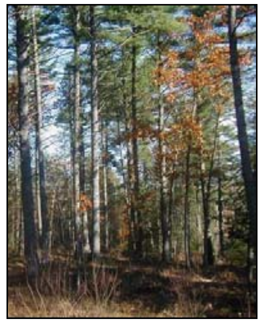
SURVEY OF MAINE FOREST PRODUCT MANUFACTURERS

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

INNOVATIVE NATURAL RESOURCE SOLUTIONS LLC
107 ELM STREET, SUITE 100-E
PORTLAND, ME 04101
WWW.INRSLLC.COM

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.

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

Developed Under a Cooperative Forestry Assistance Grant CFDA 10.664

SURVEY OF MAINE FOREST PRODUCT MANUFACTURERS

Survey of Maine Forest Product Manufacturers

Description of Survey

In order to solicit information and input from broad range of Maine forest industries, Innovative Natural Resource Solutions LLC (INRS) conducted a survey of Maine forest industries. A copy of the survey (including a signed cover letter, self-addressed stamped envelope, and a response card) was sent to 110 forest products companies in April 2004. The list included pulp mills, sawmills, secondary wood product companies and wood energy facilities, and was provided by the Maine Forest Service for purposes of this survey. INRS recognizes that the list used is not a complete inventory of each and every forest industry company in the state of Maine, but believes that the list represents a fair sampling of the range of Maine forest industries. A second survey (the same survey instrument including a signed cover letter, self-addressed stamped envelope and response card) was mailed in May 2004 to firms that had not responded to the initial mailing.

The survey was anonymous, allowing companies to share information without concern that competitors or others would use information provided by a company. The survey itself did not ask companies to identify themselves, but a separate response card (which could be mailed apart from the survey) was enclosed. Respondents were encouraged to send in the card so that INRS could track survey participants, and a $100 gift certificate to L.L. Bean was raffled to one respondent, drawn at random.

A copy of the survey and the cover letter from the first mailing are included in Appendix C of this report.

