

**STATE INITIATIVES TO SUPPORT FOREST PRODUCT
MANUFACTURING**
MAINE FUTURE FOREST ECONOMY PROJECT



**CURRENT CONDITIONS AND FACTORS INFLUENCING THE
FUTURE OF MAINE'S FOREST PRODUCTS INDUSTRY**

MARCH 2005

PREPARED FOR:

**DEPARTMENT OF CONSERVATION – MAINE FOREST SERVICE
AND
MAINE TECHNOLOGY INSTITUTE**



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This material was prepared with financial support from the Department of Conservation – Maine Forest Service and the Maine Technology Institute. However, any opinions, findings, conclusions, or recommendations expressed are those of Innovative Natural Resource Solutions LLC unless otherwise noted, do not necessarily reflect the views of the Maine Department of Conservation, the Maine Forest Service, the Maine Technology Institute, or the project’s Advisory Committee, and do not constitute an endorsement of products or services mentioned.

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Printed Under Appropriation 013-04A-5180-512-4099 FFE3

Developed Under a Cooperative Forestry Assistance Grant CFDA 10.664

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**STATE INITIATIVES TO SUPPORT AND GROW
FOREST PRODUCTS MANUFACTURING**



State Initiatives to Support and Grow the Forest Industry

Overview

Activities to support and grow the forest industry nationwide – from both a public policy perspective and an industry action perspective – can be characterized in two ways. First, there are traditional economic development strategies aimed at marketing, training, and various approaches aimed at stimulating investment in all levels of the industry. Second, there are emerging efforts such as “cluster-based” approaches to economic development and efforts to explore and support new markets such as certified forest products, renewable energy, and to exploit technologies such as the Internet to create more efficiency in markets.

Traditional Industry Support

Several states are attempting to highlight the importance of the forest products industry to their local, state and regional economies. For example, the North Carolina Forestry Association produced a report, *The State of Our Forest Products Industry*²⁰⁹, in October 2003 that provided an assessment of the industry with many recommendations on how to strengthen and grow it. Unfortunately, few of the recommendations have been implemented due to be a combination of existing negative perception of the industry as well as logistical challenges with the state’s legislative calendar.²¹⁰

The South Carolina Forestry Association is pursuing a similar strategy of collaboration and meetings. Michael Porter, an expert in competitive strategy at Harvard Business School authored a study, the *South Carolina Competitiveness Initiative*²¹¹, last year that characterized the forest products industry as a low growth industry but one of several potential bases for developing strong clusters.²¹² The Association sees opportunities in developing the cluster concept used in the report.

Other efforts attempt to quantify the economic impact of the industry. The state of Minnesota conducted a study to show the multiplier effect of the forest industry on the basis of impact per dollar of timber sold. This work was funded by the U.S. Forest Service and contracted to the state Department of Employment and Economic Development.²¹³ The study is being used to highlight the economic impact of the industry among a diverse group of stakeholders including legislators, county land commissioners, and communities.²¹⁴ A similar study has been completed for Indiana.²¹⁵

²⁰⁹ http://www.ncforestry.org/15593_NCF.pdf (Last accessed: 9/10/2004)

²¹⁰ Personal communication, Bob Slocum, North Carolina Forestry Association.

²¹¹ <http://www.centralmidlands.org/pdf/monitor.pdf> (Last accessed: 9/9/2004)

²¹² Personal communication, Guy Sabin, South Carolina Forestry Association.

²¹³ Personal communication, Stephen Bratkovich, Forest Products Specialist with USDA Forest Service, S&PF.

²¹⁴ Personal communication, Keith Jacobson, Division of Forestry, MN Dept. of Natural Resources.

²¹⁵ The *Northeast State Foresters Association* completes similar analysis for the states of Maine, New Hampshire, Vermont and New York.



