. Your dedication has laid the foundation for a future where Vermont’s forests thrive, and the forest products sector continues to be a cornerstone of our state’s prosperity.

A handwritten signature in black ink that reads "Danielle Fitzko".

Danielle Fitzko, Commissioner





»»»» STRATEGIC ROADMAP ADVISORY PANEL

The Vermont Forest Future Strategic Roadmap Advisory Panel has been central and instrumental in developing and shaping the Strategic Roadmap. The group brings a wide range of perspectives and voices and has helped to ensure that the planning process took a “big tent” approach.

This has ensured that the Strategic Roadmap looks to the future of the forest products sector, while understanding that there are other forest users and uses. Throughout the discussions, the Advisory Panel has sought to create aspirational strategies and actions that reflect the bold, future-orientated mandate provided by the Legislature.

VERMONT FOREST FUTURE STRATEGIC ROADMAP ADVISORY PANEL

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The Advisory Panel and the Strategic Roadmap planning process was supported by a core project team. This dedicated team included the following Vermont Forest, Parks and Recreation staff: Katharine Servidio, Paul Frederick (now retired), Oliver Pierson, and Molly Willard; plus Christine Dorsey McGowan from the Vermont Sustainable Jobs Fund (VSJF).





FOCUSING ON FOREST HEALTH

A key theme has been a focus on forest health. Forest health is expansive and covers the broad issues of ecological resilience and adaptability, as well as support for a productive working forest economy. This includes recognizing the role forests can play in mitigating climate change and nurturing an ecosystem that can sustain and protect people and landscapes.



MAINTAINING FORESTS AS WORKING FORESTS

A key threat is the loss of timber supplies from working forests and the subsequent economic impacts on Vermont small businesses. The Strategic Roadmap lays out actions to promote working forests in policy decisions and land use planning. It also includes actions to educate, encourage, and motivate landowners and decision makers to maintain Vermont's working forests.



INVESTING IN FUTURE READINESS

There is a clear desire and need to invest in helping the industry adapt to change and invest in accelerating innovation. The Strategic Roadmap includes actions to improve investment, access to capital, and risk management. Part of the future readiness theme is the next generation of the workforce and how the industry can position itself as an attractive career choice.



CELEBRATING THE IMPORTANCE OF FOREST PRODUCTS

The forest products sector is a vital part of Vermont's economy. It supports thousands of jobs and produces a wide range of products that contribute to people's everyday lives. These products range from the lumber that makes our homes to the sap that makes Vermont's famous maple syrup. In the Strategic Roadmap, there are actions that aim to build appreciation and demand for Vermont wood and forest products.



TAKING RESPONSIBILITY FOR SOCIAL LICENSE

Industry stakeholders recognize the importance of securing societal support, and that it must be earned, not taken for granted. The Strategic Roadmap includes actions to educate the public about the industry's important role as an ecosystem manager and to provide transparent information on forest conditions and trends.



RECOGNIZING THE MULTIPLE FOREST USERS AND STAKEHOLDERS

While the Strategic Roadmap has focused primarily on the future of the forest products sector, it recognizes that there are other active forest users and people who have a deep interest in the future of the forests. The Strategic Roadmap includes actions aimed at building links with other forest user groups.



CREATING A 'WHOLE-OF-GOVERNMENT' APPROACH

An interagency task force focused on the forest products industry could help reduce the administrative burden on the industry, simplify the process of starting, growing, and maintaining a Vermont-scale forest products enterprise, and stimulate investments that increase the overall strength of Vermont's forest products sector.





INTRODUCTION

The goal of the Vermont Forest Future Strategic Roadmap was to assess the current state of Vermont’s forest products sector and greater forest economy and identify opportunities to strengthen, modernize, promote, and protect its long-term viability.

The process has involved parties representing diverse users of Vermont’s forests in a robust public engagement process, resulting in the development of a 10-year plan. The plan provides a strategic framework, including strategic pillars with objectives, strategies, and recommended actions. This creates a forward-looking plan that anticipates trends and helps position Vermont’s forest products sector and greater forest economy for the future.

THE INTENDED LONG-TERM OUTCOMES OF THE VERMONT FOREST FUTURE STRATEGIC ROADMAP ARE TO:

- Increase sustainable economic development and jobs in Vermont’s forest economy.
- Promote ways to expand the workforce and strengthen forest products enterprises in order to strengthen, modernize, promote, and protect the Vermont forest economy into the future.
- Promote the importance of healthy, resilient, and sustainably managed working forests that provide a diverse array of high-quality products now and in the future.
- Identify actionable strategies designed to strengthen, modernize, promote, and protect the forest products sector in Vermont, including opportunities for new product development, opening new markets for Vermont forest products, adopting modern manufacturing processes, and utilizing new ways to market Vermont forest products.

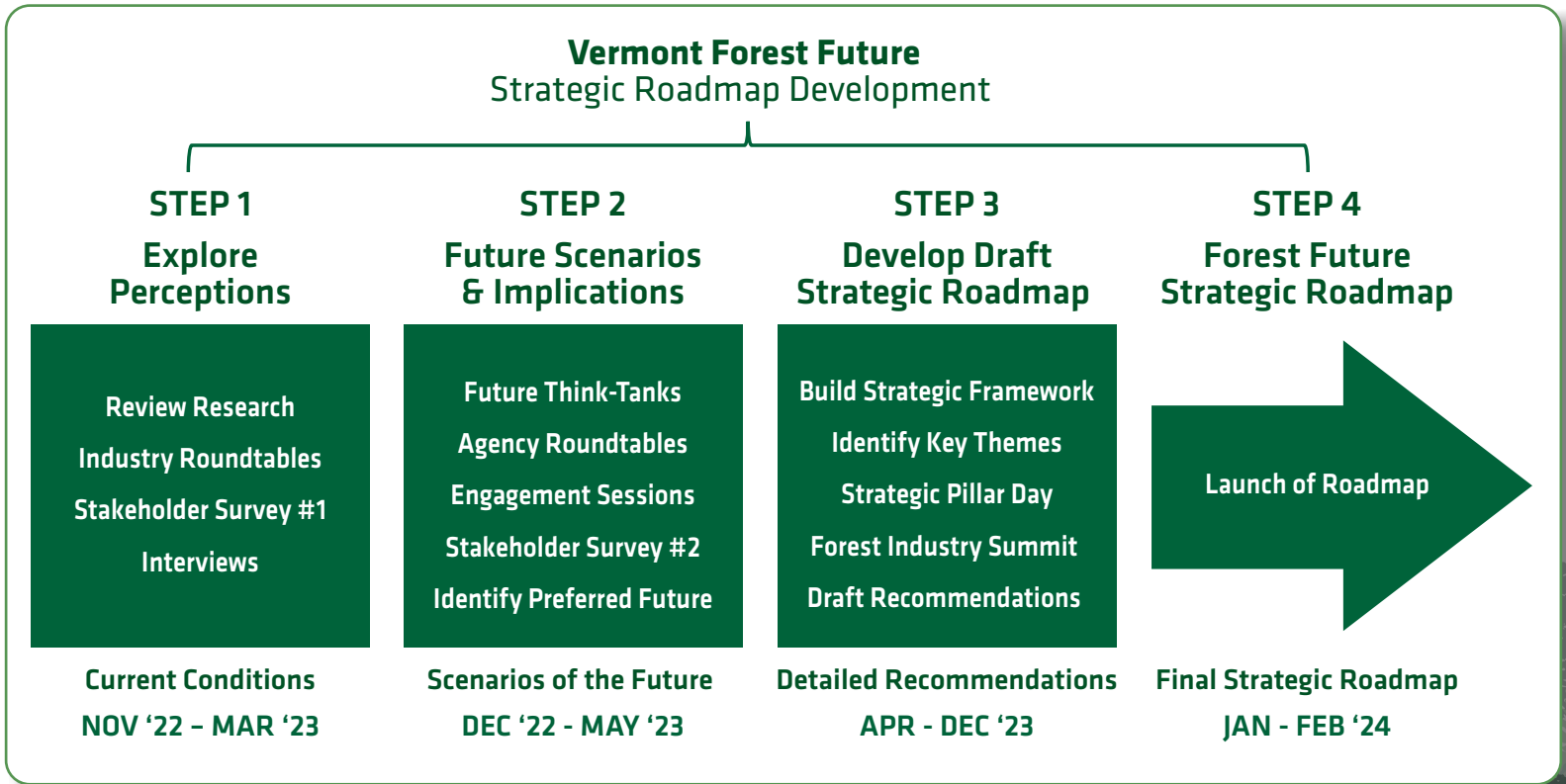




The planning process placed a high priority on stakeholder and industry engagement. This has been a key feature of this work, with numerous opportunities for meaningful input.