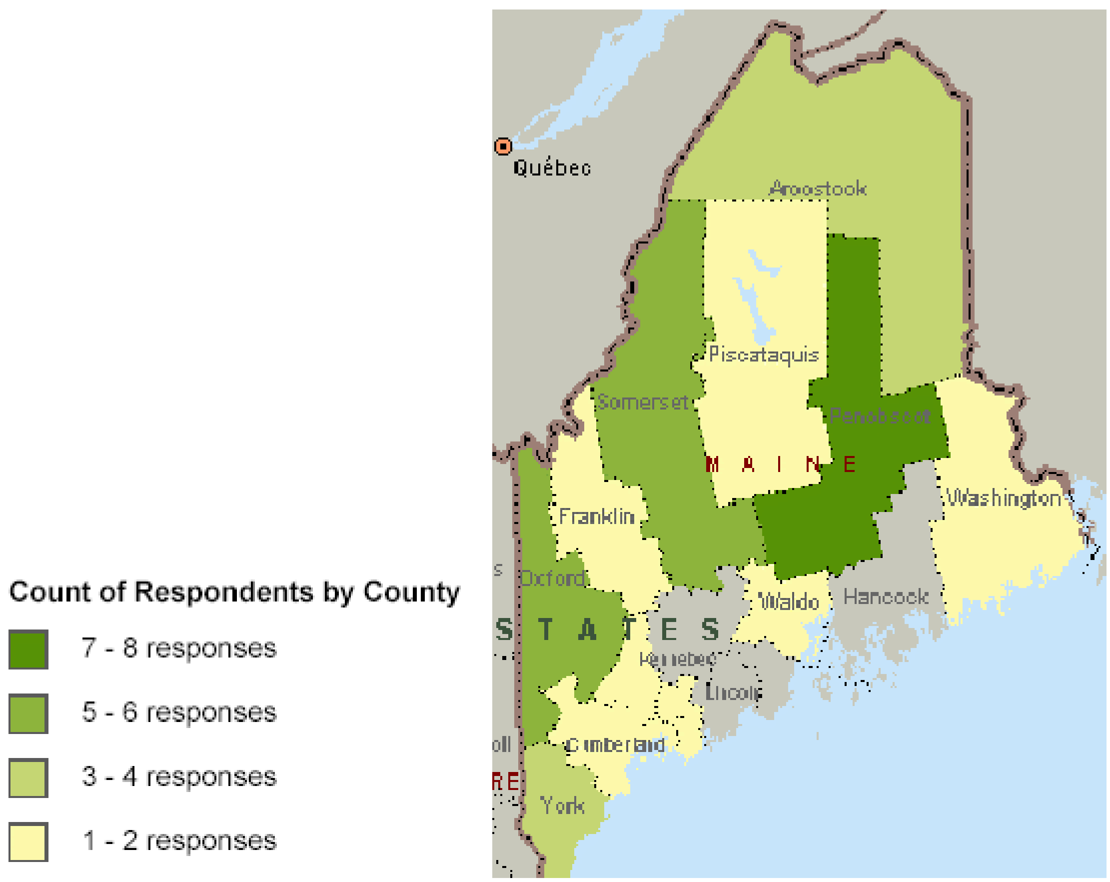
Survey Respondents

Following the two mailings, a total of 49 responses were received, for a response rate of 45%. Thirty-seven respondents sent in response cards identifying themselves (76% of all respondents), but in order to maintain confidentiality, these identifications could not be associated with a particular survey. Survey respondents included sawmills (hardwood and softwood), secondary wood product manufacturers, pulp and paper mills, wood-energy facilities, and manufacturers of engineered wood products.

Survey respondents were well-distributed throughout the state, with responses being received from the far northern and far southern portions of the state. The county with the largest number of identified responses was Penobscot, with eight.

The map below indicates the geographic distribution of known survey respondents (As noted above, INRS does not know the exact identity of 12 respondents; for this reason those respondents are not identified geographically.)

Figure 96. Geographic distribution of known survey respondents.



Survey Results

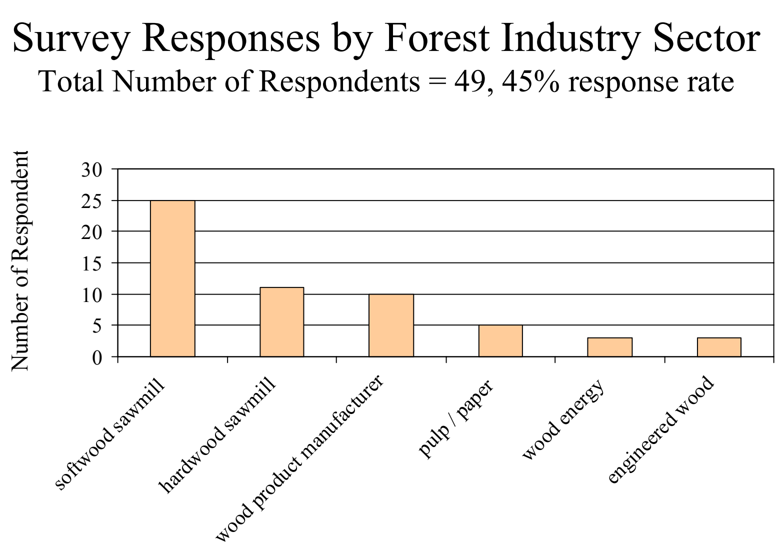
The following information describes the responses received from this survey. It should be noted that not all respondents answered every question. Additionally, three individuals who were not targets of this survey responded (i.e., a logging contractor and two landowners). As the issues these sectors face are different than the survey targets, these raw responses were not included in the data set. However, responses to open-ended questions from these surveys were included when they addressed the issues at hand.

Demographic

The 49 mills that responded employ a total of 6,680 employees. The mean number of employees per respondent is 134; the median is 36 employees (the median reflects that a few very large employers responded to the survey).

Survey responses were received from all sectors of Maine's forest industry, with the greatest number of responses (25) coming from softwood sawmills, and the smallest number of responses coming from engineered wood and wood energy facilities. This is not unexpected, as Maine has more softwood sawmills (by number) than engineered wood or wood energy facilities.