Industry promotion efforts tend to be led by public agencies with an interest in expanding either wood utilization in the state (e.g., state departments of natural resources) or employment and tax base (e.g., state departments of commerce). Successful industry promotion efforts are the result of long-term cooperative efforts between mid-level staff in their respective state agencies, whether or not originated at higher levels in their organizations or by the governor. Although initiatives at higher levels were sometimes helpful in instigating such cooperation, it does not appear to be either a necessary or sufficient condition for success.

The major issues in industry promotion are “business climate” topics such as tax rates, employment laws, energy costs, transportation infrastructure, and especially environmental regulation, all of which affect a wide variety of business sectors. Wood availability is also an important factor, but not as great as might be expected since new, low-cost producers can often displace older, higher-cost producers in competing for a wood resource. Environmental regulation can be highly variable between states and can be dealt with on a sector-by-sector basis through a combination of technical assistance and simplification of permitting procedures without relaxing and potentially improving actual environmental performance.

Direct sales, through activities such as promotional efforts at trade shows, can have a significant effect on promoting timber product exports from a state, especially of higher quality, specialized, non-commodity items. After improving business climate, such efforts are also very effective in drawing new industry into a state, especially if all relevant state departments or functions (addressing wood resources and business climate) are present offering information and visibly cooperating with one another.

Several states offer services through utilization and marketing (U&M) specialists. These individuals provide a variety of services that are most popular when they focus on activities such as technical assistance to existing industry to improve processes that lower costs, improve volume and grade recovery, add secondary processing, or improve business methods to increase profits and market share relative to competitors in other states. Typically, these efforts are most meaningful to the smaller-scale sawmilling sector than to the larger scale and more integrated pulp and paper sector, where firms conduct their own research.



Case Study – Great Lakes Wood Manufacturing Partnership²¹⁶

Located at the University of Minnesota – Duluth, the *Great Lakes Wood Manufacturing Partnership* (GLWMP) is designed to enhance the competitiveness of the wood products industry in the Western Great Lakes region of Minnesota, Michigan and Wisconsin by completing company-specific projects. They accomplish this through the implementation of “Lean Manufacturing” principals and product development for wood-using companies.

With the majority of its current funding from the National Science Foundation, the GLWMP works with individual companies to implement continuous improvement strategies to the wood manufacturing process. They implement a process known as “Lean Manufacturing”, which focuses on:

- Systematic removal of waste;
- Reducing costs and shortening cycle time between customer order and ship date;
- Creating a culture in which everyone is continually improving process and production.

In an example provided for one company who used the services of the GLWMP, reported results included:

- Process lead time decreased by 66%;
- Floor space used decreased by 42,000 square feet;
- Productivity increased by 240%;
- On-time shipping improved from 95.2% to 99.3%;
- A significant increase in product offering; and
- In-sourcing of previously purchased items.

The GLWMP reports a number of similar successes, and anticipates a growing regional role. Going forward, the organization’s focus will be on developing public-private partnerships that support wood-using manufacturers:

- Cooperatively providing assistance to companies in adoption of best manufacturing practices, introduction of new technology and development of new products;
- Promoting innovation by training wood specialists in lean manufacturing and group facilitation;
- Creating a model for future ties between state agencies, economic development organizations and private wood products businesses.

²¹⁶ Brashaw, Brian K. “Enhancing Competitiveness Through Lean Implementation: The Great Lakes Manufacturing Partnership.” *Manufacturing Competitiveness of the Forest Products Industry: Competing in Today’s Global Manufacturing and Consumer Marketplace*. New Orleans, LA. November 4, 2004.



The success of these “traditional” U&M efforts is tied closely to federal assistance in identifying issues, spearheading initiatives, establishing technical assistance templates, holding regional workshops, and training and securing federal funding for state-level staff. These federal initiatives are usually tied to strategic resource utilization and protection issues. The last such major effort was the 1970s Sawmill Improvement Program which focused on milling and drying technical assistance. Budget cuts ended this program in the 1980s and U&M programs have struggled ever since. The current fire-driven recognition of a forest health crisis has led to the promotion of another new initiative to improve utilization of small-diameter ladder-fuel species in primarily western forests. Although not yet funded, such efforts typically extend to programs in all 50 states.