STRATEGIC ROADMAP DEVELOPMENT TIMELINE

Development of the Vermont Forest Future Strategic Roadmap began in November 2022 and will conclude with a launch in early 2024. The next phase will begin with the establishment of a stakeholder collaborative to work on the implementation of the Strategic Roadmap over the next ten years. The development process was designed to follow a series of key steps, including exploring stakeholder perceptions, building future scenarios, and developing a strategic framework and actions.



The Vermont Forest Future Strategic Roadmap planning process has created a high-level roadmap that lays out a future direction for Vermont's forest products sector and forest economy. It is a forward-looking and comprehensive roadmap that takes a "big picture" approach, reflects the complexity of today's world, and responds to the challenges and opportunities facing the industry. The process included many voices and different perspectives, all coming together to focus on growing a strong Vermont forest products sector and prosperous forest economy that recognizes the broad range of values and benefits provided by our forests.

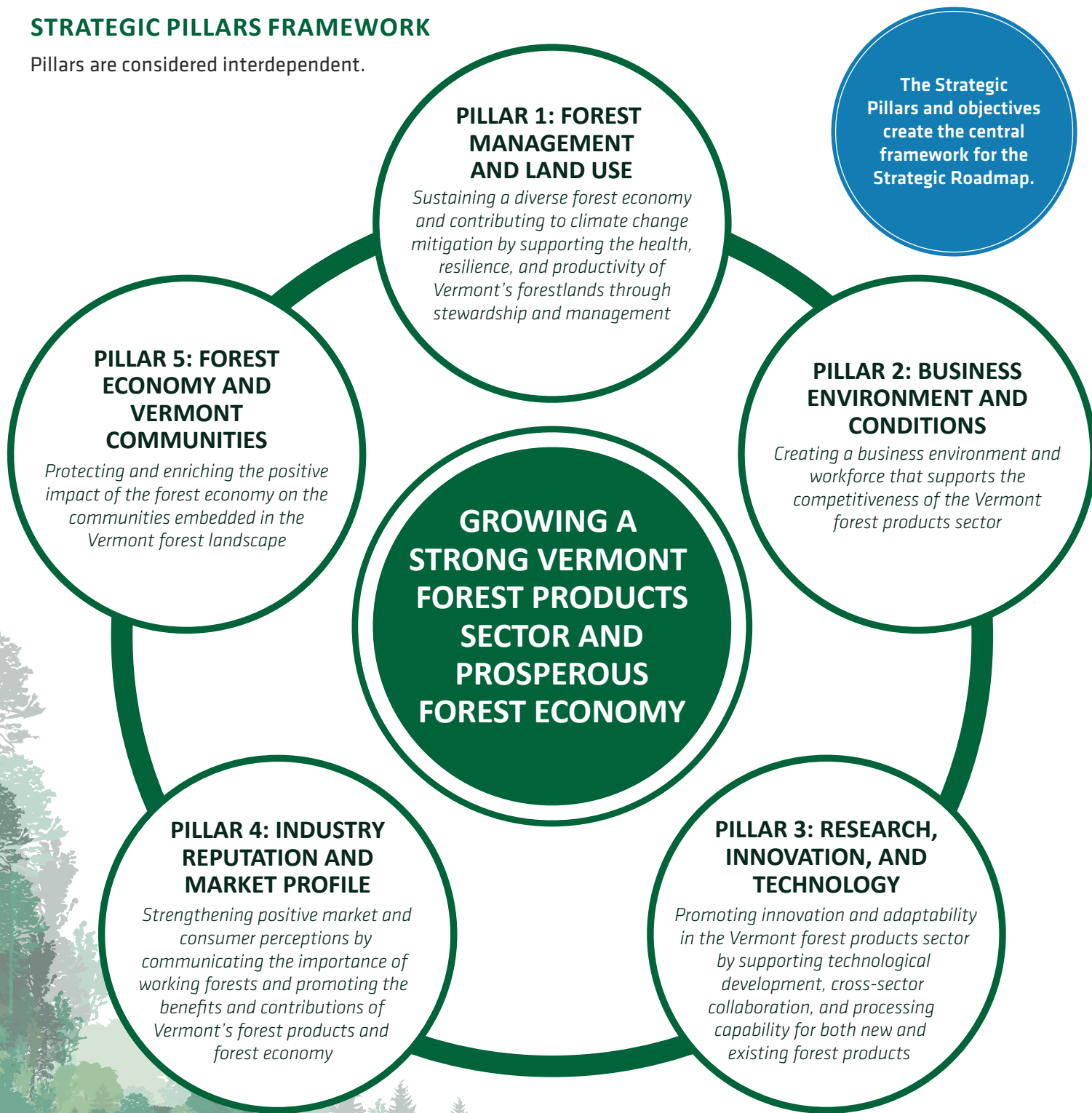


STRATEGIC FRAMEWORK AND ACTIONS

The strategic framework was developed to provide a roadmap for achieving the preferred future identified through the planning process. The framework is an organizing structure for objectives, strategies, and actions. It was developed with the Advisory Panel and expanded upon at the Strategic Pillar Day, which brought together over 70 industry stakeholders. The Advisory Panel has devoted considerable time to refining and developing the Pillars and their supporting objectives, strategies, and actions. The Strategic Pillars are viewed as interdependent and mutually supportive. The pillars include a “package” of recommended actions that work together to achieve the preferred future.

STRATEGIC PILLARS FRAMEWORK

Pillars are considered interdependent.



PILLAR 1: FOREST MANAGEMENT AND LAND USE

PILLAR 1:
FOREST
MANAGEMENT
AND
LAND USE

OBJECTIVE: Sustaining a diverse forest economy and contributing to climate change mitigation by supporting the health, resilience, and productivity of Vermont’s forestlands through stewardship and management.

This pillar places a strong focus on supporting management to improve forest health and promoting policies that support the stewardship of working forests. Throughout the survey work and industry stakeholder engagement, there was an expressed interest in exploring more intentional policy interventions and public investments to optimize conditions for healthy forests and forest landscapes. There is widespread agreement that the overarching approach to forest management should focus on maintaining healthy forests that are resilient to climate change and capable of supporting a viable and diverse forest economy. Previous research suggests that forest management practices over the past three decades have improved the overall condition of Vermont’s forests (Morin, et al. 2020). However, Vermont’s forest landscapes are facing new and emerging challenges, including climate change and more extreme weather events, shifting priorities for land use, and changing ownership of forestlands. For example, extreme rain events have been most pronounced in the Northeast, where the frequency of such events has increased by 74% (Dockry, Bengston, & Westphal, 2020).