Figure 97. Survey Responses by Forest Industry Sector



Note: Some respondents are in more than one category, so columns total to more than 49

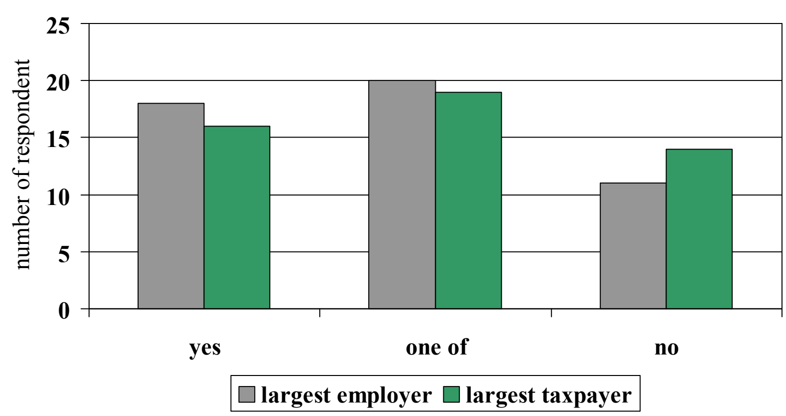
As seen below, when viewed by employees, the largest response came from the pulp and paper industry. This is expected, as these facilities tend to be very large employers.

Figure 98. Total, Average and Median Employees for Respondents by Sector

	Employees		
	Total	Average	Median
Softwood Sawmill	2,589	111	24
Hardwood Sawmill	505	46	23
Wood Products	210	35	38
Pulp & Paper	2,980	745	800
Wood Energy	32	16	16
Engineered Wood	364	121	114
All Respondents	6,680	134	36

Forest industries remain a critical part of Maine's rural economy, and many of the industries that responded to the survey are either the largest or one of the largest employers and taxpayers in their community. Of the survey respondents, 78% are either the largest or one of the largest single employers in their community, and 71% are either the largest or one of the largest single taxpayers in their host community.

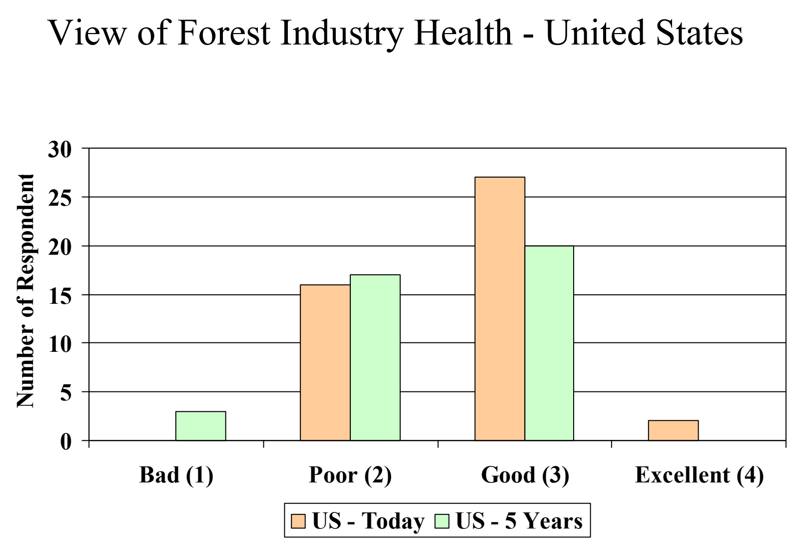
Figure 99. Forest Industries as Employers and Taxpayers in Maine Communities



Perception of industry health

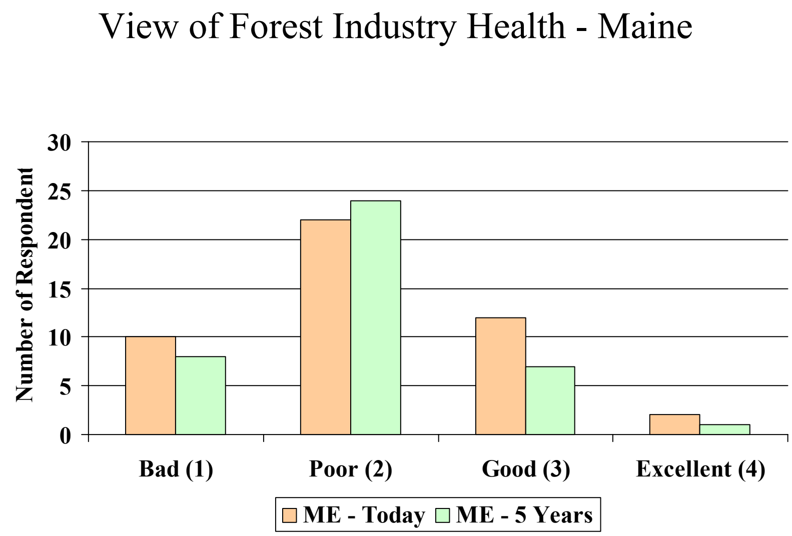
As a key component of the survey, respondents were asked about their perception of forest industry health, both today and in five years. This question was asked for the forest industry in the entire United States and in Maine specifically. The average respondent indicated that they view industry health nationwide as good (2.7), but are not optimistic that this will be the case five years from now (2.4).