Another common function of the state U&M staff is to conduct resource analyses from published data to help identify hypothetically available underutilized timber resources. The development and dissemination of such material may help to get the attention of some companies who are looking to locate processing facilities but since data is publicly available and undoubtedly used by more specialized and experienced private-sector analysts, it is unlikely to be persuasive or essential in industry promotion efforts. These analyses can, however, help align public agencies with the needs of companies looking to site new plants and can help in public discussions of issues surrounding the potential resource impact of a new plant under consideration.



*Case Study – Wisconsin Trade Mission to China*²¹⁷

In March of 2004, four Wisconsin forest product manufacturers and a Wisconsin Forest Products Marketing & Utilization Specialist spent three weeks in China as part of a Governor's Trade Mission. The focus of the trip was developing contacts in the Chinese furniture and wood manufacturing industry, and developing an understanding of how the Chinese market operates. The four manufacturers who participated in the trade mission included two hardwood lumber mills, a window manufacturer and a door manufacturer.

This trip, coordinated through the Wisconsin Department of Commerce and the state's trade office in China, provided participants an opportunity to get a better understanding of the Chinese marketplace and how forest product manufacturers can access it.

The participants visited four regions of China, including the Guangdong Province (North of Hong Kong), where over half of Chinese furniture exported to the United States is manufactured. For forest product manufacturers, trips to production regions were of value; trips to the capital Beijing were not.

Participants learned that Chinese lumber manufacturers do not have an understanding of U.S. hardwood lumber grades, and this proved problematic to making business deals. Reportedly, the Chinese did not have a consistent standard that U.S. manufacturers could adapt to. Recognizing the need for a common understanding of grades in order to work together, these manufacturers -- in cooperation with the Lakes States Lumber Association -- are considering an invitation to have a booth and host grade workshops at a Chinese furniture association meeting in 2005.

Observations from the organizer of this trade mission include:

- Companies who participated in this mission received valuable lessons in the complexities and opportunities of doing business in China;
- During the three week visit, the participants received no requests for certified product;
- By participating in an organized trade mission, companies had access to a wide variety of firms and services that would be difficult to organize on an individual firm level;
- None of the firms who attended bought or sold product during the trip, but all did establish contacts and an understanding of the Chinese marketplace that they found valuable.

In order to organize the trade mission, Wisconsin provided \$20,000. Companies paid to participate, and all expenses for a company totaled between \$6,000 and \$8,000 for travel, lodging, meals, fees to Wisconsin, interpreters, and other expenses.

²¹⁷ Personal Communication with Terry Mace, Wisconsin Department of Natural Resources, October 5, 2004.



Emerging Industry Support

An emerging strategy is the implementation of a “cluster-based” approach to economic development. This strategy is being pursued in Wisconsin, coordinated by the state Department of Commerce, and targets and supports industries that create quality, high paying jobs in Wisconsin. Industry clusters, according to a Wisconsin report, are “geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field,” such as the paper industry.²¹⁸ Although this initiative is still young, it has taken demonstrated steps to identify mechanisms to maintain and enhance the economic health of the paper industry in Wisconsin. Participants in the paper industry economic cluster initiative identified seven general areas of importance: government, public relations, partnerships, infrastructure, research and development, economics, and education.²¹⁹ The Wisconsin Paper Council is developing specific recommendations for these seven areas. In addition to these general areas, three priority issues were identified, including reforming the tax structure, streamlining the environmental regulatory system and creating a low-cost, reliable energy system. It is too early to determine the impact of this approach.