Overarching strategies that support this pillar include:



MANAGE FOR INCREASED FOREST HEALTH.



PROMOTE LAND USE POLICIES TO MAINTAIN WORKING FORESTLANDS.



EMPOWER LANDOWNERS TO MAINTAIN WORKING FORESTS BY REDUCING BARRIERS AND CREATING INCENTIVES.



FAST FACTS

- As of January 2023, more than 19,000 parcels were enrolled in the Use Value Appraisal Program, including more than 2 million acres of forestland (Division of Property Valuation and Review, 2023).
- The net growth to removals ratio, calculated by taking the annual gross growth minus annual mortality and dividing by annual removals, is nearly 3:1 – meaning that Vermont’s forests are growing almost three times as much standing timber each year than is harvested or taken out of production due to land use change (U.S. Department of Agriculture, Forest Service, Northern Research Station, 2023).

STRATEGY: MANAGE FOR INCREASED FOREST HEALTH

Throughout the planning process, there has been strong support for efforts to improve overall forest health and to help manage and steward forests for long-term environmental, social, and economic benefits. Part of the concept of a healthy forest is that it supports a viable and diverse forest economy. It is recognized that forests provide important ecological and societal benefits that are cherished by the many stakeholders across Vermont.

Action 1: Provide robust data on forest health trends.

Build an understanding about the status and forecast trends of Vermont's forests health by:

- Providing comprehensive and robust information to stakeholders and the public.
- Developing a coordinated government and industry response to emerging threats and changes in forest health (invasive species, climate-driven range shifts).

Action 2: Build a community of practice.

Convene forestry stakeholders to facilitate a community of practice that:

- Pools resources and helps boost the overall capacity and expertise of professionals.
- Builds professional expertise and accelerates peer-to-peer sharing of industry and stakeholder knowledge about forest health and best practices.

Action 3: Demonstrate best practices for increasing forest health.

Use state lands as a resource for demonstration projects by:

- Highlighting forest management practices on state lands that are designed to address current or future threats to forest health.
- Exploring traditional indigenous land management practices, and appropriately incorporating this knowledge in modern forest management approaches.



FOREST FUTURE INSIGHT

- Forest health has been a central discussion in the development of the Strategic Roadmap and should continue to be a central theme in the implementation of the Strategic Roadmap. It is recognized that Vermont places a high priority on healthy ecosystems, environmental sustainability, and tackling climate change mitigation. The forest products sector has a key role to play as a significant ecosystem manager.
- Vermonters care deeply about the health and integrity of our forests and often look for reliable sources of information. Fortunately, we have many monitoring efforts and experts working together to understand what's happening and tracking tools to help us make informed decisions about protecting and caring for our forests. One notable example of tracking is the Forest Ecosystem Monitoring Cooperative's Forest Indicator Dashboard. This valuable tool tracks data trends and provides a comprehensive understanding and insight into Vermont's forests. Now there is an opportunity to further invest in this tool and share the information within the dashboard. In doing so, we can create a comprehensive resource that provides a holistic view for people to assess and understand the current health of our forests.

STRATEGY: PROMOTE LAND USE POLICIES TO MAINTAIN WORKING FORESTLANDS

Vermont's forests are unique because of the large number of private forest landowners and the large cumulative effect of individual landowner decisions on overall land use and forest integrity. While much of the forest is still in large parcels, forests are being broken up into smaller and smaller parcels and fragmented. There is a recognition that there is a need to maintain and promote sound forest management and land use, and that there must be an appropriate balance of policies and public and private investment in maintaining forest cover.

Action 4: Promote working forests in land use planning.

Promote legislation and other land use planning efforts that:

- Recognize the value of maintaining intact and connected forests.
- Promote sustainable forest management.
- Support forest products enterprises.

Action 5: Support resilience and biodiversity planning.

Support the development and implementation of a state-wide community resilience and biodiversity conservation plan (Act 59 of 2023), with a particular emphasis on helping:

- Maintain the sustainable management of working forests, including planning for conservation and biodiversity.
- Ensure that working forests remain a vital component of Vermont's conserved landscape.



FOREST
FUTURE
INSIGHT

- A key role and opportunity for government at all levels is to provide the policy and planning framework that helps to maintain working forests. Keeping forests as forests, and by extension working forests, is a core theme of the Strategic Roadmap. This has multiple benefits, including economic stability and resilience for the industry, as well as important ecosystem functions.

STRATEGY: EMPOWER LANDOWNERS TO MAINTAIN WORKING FORESTS BY REDUCING BARRIERS AND CREATING INCENTIVES

PILLAR 1:
FOREST
MANAGEMENT
AND
LAND USE

A key issue for the future of Vermont's forest economy is the ability and willingness of landowners to engage with the forest products sector, provide a reliable supply of forest products through responsible forest management, and maintain healthy, working forests. Vermont's Use Value Appraisal (UVA) Program, commonly referred to as Current Use, has been well regarded as a tool to incentivize private forest landowners to be good stewards of the land and in so doing, provide Vermont with clean air and water, wildlife habitat, and valuable forest products like building material, paper, fuel, and maple syrup. In recognition of the value of providing these benefits, and their commitment to carrying out sustainable forest management in accordance with a forest management plan approved by the Department of Forests, Parks and Recreation, landowners enrolled in the UVA program's forestland category receive an adjusted land assessment value that reflects the current use of their forestland rather than the potential development value of the land.

Action 6: Support Vermont's Use Value Appraisal program.

Enhance the sustainability and functionality of Vermont's Use Value Appraisal (Current Use) program by:

- Maintaining its focus on working forest lands, and other statutory goals.
- Facilitating the inclusion of new landowners.
- Modernizing the administrative systems.
- Leveraging the expertise of Vermont's Licensed Foresters.

Action 7: Boost capacity to assist landowners.

Enhance technical assistance and programs focused on landowners and local communities by:

- Connecting unengaged landowners to sustainable forest management.
- Exploring the feasibility of forming landowner consortia to support forest management on small parcels.

Action 8: Provide incentives to landowners for forest management.

Reduce barriers to active forest management by:

- Supporting opportunities for landowners to receive financial compensation for management.
- Promoting market-based incentives (goods and services).



FOREST
FUTURE
INSIGHT

- The role of Vermont's Licensed Foresters is key to helping landowners maintain working forests. The planning process has highlighted an opportunity to leverage the expertise and capacity of these professionals.
- Changes in land ownership, both generational transfers and new landowners, are a potential challenge. New landowners may not have an appreciation of the benefits of forest management, and actions are needed to help educate and encourage the continued long-term stewardship and maintenance of working forests.



PILLAR 2: BUSINESS ENVIRONMENT AND CONDITIONS

PILLAR 2:
BUSINESS
ENVIRONMENT
AND
CONDITIONS

OBJECTIVE: Creating a business environment and workforce that supports the competitiveness of the Vermont forest products sector.

This pillar aims to strengthen the industry’s ability to adapt to change and to guide government in finding creative solutions. The stakeholder engagement process has highlighted the challenges facing Vermont forest products enterprises. Global competition and supply chain challenges have added to these competitive pressures. The stakeholder engagement work has highlighted concerns that wood processing in Vermont is becoming increasingly challenging. This covers the spectrum of processing from loggers to sawmills to furniture makers. The shrinking size of forest parcels and changing land ownership patterns add complexity to forest management. In addition, the pace of automation in many industries is accelerating, putting additional pressure on smaller operations that may not have the financial capacity to make major investments in upgrades. The forest products sector, like most resource economy sectors, is also facing immediate and future workforce constraints.

Overarching strategies that support this pillar include:



ENHANCE CAPACITY FOR INDUSTRY ADAPTATION.