Figure 100. View of Forest Industry Health in the United States



In contrast to the current view of the U.S. forest industry, the average respondent indicated that they view the current health of Maine's forest industry as poor (2.1), and on average do not see this changing in five years (2.0).

Figure 101. View of Forest Industry Health - Maine



Responses were similar when respondents were asked about their view of the health of their sector.

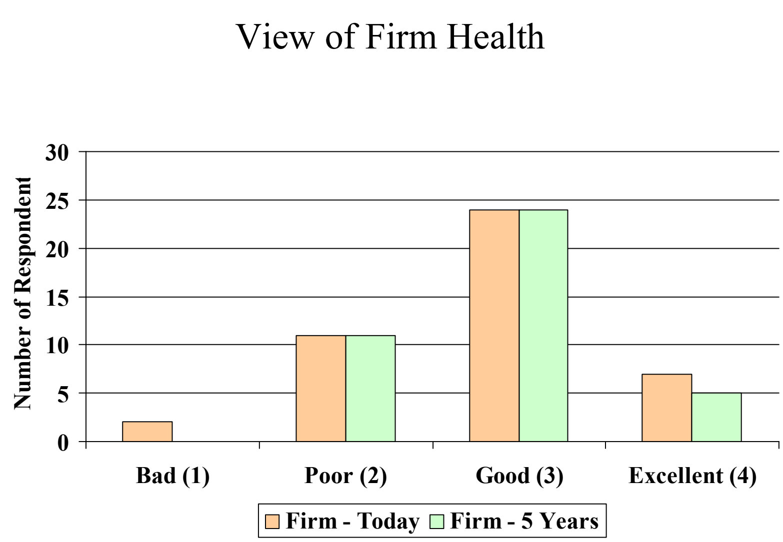
Figure 102. Respondent View of Forest Industry Health

		Number of Responses				
		Bad (1)	Poor (2)	Good (3)	Excellent (4)	Average
Today	Industry - US	0	16	27	2	2.7
	Industry - ME	10	22	12	2	2.1
	Sector - US	0	18	22	1	2.6
	Sector - ME	11	20	11	1	2.0
	Firm	2	11	24	7	2.8
5 Years	Industry - US	3	17	20	0	2.4
	Industry - ME	8	24	7	1	2.0
	Sector - US	3	15	17	1	2.4
	Sector - ME	8	22	7	0	2.0
	Firm	0	11	24	5	2.9

Interestingly, the average respondent's viewed their firm's current health as better than the national or state average (2.8), and were slightly optimistic about the future health of their firm (2.9). There are a number of possible explanations for this, including:

- The firms that responded to the survey may, on average, be in better financial health than the industry as a whole, either nationally or in Maine;
- It is possible that respondents self-selected, and those in good financial health were more likely to complete and return the survey; or
- Those that completed the survey are quite familiar with the finances and plans of their individual firm, but are not as aware of the finances and plans of others in the industry.