One area in which Maine is a leader is in the promotion of forest certification to both assure citizens of the quality of forest management and to satisfy the growing demands of timber product buyers. In fact, it is already well known that some paper purchases have been reallocated from the Lake States to Maine because of certification promotion and higher certified content in the state. For example, in 2002 Time Inc. purchased 90,000 tons (12 percent) of its 600,000 tons of paper from Maine. In 2003, Time sourced 100,000 tons (16 percent) of its paper from Maine. In a presentation to a Natural Resource Industry gathering in Maine, David Refkin, President of TI Paperco, Inc. stated that as a major buyer of paper, his company has a responsibility to incorporate environmentalism and promote continual improvement within its purchasing strategy.²²⁰

The State of Washington demonstrates some of the most coordinated activities in support of the forest products industry. The state’s Department of Natural Resources (DNR) is in a unique position, with a large amount of forestland held in public trust and managed to provide an economic return that supports the state’s educational and other institutions. DNR is constitutionally mandated to manage its trust lands not only for short-term returns but also for long-term inter-generational equity. DNR views part of its role as helping to provide a stable source of raw materials within the state.

In addition to this very direct role in industry support, the DNR also works cooperatively with the industry, the University of Washington (UW), and Washington State University

²¹⁸ *Paper industry economic cluster initiative, Part I: The State of Wisconsin’s Paper Industry*. February 2003, Prepared by the Wisconsin Paper Council.

²¹⁹ *Paper industry economic cluster initiative, Part II: The State of Wisconsin’s Paper Industry, Recommendations for Action*. June 2003, Prepared by the Wisconsin Paper Council.

²²⁰ Refkin, David. November 17, 2003. Presentation: TimeInc-towards a greener forest products industry. http://www.maine.gov/governor/baldacci/news/events/refkin_files/TextOnly/index.html (Last accessed: 9/10/2004)



(WSU) to explore existing and potential markets and works to ensure that the resource supply matches market opportunities. For example, DNR, in cooperation with UW and WSU, are in the final stages of a marketing study exploring the connections between primary and secondary markets. In particular, the study is looking at how DNR wood fits into the secondary and value-added marketplace. There are a variety of reasons for the health of the forest products industry but it is evident that Washington appears to provide a good climate for the industry. Several new mills recently opened in the Puget Sound region; DNR believes this can be explained partially by the fact that the industry can depend on a stable resource supply (as well as low energy costs). Finally, DNR is exploring sustainability programs, including the potential for third-party forest certification in the state. The state is exploring both Forest Stewardship Council and Sustainability Forestry Initiative programs.²²¹ This interest indicates that Maine could be on the leading edge of sustainability issues with its commitment to forest certification, an observation reinforced by a recent action by the Michigan legislature, which is also encouraging certification as a tool to enhance the forest products industry. In 2004, the state legislature passed Public Act 124 establishing a forest development fund, one use of which can be “To obtain and maintain certification of sustainable forestry standards in the state forest...”²²²

Some innovation is occurring in the renewable energy sector, especially in New York State, where Governor Pataki outlined a general goal “to make New York's bio-fuels industry one of the strongest in the nation.”²²³ Part of this goal expands the core mission of the Center of Excellence in Environmental Systems in Syracuse to include research and development in renewable and clean energy sources. In addition, the Center is encouraged to develop more partnerships with the New York State Research and Development Authority, the SUNY College of Environmental Science and Forestry (ESF), and Cornell University. ESF and the SUNY Center for Sustainable and Renewable Energy in Syracuse act as a clearinghouse for research and development in various types of renewable energy, including biofuels. Researchers at these institutions also are working on the biology and engineering aspects of biofuels.²²⁴

One example of biomass fuel development in New York is the Laidlaw Energy Group, which was awarded a \$1 million state grant to convert a plant from natural gas to wood. This award is apparently a result of Governor Pataki’s goal of developing a renewable portfolio standard of 25 percent on in-state power generation. Laidlaw is working with Cousineau Forest Products to bring wood pallets to the power site, where they will be processed into clean wood fuel.²²⁵

²²¹ All information on WA based on personal communication with John Tweedale, Natural Resources Assistant Division Manager, WA State, Dept. of Natural Resources.