BUILD STRONG CONNECTIONS TO THE NEXT GENERATION WORKFORCE.



CREATE A “PROBLEM-BUSTING” APPROACH FOCUSED ON THE FOREST ECONOMY.



FAST FACTS

- Overall economic impact of the forest products industry (2020) included 9,107 direct jobs with 13,816 total jobs. These jobs result in labor income of \$291.5 million and \$521.9 million, respectively (Public Sector Consultants & Frederick, 2020).
- In 2020, Vermont’s forest products sector produced a total economic contribution of \$2.1 billion, with \$770.8 million being value-added (Public Sector Consultants & Frederick, 2020).
- In 2013, 58% of Vermont’s logging business owners were over the age of 50. Of those, 23% are older than 60 (North East State Foresters Association, 2013). This issue is likely to be even more pronounced today.

STRATEGY: ENHANCE CAPACITY FOR INDUSTRY ADAPTATION

Stakeholder engagement has highlighted the need for accelerated adaptation, as the forest products sector faces increasing pressures from changes in technology, costs, and competition. There is an identified opportunity to build local and regional supply chains that enable more value-adding to occur within the state and region. The decade ahead will see a period of pronounced and rapid change in social, environmental and industry conditions. This will require continuous adjustment and adaptation of industries and sectors.

Action 9: Adopt climate resilience strategies.

Support the industry in adopting resilience strategies, including:

- Assisting forest products enterprises implement climate-adapted practices.
- Encouraging the installation of climate-resilient infrastructure.
- Promoting the use of logging equipment and techniques that reduce adverse impacts on soil and water quality.
- Facilitating improved access to finance and capital for forest products enterprises.

Action 10: Strengthen industry service providers.

Improve the coordination, accessibility, and effectiveness of technical assistance for forest products enterprises by:

- Identifying gaps in current offerings.
- Expanding services for start-ups.
- Increasing access to business skills development, succession planning and future needs assessments, marketing, grant writing, and permitting assistance.

Action 11: Build greater situational awareness.

Build situational awareness to support forest products enterprises and attract new investments by:

- Supporting data collection, analysis, and communication on the volume and scale of Vermont's forest inventory, wood flows, utilization, and production.
- Understanding emerging trends and technical approaches.



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INSIGHT

- Actions in this pillar focus primarily on building future readiness. There are key emerging technology trends in automation, robotics, and artificial intelligence, as well as the impacts of climate change, that industry participants will need to navigate.
- A key area identified in the roadmap planning process relates to carbon and forests. There are potential trends and new developments around carbon sequestration and storage, markets, and trading initiatives. This is an area that should be monitored and studied to understand the benefits and potential implications for working forests, and forest health in general.

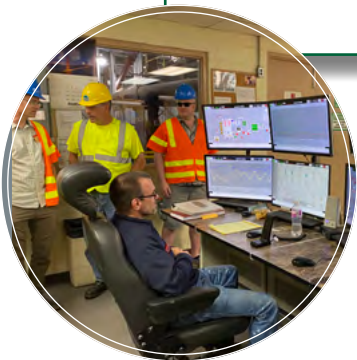
STRATEGY: BUILD STRONG CONNECTIONS TO THE NEXT GENERATION WORKFORCE

The issue of workforce shortages is prevalent across all industries, including Vermont's forest products sector. This is a current and future workforce challenge. Industry discussions have highlighted the challenge of an aging workforce and ownership, and a lack of connection with the next generation of workers, business owners, and investors. However, there is a rapid growth in the number of people who are connected to working forests through areas such as outdoor recreation and non-timber forest products. This is a promising opportunity for the forest products sector and the broader forest economy, and has the potential to help ensure high quality, well-paid, safe, and attractive jobs in Vermont.

Action 12: Boost the next generation of forest workers.

Attract the next generation of forest workers and promote forest-based careers by:

- Conducting regular industry-based workforce needs surveys.
- Promoting forest industry careers in the K-12 education system and their important future connection to the Vermont landscape and economy.
- Investing in post-secondary technical education programs that provide hands-on training and education in modern, cutting-edge technologies, and equipment.
- Connecting and collaborating with existing education initiatives.



FOREST
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INSIGHT

- The key theme of this strategy is to build connections with a potential future workforce and to make careers in the forest economy an attractive proposition. There are existing initiatives such as UVM Extension's Maple Challenge Day, Game of Logging Regional Competitions, the Vermont Youth Conservation Corps Forestry Crews, and organizations such as Future Farmers of America that could be expanded to further provide these important connections.
- There is potential to explore a bold initiative such as a "Wood Technology Educational Center" that showcases the future of forestry and highlights success stories such as the Wood Technology Center of Excellence at Northcentral Technical College in Wisconsin. Such a center would focus on using cutting-edge technology and an industry-driven curriculum to train students to become skilled workers or successful entrepreneurs. It would develop customized courses in collaboration with industry experts. This could be a powerful tool that would create the future-oriented approach and excitement about future careers in the forestry sector.



STRATEGY: CREATE A “PROBLEM-BUSTING” APPROACH FOCUSED ON THE FOREST ECONOMY

In previous reports and throughout the Vermont Forest Future Strategic Roadmap public engagement process, stakeholders have identified numerous institutional and policy barriers to business growth and competitiveness in the forest products sector. While progress has been made on some policy issues to support Vermont’s forest economy, there is a perception that these barriers impede value-added investment and that new policy initiatives often have the potential to create new barriers and impediments. An interagency task force focused on the forest economy could help reduce the administrative burden on the industry, simplify the process of starting, growing, and maintaining a Vermont-scale forest products facility, and stimulate investments that increase the overall strength of Vermont’s forest products sector.

Action 13: Create a governmental interagency taskforce focused on solutions.

Establish an interagency task force with a specific focus on the forest economy to:

- Develop practical solutions to persistent or project-specific challenges.
- Facilitate new and innovative investments in the forest products sector.
- Act as a mechanism for future coordinated emergency response for the forest products sector.



FOREST
FUTURE
INSIGHT

- An example of where such an interagency taskforce could act would be to reduce barriers to investment in the forest products sector – such as, supporting small scale wood processing ventures (such as sawmills) successfully navigate the permitting and regulatory process, identify appropriate development sites, and connect with financial assistance providers. This would require a coordinated approach across agencies, and between agencies and the private sector.
- While there is sometimes skepticism about the ability of government to “get it right,” such an interagency taskforce, led by the Commissioner, could align government efforts and resources to expedite solutions on key issues.



PILLAR 3: RESEARCH, INNOVATION, AND TECHNOLOGY

PILLAR 3:
RESEARCH,
INNOVATION,
AND
TECHNOLOGY

OBJECTIVE: Promoting innovation and adaptability in the Vermont forest products sector by supporting technological development, cross-sector collaboration, and processing capability for both new and existing forest products.

This pillar aims to boost the pace of innovation and to seize new opportunities as they emerge. The stakeholder engagement process has revealed a desire for a more proactive investment of public and private resources to help spur innovation and build strong cross-sector collaborations and linkages. The forest products sector has a long-standing and important role in Vermont's economy. There is a prevailing sentiment that additional support for innovation in new products and uses (e.g., mass timber) could help solve some long-term economic challenges and bring new economic vitality to the sector. However, the process of change and innovation can take time and often results in failures as well as successes. It requires a robust culture of risk tolerance, access to "patient capital," and the ability to absorb setbacks. New England is an epicenter of industrial innovation, but there is a need to build better connections between Vermont and this regional innovation ecosystem.

Overarching strategies that support this pillar include:



PURSUE NEW DEVELOPMENT OPPORTUNITIES AND INNOVATIVE USES OF VERMONT FOREST PRODUCTS.