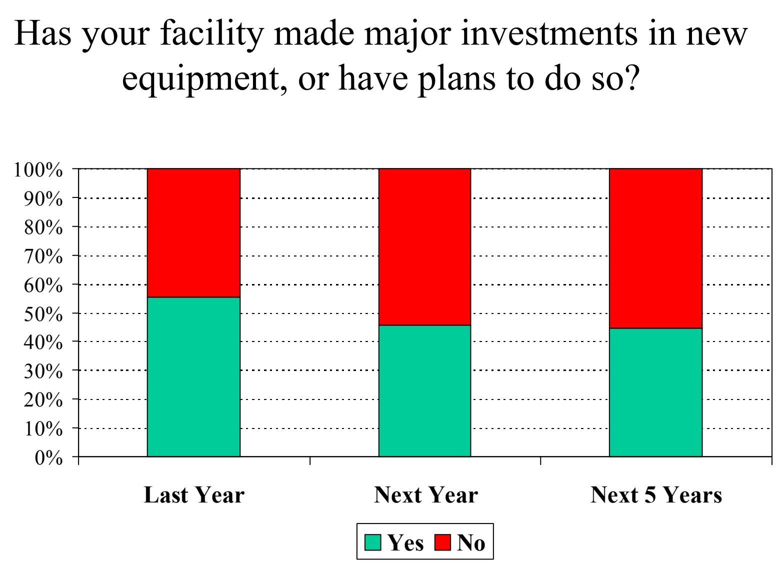
Figure 103. View of Firm Health



Investments and Investment plans

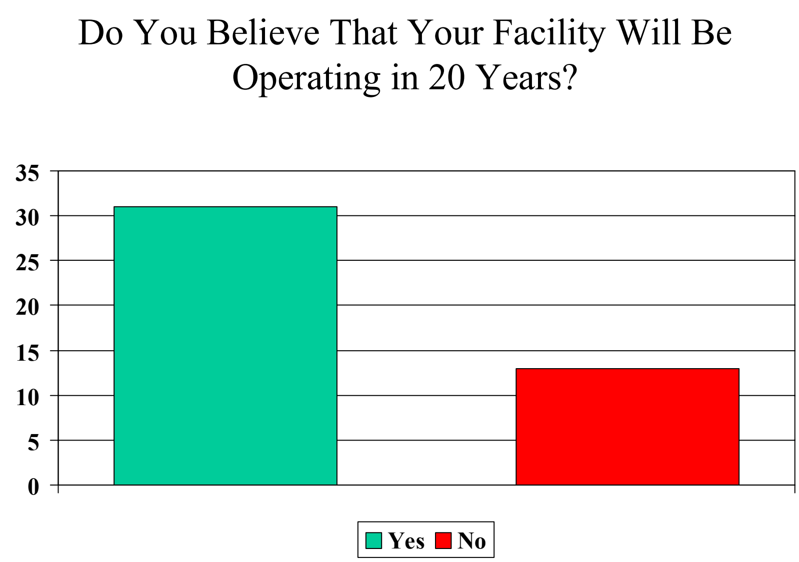
In order to survive and prosper in the increasingly competitive global marketplace, Maine firms have been investing, and continue to invest in their operations. Survey respondents were asked if they had made, and intended to make "major investments in new equipment" (the level of "major investment" was not defined). In an encouraging sign, over half of the respondents have made investments in the past year. However, <u>the number of firms that plan investments in the next year or five years is less than half, a response that should be of significant concern to the State and the industry.</u>

Figure 104. Major Investments in New Equipment



Firms were asked whether they believe that their facility would be operating in twenty years. INRS recognizes that this is a long time horizon, but this provides a good indication of the long-term outlook of a respondent. Seventy percent of the respondents believe that their facility will be operating in twenty years, a sign of confidence in continued strength of Maine's forest economy. However, thirty percent of the facilities indicated that they do not see themselves in operation in twenty years. Maine should recognize this as a warning that there are concerns about the long-term prospects of some forest companies, and should take action to make the climate one in which both the State and forest industries are responsive to changes in the marketplace.

Figure 105. Long-term Confidence in Continued Operation



Programs available to the forest industry

Maine has a number of business assistance programs available to forest industries (as well as other industries). In an effort to gauge how well forest industries know these programs, and to determine whether forest industry perceives these programs as meeting their needs, respondents were asked about their awareness of four programs, and whether they perceived these programs fit their needs:

- **FAME** – The Finance Authority of Maine. FAME is an independent state agency that (along with other responsibilities) develops and administers programs related to the financing of business in the State of Maine. FAME offers a wide range of financial products for start-ups, growing firms and established companies, and can be found at www.famemaine.com;