²²² NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 324.50507 (4) (c), Public Act 124, May 28, 2004. Popular Name: Act 451.

²²³ Governor George Pataki, State of the State, January 7, 2004.

²²⁴ Murphy, Cornelius B. Jr. New York can be a leader into sustainable future. *The Post-Standard (Syracuse)*, 5/23/2004.

²²⁵ Cropp, Ian. Laidlaw power plant to burn wood instead of natural gas/Ellicottville facility received \$1 million state grant. *Buffalo News (New York)*, 8/4/2004.



Another biomass project, outside of New York, involved the Central Minnesota Ethanol Cooperative in Little Falls, Minnesota. In this case, a federal grant of \$2 million is helping the facility convert from natural gas to wood chips as a source of fuel. Minnesota Project Innovation (MPI), a service helping Minnesota companies compete for research grants from federal agencies, assisted the company in winning the \$2 million grant from the U.S. Department of Energy and Department of Agriculture. MPI has since become a fee-for-service operation due to state budget cuts.²²⁶ As of September 2004, the project is not on line. In addition to the grant, USDA-backed loans will be used to finance the project, which is still going through pollution control review. The facility should be operating by the end of the year.²²⁷

The information technology sector could be an area of innovation for the forest products industry. In particular, use of information technology that goes beyond simple online directories and that connects buyers and sellers is seen as an underutilized growth area by observers.

²²⁶ Homemade energy; as pollution-control equipment became mandatory and the cost of natural gas skyrocketed, an unlikely pair set out to find a solution – cheap energy from biomass. *Star Tribune (Minneapolis, MN)*, 10/17/2003.

²²⁷ Personal communication, Kent Holzer, Operations Manager, Central MN Ethanol Co-op.



Case Study – Web-Based Forest Industries Communities²²⁸

A number of states are taking steps to develop on-line “communities” that allow interaction between users to promote state forest industries and promote business. These websites are designed to go beyond traditional directories and allow for an ever-increasing amount of information and interaction between users.

In Louisiana, the *Louisiana Forest Products Community* (www.laforestproducts.org) describes itself as an “innovative website that facilitates and promotes sustainable forest-sector economic development in the State of Louisiana.” This is accomplished through a searchable database that allows purchasers to identify Louisiana manufacturers that meet their unique purchase needs. It is the intent of the organizers of this website to allow small, rural forest product manufacturers to have the same exposure and market opportunities as large companies.

In Oregon, a new website is under development with an objective “to facilitate connections between ‘links in the forest industry value chain’ – forest landowners, primary sawmills, secondary manufacturers and service providers.” This effort is being undertaken to address a number of identified needs in Oregon’s forest products industry, including:

- Lack of information on infrastructure in place for underutilized species;
- Recent changes in the primary processing infrastructure; and
- Lack of information to foster product and market development.

As these websites develop, they will provide an opportunity to learn about how web-based communities can best serve the needs of forest industries.

Outlook

A variety of efforts exist across the country to support and grow the forest industry. These range from traditional economic development strategies that focus on discrete sectors and businesses to new efforts such as cluster-based economic development that build on the synergies that exist with geographic concentrations of interconnected companies. Emerging efforts such as forest certification, renewable energy development, and information technology innovation offer new opportunities, some of which – such as certification – Maine is already exploring and in which it can be characterized as a national leader.

²²⁸ Vlosky, Richard. “State Level Forest Sector Web-Based Communities: Developing a Competitive Edge.” *Manufacturing Competitiveness of the Forest Products Industry: Competing in Today’s Global Manufacturing and Consumer Marketplace*. New Orleans, LA. November 5, 2004.