ACCELERATE THE ADOPTION OF TECHNICAL INNOVATION.



FAST FACTS

- In 2020, total contributions of wood furniture manufacturing in Vermont were \$280.4 million in output, 2,084 jobs, \$94.3 million in labor income, and \$115.2 million in value adding (Public Sector Consultants and Frederick, 2020).
- A 2021 study concluded that Vermont had 35 potential industrial sites available for new forest products manufacturing (Northeast Wood Markets Retention and New Market Recruitment Initiative, 2021).



STRATEGY: PURSUE NEW DEVELOPMENT OPPORTUNITIES FOR VERMONT FOREST PRODUCTS

PILLAR 3:
RESEARCH,
INNOVATION,
AND
TECHNOLOGY

The need to find ways to use lower economic value wood has been a key theme in discussions and engagement with industry stakeholders. This is an important part of the overall economics of the wood products sector. In addition, there is a growing interest in the use of products such as cross-laminated timber (CLT) and nanocellulose, which offer new and exciting opportunities for Vermont forest products enterprises. However, in order to take full advantage of new potential uses, the industry and the state need to help drive innovation and adaptation.

Action 14: Anticipate and respond to new consumer demands.

Position Vermont and its forest products sector to pursue emerging opportunities for local and regional innovative value-adding by:

- Maintaining awareness of emerging consumer trends and demands for locally sourced and environmentally sustainable materials.
- Responding to evolving consumer preferences for potential new and innovative wood products.

Action 15: Recognize new economic development opportunities.

Research emerging trends in regional and global value chains and markets to identify when local processing and products will become more competitive, including:

- Reshoring of wood manufacturing, especially building materials such as plywood, insulation, and mass timber.
- Increased use of locally sourced wood for housing or residential construction at multiple scales.

Action 16: Leverage the success of the maple industry.

Foster closer collaboration and synergy between maple producers and other forest products enterprises, by:

- Creating greater cross-sector synergies and helping to share lessons learned.



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INSIGHT

- Survey results from the planning process indicate that people are generally optimistic about the increased economic impact of new and emerging forest uses, including recreation and non-timber forest products. It is also important to ensure that wood-based products have a viable and prosperous future.
- One area that has significant promise is the potential new opportunities that could arise from continued changes in markets, consumer demands, and value chains. This could generate or strengthen new opportunities for wood-based products and locally sourced materials.

STRATEGY: ACCELERATE THE ADOPTION OF TECHNICAL INNOVATION

Vermont’s forest products sector has a history of innovation, particularly at the local scale. There is a desire to help accelerate the adoption of new technical innovations that are being created in the surrounding region. The barrier, however, is that some of the technological advances and innovations are capital intensive. There is an identified opportunity to creatively explore how to bring new investors and capital into the forest economy.

Action 17: Build financial tools to help drive innovation.

Explore how best to create investment tools and financing mechanisms that will support innovation by:

- Boosting investment in resilience and stewardship in Vermont’s forest products sector.
- Attracting new investors and capital.
- Examining ways to de-risk investments in forest products enterprises.

Action 18: Invest in accelerating innovation.

Support accelerated innovation and sustainability in Vermont’s forest products sector by:

- Promoting existing funding opportunities for working lands.
- Highlighting the positive impacts of investments.
- Supporting working lands investments to meet demand.



FOREST
FUTURE
INSIGHT

- The Vermont Working Lands Enterprise Initiative (WLEI), which supports innovative entrepreneurs at the forefront of Vermont’s working lands economy by providing technical and financial assistance to help growing businesses thrive, has yielded remarkable results through its investment in supporting working lands enterprises. Over the past decade, more than 500 new jobs have been created, at least 24,000 acres of our working landscape have directly benefited from these initiatives, and businesses supported by grant-funded projects account for more than \$55 million in annual sales, demonstrating the tangible economic impact. These accomplishments over the past decade highlight the positive impact of WLEI, made possible through the support of the Vermont Legislature, and underscore the continued importance of investing in a resilient and prosperous future for working lands.
- There is the potential to link investment capital to the narrative of renewable resources and the sustainable management of working forests. The push for renewable energy and climate-smart products could create greater interest in investing in forest sector projects with strong environmental credentials.



PILLAR 4: INDUSTRY REPUTATION AND MARKET PROFILE

PILLAR 4:
INDUSTRY
REPUTATION
AND MARKET
PROFILE

OBJECTIVE: Strengthening positive market and consumer perceptions by communicating the importance of working forests and promoting the benefits and contributions of Vermont’s forest products and forest economy.

This pillar focuses on building support and appreciation for Vermont forest products and the forest economy. Stakeholder discussions have highlighted the need to better promote the inherent sustainability of Vermont wood products and the forest products sector. The general public is becoming more aware of sustainability issues, including climate change and other stressors on forest health. To maintain support, Vermont’s forest products sector must better communicate its approach to sustainability and sound forest management. The industry is well positioned to do this due to the key role that the forest products sector plays in ecosystem management. There is also a desire and opportunity to boost the appreciation and use of Vermont forest products and to find ways to capture a premium for unique and specialty wood products.

Overarching strategies that support this pillar include:



STRENGTHEN AND MAINTAIN THE SOCIAL LICENSE OF THE FOREST PRODUCTS SECTOR.



ENCOURAGE THE DEMAND, USE, AND APPRECIATION FOR VERMONT FOREST PRODUCTS.



FAST FACTS

- Wood remains an important energy and heating source in Vermont and much of the world and is likely to remain a desirable fuel source as economies and consumers transition away from fossil fuels. For example, in 2022, the Vermont Comprehensive Energy Plan adopted a goal of meeting at least 35% of Vermont’s thermal demand with wood heat by 2030 and concluded that providing transparent and comprehensive information about advanced wood heat is essential to support informed consumer choices (Vermont Department of Public Service, 2022). Vermont’s existing electric biomass plants play an important role in the overall forest economy by providing a local market for lower economic value wood. There is currently an effort to improve their efficiency and examine greenhouse gas accounting to better inform policy on electricity generating biomass facilities as well as cogeneration.
- In 2015, a significant portion of furniture and wood products manufacturers experienced consumer demand for products that could be traced back to wood harvested in Vermont although less than one-third of forest products businesses surveyed were interested in participating in a state or regional branding initiative (Yellow Wood Associates, Inc., 2015a).



STRATEGY: STRENGTHEN AND MAINTAIN THE SOCIAL LICENSE OF THE FOREST PRODUCTS SECTOR

PILLAR 4:
INDUSTRY
REPUTATION
AND MARKET
PROFILE

Resource-based industries are increasingly subject to public scrutiny about the sustainability of their operations and practices. Overall, there is a desire to strengthen and maintain the social license for the forest industry to operate in Vermont. For the forest products sector, this means ensuring that it maintains public support, which includes promoting and implementing sound harvesting practices and proactively addressing environmental impacts. It will also require clearly demonstrating the connection between positive environmental benefits and Vermont wood products.

Action 19: Promote the forest industry's critical role as an ecosystem manager.

Promote the value that forest management and forest products enterprises deliver to Vermont by:

- Educating Vermonters and visitors about the key role that the forest industry plays in the stewardship and management of healthy forest landscapes and ecosystems.
- Highlighting the great products and materials that come from Vermont forests, and the connection between the forests, wood products and their use in everyday lives.
- Providing regular public updates and resources on the overall forest health and condition of Vermont's forests and the important role they play in ecosystem functioning.
- Increasing educational outreach to new generations by leveraging existing educational resources.



Action 20: Educate land users and landowners about working forest landscapes.

Provide education to land users and landowners when they interact with forest management.