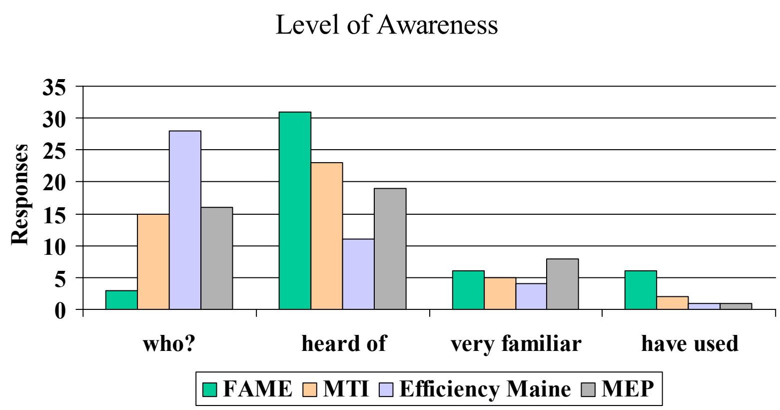
- **MTI** – The Maine Technology Institute. MTI, which provided funding for this project, is a non-profit organization created to encourage, promote, stimulate and support research and development activity leading to commercialization of new products and services in the State's technology intensive sectors. One of MTI's focus areas is the forest industry, and information can be found at www.mainetechnology.org;

- **Efficiency Maine** – Efficiency Maine is a statewide effort to: promote the more efficient use of electricity; help Maine residents and businesses reduce energy costs; and improve Maine's environment. Efficiency Maine is funded by electricity consumers and administered by the Maine Public Utilities Commission, and includes programs to help industries invest in energy efficient equipment. More information can be found at www.efficiencymaine.com;

- **Maine MEP** – The Manufacturing Extension Partnership – is a non-profit service available to every manufacturer in the state to help them compete more effectively in the global marketplace. Improved efficiency, elimination of waste, international certifications, integration into global supply chains and networking Maine businesses with the resources they need to become more profitable, and increased sales are among the benefits of working with the Maine MEP. More information on Maine MEP can be found at www.mainemep.org.

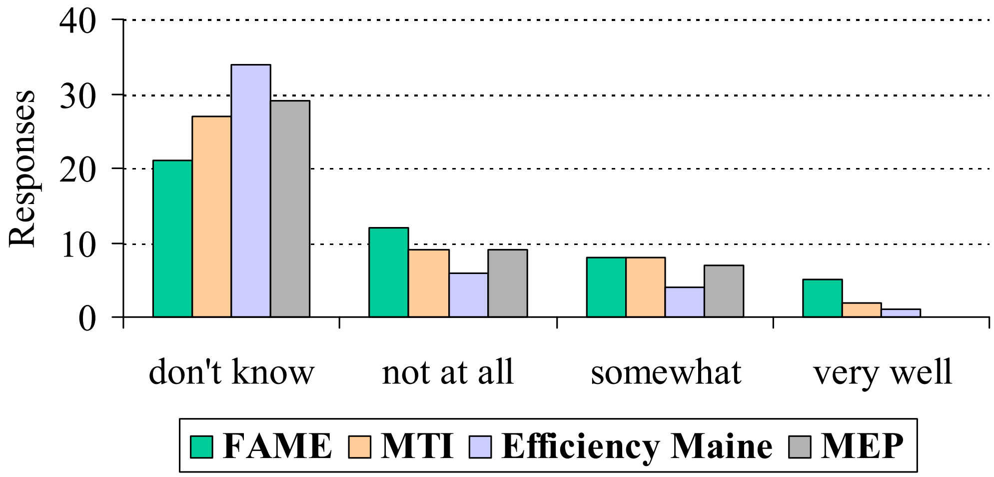
In the survey, we learned that most respondents were not familiar with these four programs, with *at least* seventy percent of respondents indicating that they did not know of, or have only heard of, these programs.

Figure 106. Industry Awareness of Business Assistance Programs & Organizations



In addition to knowing little about these four programs, companies either don't know if the programs and services offered fit their needs, or have concluded that they do not. While it may be true that some organizations or programs do not offer products that meet the needs of forest industry, it is surprising to find that, with the exception of FAME, over half of the respondents did not know whether these programs fit their needs. This clearly points to a need to connect forest industries to programs that exist. In addition to the four programs surveyed, Maine offers a number of other programs to companies; there is no reason to believe that other programs have greater awareness levels.