- Create a communications toolkit to connect land users with informational content, especially in areas where there is active forest management and harvesting.
- Connect with new landowners at the point of land purchase and at points of future land use decisions.



Action 21: Highlight professionalism of the forest industry.

Highlight the professional orientation and status of the forest industry, including:

- Supporting the ongoing professionalism of the industry through tools such as training and credentialing programs.
- Emphasizing the scientific basis for forest management decisions.



- The stakeholder engagement process has revealed that the concept of social license is key to the future, and there is a recognition that it must be earned, not taken for granted. Vermont's forest products sector is well positioned to earn this recognition by focusing on its commitment to standards and ongoing professionalism.
- Investing in and leveraging programs such as Project Learning Tree and ForestryWorks for youth is critical to fostering a deep understanding and appreciation of the working forest landscape. These initiatives not only provide essential knowledge about forest ecosystems, but also cultivate a generation that is intimately connected to the uses, people, and inherent benefits of sustainable forestry practices. Through the strategic use of such programs, we are not only empowering our youth, but also making a strategic investment in strengthening the resilience of our working forests, communities and economies, while supporting the development of the next generation of workers.

FOREST
FUTURE
INSIGHT

STRATEGY: ENCOURAGE THE DEMAND, USE AND APPRECIATION FOR VERMONT FOREST PRODUCTS

PILLAR 4:
INDUSTRY
REPUTATION
AND MARKET
PROFILE

As a small but heavily forested state, Vermont produces far more forest products than are processed locally. As a result, regional, national, and international forest products markets are critical to the long-term viability of Vermont's forest products sector. Consumer sentiment favors sustainably harvested forest products, but there has not been the same demand for locally or regionally sourced forest products. Since COVID, many consumers are asking where the products they buy come from. This is an excellent opportunity to showcase the wide variety of wood products that come from Vermont's forests, as well as the forests throughout the Northern Forest region.

Action 22: Elevate the importance of modern and efficient wood energy.

Strengthen the key role that wood energy plays in Vermont by:

- Re-establishing the Statewide Wood Energy Team (SWET) to expand Vermont's market leadership in the thermal wood energy sector.
- Exploring the feasibility of establishing a "Center for Wood Energy" as an education and innovation hub.

Action 23: Leverage national wood promotional programs.

Increase the visibility and market presence of Vermont's wood products by:

- Helping forest products enterprises explore and leverage regional or national programs.
- Partnering with regional and national industry marketing efforts.

Action 24: Encourage the use of Vermont woods in specialty products.

Support a robust market for Vermont wood by:

- Promoting and encouraging the use of Vermont wood in specialty wood products, such as furniture, craft items, and cabinetry.

Action 25: Stimulate local demand for use of wood in construction and building.

Help stimulate demand for wood building materials by:

- Convening architects, designers, builders, and wood industry experts to identify opportunities and develop market strategies.
- Initiating projects that use local products in local construction.



FOREST
FUTURE
INSIGHT

- Existing national forest and wood products marketing initiatives could provide an easy springboard for Vermont wood products. One such initiative, the Real American Hardwood Coalition (RAHC), is an industry-led effort to inspire and educate consumers and professionals about the uses and benefits of real hardwood forest products. RAHC recently launched the Build Your World advertising campaign in partnership with the Magnolia Network and created a social media guide for industry members.
- Regionally sourced wood for construction offers architects, designers, and builders the opportunity to use materials that support the local forest economy while reducing the carbon footprint of our built environment. More and more, certification programs such as LEED are recognizing the embodied carbon in wood and other biomaterials as important components of sustainable building.

PILLAR 5: FOREST ECONOMY AND VERMONT COMMUNITIES

PILLAR 5:
FOREST
ECONOMY AND
VERMONT
COMMUNITIES

OBJECTIVE: Protecting and enriching the positive impact of the forest economy on the communities embedded in the Vermont forest landscape.

Vermont is called the Green Mountain State for good reason: more than 75 percent of our land is forested. Vermonters and visitors alike value our forests for their environmental, cultural, and economic benefits. Sawmills were some of the earliest economic engines in many of Vermont's rural towns, which continue to benefit from the forest economy that grew up around them. The Vermont Forest Future Strategic Roadmap provides a vision for how towns can maintain a strong forest culture and take advantage of the many ways that forests contribute to our economy and well-being.

Overarching strategies that support this pillar include:



BUILD STRONGER LINKAGES BETWEEN FOREST USERS AND THE FOREST PRODUCTS SECTOR.



IMAGINING THE FOREST COMMUNITY OF TOMORROW.



FAST FACTS

- Vermont's forests are heavily used by residents for a variety of recreational activities. 72% of Vermonters participate in outdoor recreation each year. Overall, 33.7% of visitors hiked or backpacked, 27% viewed wildlife, and 16.3% canoed or kayaked (Trust for Public Land, 2018).
- A 2013 survey found that 60% of Vermont logging businesses were owner-operated with no employees. Less than 10% of Vermont logging businesses had more than 5 employees (North East State Foresters Association, 2013).
- In 2021, 57% of Vermont's sawlog harvest was exported out of state for value-added processing. 49% of the export volume went to Quebec, followed by New Hampshire and Maine at 29% and 16%, respectively. Nearly 4% was shipped overseas, mostly to China (Department of Forests, Parks and Recreation, 2022).

STRATEGY: BUILD STRONGER LINKAGES BETWEEN FOREST USERS AND THE FOREST PRODUCTS SECTOR

As Vermont’s forest economy evolves, it is very likely that trail-based recreation, such as biking and hiking, will become an even more significant economic driver. This is already evident in some regions, like the Northeast Kingdom, where recreation is providing renewed economic vitality and operates in a complementary manner with the forest products sector. In fact, these economic drivers are now beginning to intersect in innovative and successful ways. Outdoor recreation opportunities can help enrich and enhance Vermont’s communities as exemplary places to live, work, and play.

Action 26: Connect recreational and other forest users with the forest products sector.

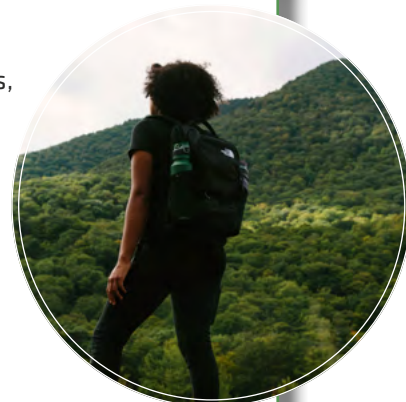
Build active support for land management by:

- Promoting engagement of recreational users, conservation partners, anglers, hunters, foragers, and other interested stakeholders in forest management activities.
- Actively involving land users in interactive initiatives such as volunteer work for invasive species control and trail development.

Action 27: Demonstrate working forest landscapes and the forest economy.

Educate diverse audiences about sustainable forest management and the forest products industry by:

- Establishing statewide partnerships to develop demonstration sites that highlight the forest products industry’s connections to local communities.



FOREST
FUTURE
INSIGHT

- Forests are becoming increasingly important recreational destinations. Working forests provide an excellent opportunity to educate the public about the synergies between forest management, recreation, and other forest uses that benefit the public.
- Forest demonstration sites can be a powerful outreach and education tool to showcase exemplary forest management, recreation design, and sustainable economic development in Vermont’s rural communities.

The future trajectory of Vermont's forest communities is a fascinating topic. In some areas, there has been a gradual decline in terms of population and economic activity. But in other areas there is a resurgence, driven by new recreation economies and remote work opportunities. The forest community of tomorrow may have a different and deeper connection to the forest landscape and resources. There is interest in helping to redefine and reimagine forest communities, and in thinking about future communities that might include a greater diversity of people who could bring new business ideas and models.



Action 28: Empower Vermont communities to view working forests as an integral part of their future.

Help Vermont's communities better connect with and use their local forests by:

- Supporting state level policies and local planning efforts that promote the importance of forests as local economic engines, recognize the role of working forests in resiliency at the local and statewide level, and elevate the ecological and economic importance of Vermont's forests.
- Facilitating strategies to increase the use of local and regional forest product resources in local state, municipal, public works, and housing construction projects.
- Supporting the active management of town forests to enhance local understanding of the benefits of active forest management and the use of forest products.

Action 29: Engage indigenous groups, including Vermont Recognized Tribes, to expand the range of communities involved in forest management approaches.

Engage indigenous groups, including Vermont Recognized Tribes, in sustainable forest management discussions by:

- Including representation in key forest management planning groups and processes.
- Partnering with indigenous groups, including Vermont Recognized Tribes, to find ways to uplift their communities or provide resources through working with the state or local landowners.
- Collaborating to better understand the full range of traditional uses of forest products, and how these could offer new opportunities for the forest economy.

Action 30: Promote the economic contribution of the forest economy to Vermont communities.

Provide educational resources to Vermont communities about the role of the forest products industry as a key economic driver by:

- Conducting an economic impact study every five years to assess the economic contributions of the forest products sector.
- Promoting the value of the forest products industry to rural communities and the state.



- Vermont's forest landscape has been vitally important in shaping the culture, heritage, and traditions of the state and its people. This includes indigenous people as well as new visitors. Tapping into and celebrating this connection has been an undercurrent of the Strategic Roadmap process.
- There is considerable potential for Vermont communities to explore ways to unlock the value inherent in community forests. This value encompasses a wide range of future opportunities, including stored carbon, recreational opportunities, maple production, climate change mitigation, and local wood.

»»»»» NEXT STEPS AND SHORT-TERM PRIORITIES

The next major step is launching the Vermont Forest Future Strategic Roadmap. The Roadmap implementation will require a multi-stakeholder approach, which will continue to build on the collaborative process. This will include opportunities for the industry and stakeholders to explore the actions and contribute their expertise.

Initial Action: Create an Implementation Steering Committee for the Strategic Roadmap.

To build on the knowledge and insights built through the Strategic Roadmap planning process, the Commissioner is creating an Implementation Steering Committee of stakeholders to:

- Act as a continuation of the Vermont Forest Future Strategic Roadmap Advisory Panel.
- Provide direct advice and input to the Commissioner, the Legislature, and partners on implementation of the Vermont Forest Future Strategic Roadmap.



SHORT-TERM HIGH PRIORITY ACTIONS

The Advisory Panel has identified several actions that are considered immediate high priorities that will help build long-term traction and address acute challenges. As a 10-year strategic plan, some of the more complex actions in this Strategic Roadmap will take longer to begin implementation and may require further discussion and refinement with the Implementation Steering Committee. The short-term, high-priority actions identified by the Advisory Panel are:

- Action 1: Provide robust data on forest health trends.
- Action 4: Promote working forests in land use planning.
- Action 9: Adopt climate resilience strategies
- Action 12: Boost the next generation of forest workers.
- Action 18: Invest in accelerating innovation.
- Action 19: Promote the forest industry’s critical role as an ecosystem manager.
- Action 22: Elevate the importance of modern and efficient wood energy.
- Action 26: Connect recreational and other forest users with the forest products sector.
- Action 30: Promote the economic contribution of the forest economy to Vermont communities.





»»»» MORE INFORMATION

For more information about the Vermont Forest Future Strategic Roadmap Project, please contact:

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Additional information about the Vermont Forest Future Strategic Roadmap Project and the associated data analysis are available on the project portal:

lab2.future-iq.com/vermont-forest-future

We would like to acknowledge the substantial work and on the ground support from the core team involved with this project from the VT Department of Forests, Parks & Recreation and Vermont Sustainable Jobs Fund.

Photos courtesy of Erica Houskeeper | VSJF and Future iQ



APPENDIX

DEFINITIONS

The following are some important definitions that helped frame the Strategic Roadmap.

FOREST ECONOMY:

the economic system and interrelated connections of Vermont's forests with the consumers, producers, and providers of forest products and forest-based services and uses.

FOREST PRODUCTS SECTOR:

economic sub-sector that includes forest products enterprises and wood products manufacturers.

FOREST PRODUCTS ENTERPRISES:

businesses primarily engaged as forestry service providers or operators (including harvesting and trucking of forest products) and forest or wood product manufacturers, craftspeople, brokers, retailers, wholesalers, distributors, etc.

WOOD PRODUCTS MANUFACTURERS:

businesses that produce a value-added physical and tangible good or product through special manufacturing, marketing, crafting, or processing forest or primary wood products.

WORKING FORESTS:

refers to forestland managed for the purpose of producing forest products, goods, and services, including the intangible public benefits provided by those forestlands such as aesthetics, contributions to the outdoor recreation and tourism sectors, and exemplifying the ecological, community, and land values of Vermonters.

FOREST PRODUCT (10 V.S.A. § 2602):

logs; pulpwood; veneer; bolt wood; wood chips; stud wood; poles; pilings; biomass; fuel wood; maple sap; or bark.



The Vermont Forest Future Strategic Roadmap planning process sought to build on previous research and studies. Throughout the process, previous research work was reviewed and incorporated to understand what has changed and where there have been successes. An in-depth analysis of previous work was conducted to explore past recommendations and their current relevance to the development of the Strategic Roadmap. In addition to this industry-specific research review, the Strategic Roadmap process explored macro trends related to changing societal values, mass urbanization and its impact, and industrial innovation. These trends helped to inform the scenario development in the Think-Tank sessions. This research review included over 30 reports, including the following examples:

Vermont's forests and the forest products sector have been the subject of numerous studies. This has built a significant body of research and understanding of Vermont's forest economy.

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DataInsight

- The Strategic Roadmap planning process aimed to identify key actions needed to build a robust forest products sector and prosperous forest economy. Lessons learned from previous work were incorporated to create a focused and achievable roadmap.
- The volume of previous work highlights the importance of the forest economy to Vermont and the significant contributions it makes to the State, both in terms of economic impact and recreational, cultural, and environmental benefits.




STAKEHOLDER AND INDUSTRY ENGAGEMENT

The key to the future-oriented Vermont Forest Future Strategic Roadmap planning process was robust and extensive engagement across the state from November 2022 to September 2023. The intent was to maintain a balance of in-person and virtual events to ensure maximum participation.

This robust engagement has helped deepen the thinking behind the Strategic Roadmap and provided multiple opportunities for stakeholders to contribute.





DataInsight

- The level of engagement was a key highlight of the planning process. This intentional stakeholder engagement helped to build a robust Strategic Roadmap that reflects the aspirations of the industry and stakeholders.
- The implementation phase will aim to achieve similar high levels of engagement and input from across the industry and stakeholders.