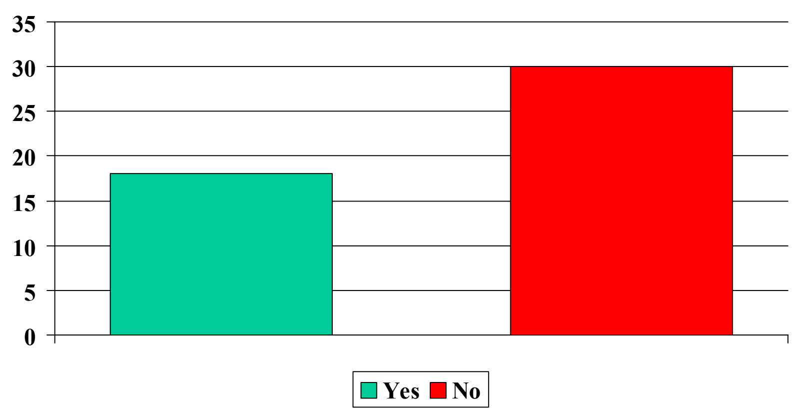
Figure 107. Industry Belief that Organizations / Programs Meet Their Needs.



Doing business in Maine

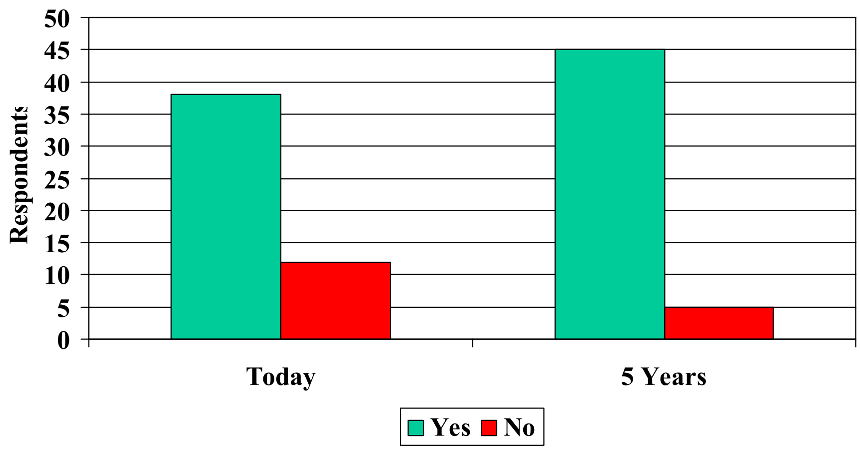
Respondents were asked whether they would consider siting a new forest industry operation in Maine, assuming necessary resource availability. Sixty-two percent indicated they would not; thirty-eight percent indicated that they would. For those that would not, they were asked where else they would look to locate a new facility. Responses included New Hampshire (13), Canada (11), Offshore (6), and the U.S. South (3). It is clear that many respondents believe that that they would be more successful in these areas than they are in Maine.

Figure 108. Number of Respondents Who Would Consider A New Facility in Maine.



Maine forest industries also report that they have trouble finding qualified workers, and expect that this issue will grow in the next five years. The average respondent indicated that the last time they hired someone was roughly four months ago; the average layoff was almost three years ago. It should be noted that firms that have closed are not part of this survey, and thus the layoff response may be misleading industry-wide. Maine forest industries estimate that the average age of their employees is 40.

Figure 109. Respondents Indicating They Have Trouble Finding Qualified Workers

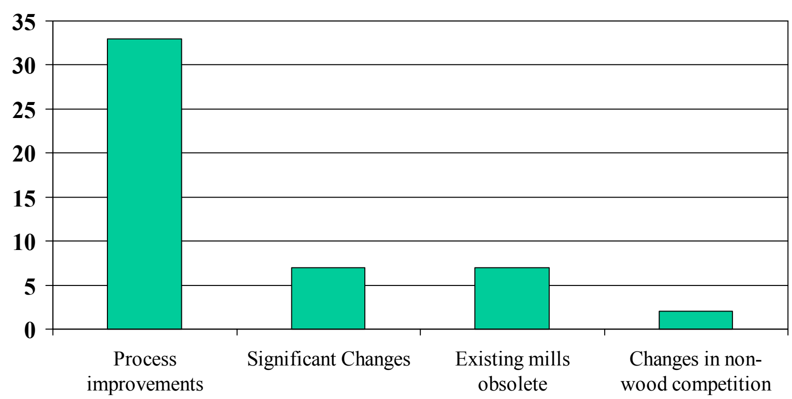


Technology Issues

The investment in and implementation of new technology has been, and will continue to be, an important part of the success of Maine's forest industry. Given the role that increased productivity and new product development may play in the future, respondents were asked several questions regarding their perspective on adopting new technology.