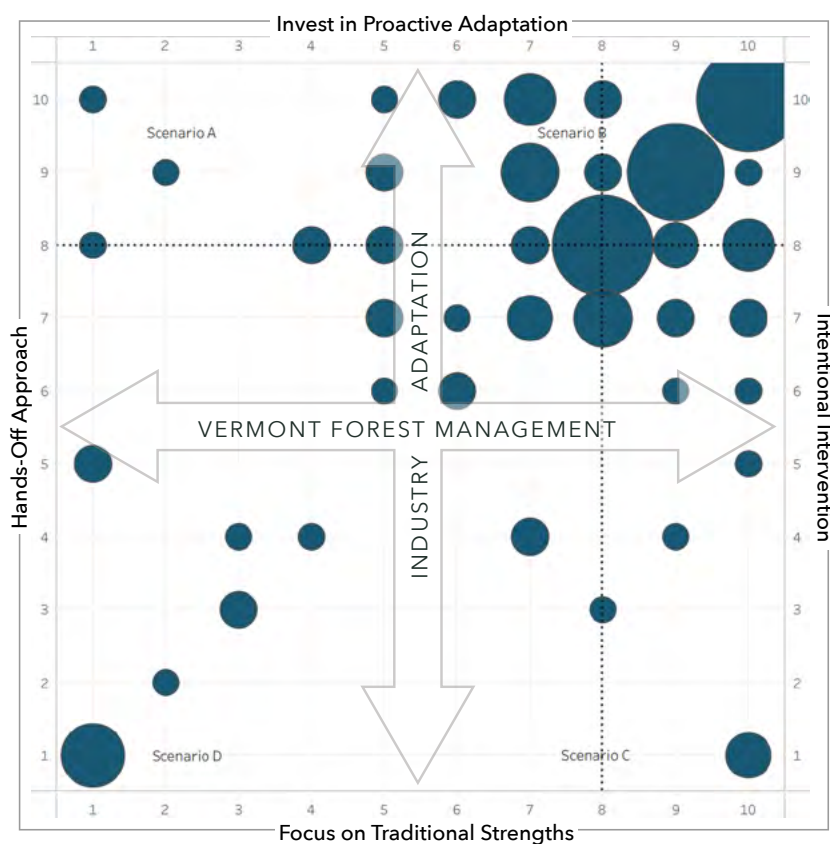
IDENTIFYING THE PREFERRED FUTURE

The initial engagement phases in the Strategic Roadmap development included a scenario-based planning process. This featured a Think-Tank workshop that enabled stakeholders to create a series of plausible future scenarios, and then explore their views on the least desired, expected, and preferred futures for Vermont’s forest economy in 10 years. The data showed that Scenario B was the preferred future. This scenario forecasts a future in which intentional forest management is coupled with proactive industry adaptation – helping to drive innovation and vibrancy in the forest economy. The validity of Scenario B as the preferred future was tested in Stakeholder Survey #2 and in the 15 subsequent community and industry events that followed the Think-Tank. The high level of engagement and alignment around the preferred future provides confidence that it reflects broad stakeholder desires.

PREFERRED FUTURE

PREFERRED SCENARIO SNAPSHOT – FUTURE IMPLICATIONS

- Public and private capital is investing in innovation, technology, and marketing.
- Forest health and management will increase as more policy interventions are made to keep “forests as forests,” maintain working forests, and mitigate threats to forest health.
- Demand for skilled workforce increases as forest management and production become more technologically advanced.
- The industry changes rapidly, with a greater focus on regional supply chains, innovation networks, and new products.



DataInsight

- The stakeholder data shows a strong desire for the preferred future in the upper right quadrant of the scenario matrix. This future combines strong investment in proactive adaptation and intentional intervention at both the investment and policy levels.
- There are some outliers in this cluster, including several responses in the lower left quadrant. However, the “point of consensus” lies squarely in the Scenario B space, and there is a relatively tight concentration of responses. The three largest response locations are in the center and far upper right of the Scenario B space, reflecting a significant appetite for change.

STRATEGIC ROADMAP FRAMEWORK - SUMMARY LIST

**PILLAR 1:
FOREST
MANAGEMENT
AND
LAND USE**

OBJECTIVE: Sustaining a diverse forest economy and contributing to climate change mitigation by supporting the health, resilience, and productivity of Vermont’s forestlands through stewardship and management.

STRATEGY: Manage for increased forest health.

STRATEGY: Promote land use policies to maintain working forestlands.

STRATEGY: Empower landowners to maintain working forests by reducing barriers and creating incentives.



**PILLAR 2:
BUSINESS
ENVIRONMENT
AND
CONDITIONS**

OBJECTIVE: Creating a business environment and workforce that supports the competitiveness of the Vermont forest products sector.

STRATEGY: Enhance capacity for industry adaptation.

STRATEGY: Build strong connections to the next generation workforce.

STRATEGY: Create a “problem-busting” approach focused on the forest economy.



**PILLAR 3:
RESEARCH,
INNOVATION,
AND
TECHNOLOGY**

OBJECTIVE: Promoting innovation and adaptability in the Vermont forest products sector by supporting technological development, cross-sector collaboration, and processing capability for both new and existing forest products.

STRATEGY: Pursue new development opportunities for Vermont forest products.

STRATEGY: Accelerate the adoption of technical innovation.



**PILLAR 4:
INDUSTRY
REPUTATION
AND MARKET
PROFILE**

OBJECTIVE: Strengthening positive market and consumer perceptions by communicating the importance of working forests and promoting the benefits and contributions of Vermont’s forest products and forest economy.

STRATEGY: Strengthen and maintain the social license of the forest products sector.

STRATEGY: Encourage the demand, use and appreciation for Vermont forest products.

**PILLAR 5:
FOREST
ECONOMY AND
VERMONT
COMMUNITIES**

OBJECTIVE: Protecting and enriching the positive impact of the forest economy on the communities embedded in the Vermont forest landscape.

STRATEGY: Build stronger linkages between forest users and the forest products sector.

STRATEGY: Imagining the forest community of tomorrow.



PILLAR 1: FOREST MANAGEMENT AND LAND USE

- Action 1: Provide robust data on forest health trends.
- Action 2: Build a community of practice.
- Action 3: Demonstrate best practices for increasing forest health.
- Action 4: Promote working forests in land use planning.
- Action 5: Support resilience and biodiversity planning
- Action 6: Support Vermont’s Use Value Appraisal program.
- Action 7: Boost capacity to assist landowners.
- Action 8: Provide incentives to landowners for forest management.



PILLAR 2: BUSINESS ENVIRONMENT AND CONDITIONS

- Action 9: Adopt climate resilience strategies.
- Action 10: Strengthen industry service providers.
- Action 11: Build greater situational awareness.
- Action 12: Boost the next generation of forest workers.
- Action 13: Create a governmental interagency taskforce focused on solutions.



PILLAR 3: RESEARCH, INNOVATION, AND TECHNOLOGY

- Action 14: Anticipate and respond to new consumer demands.
- Action 15: Recognize new economic development opportunities.
- Action 16: Leverage the success of the maple industry.
- Action 17: Build financial tools to help drive innovation.
- Action 18: Invest in accelerating innovation.

PILLAR 4: INDUSTRY REPUTATION AND MARKET PROFILE

- Action 19: Promote the forest industry’s critical role as an ecosystem manager.
- Action 20: Educate land users and landowners about working forest landscapes.
- Action 21: Highlight professionalism of the forest industry.
- Action 22: Elevate the importance of modern and efficient wood energy.
- Action 23: Leverage national wood promotional programs.
- Action 24: Encourage the use of Vermont woods in specialty products.
- Action 25: Stimulate local demand for use of wood in construction and building.



PILLAR 5: FOREST ECONOMY AND VERMONT COMMUNITIES

- Action 26: Connect recreational and other forest users with the forest products sector.
- Action 27: Demonstrate working forest landscapes and the forest economy.
- Action 28: Empower Vermont communities to view local forests as an integral part of their future.
- Action 29: Engage indigenous groups, including Vermont Recognized Tribes, to expand the range of communities involved in forest management approaches.
- Action 30: Promote the economic contribution of the forest economy to Vermont communities.



VERMONT FOREST FUTURE STRATEGIC ROADMAP

FINAL REPORT

STRATEGIES AND ACTIONS

JANUARY 2024