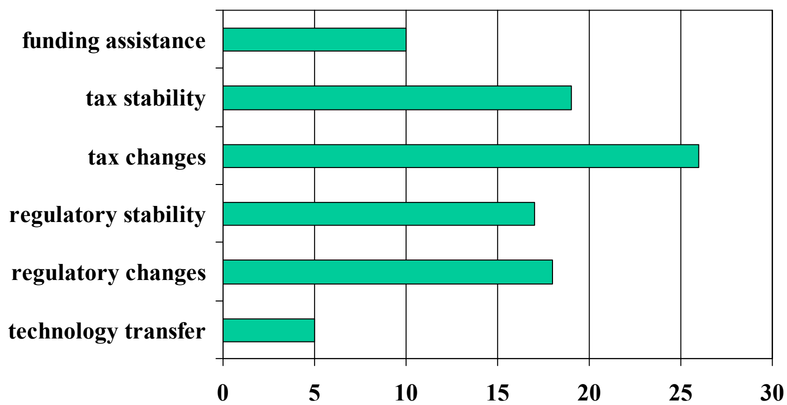
Most respondents (67%) see process improvement (e.g., technological changes that increase productivity in an incremental fashion) as the role of technology in their sector over the next decade. Some respondents (14%) see changes so significant that existing facilities will be obsolete, and a very small number (4%) believe that changes in the technology used by non-wood competitors will see significant changes, causing problems for Maine's forest industry.

Figure 110. Perspective on Technology Changes in the Next Decade



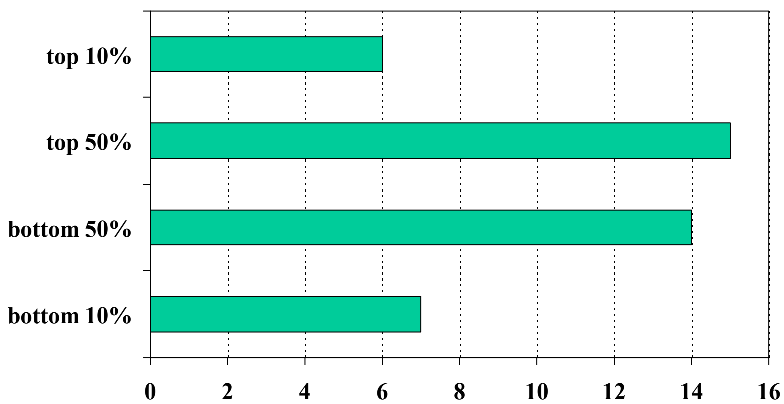
Recognizing that many Maine forest industries -- across all sectors -- will need to make continued investments in technology, respondents were asked what Maine could do to encourage investment. The largest number of respondents indicated that tax changes would encourage technology investment, with tax stability, regulatory changes and regulatory stability also frequently cited. Technology transfer (getting information to mills) was the least frequently cited thing that Maine could do to encourage investment.

Figure 111. Respondent View of How Maine Could Encourage Technology Investment



Respondents were asked where they view their facility in technology investments over the last five to ten years, when compared to global competitors. The response could be characterized as normal distribution, with most respondents saying they were in the top fifty percent (36%) or bottom fifty percent (33%) of technology investment globally. Fourteen percent of respondents see themselves in the top 10% of technology investment, and seventeen percent see themselves in the bottom 10%.

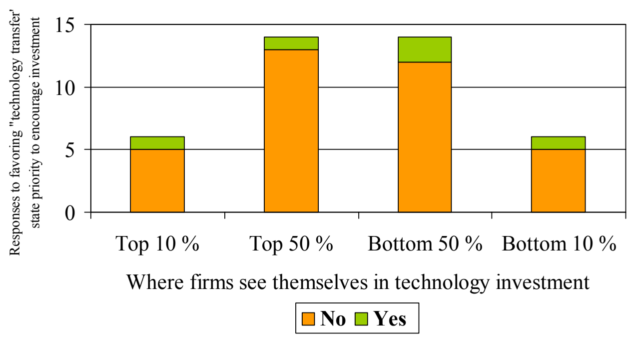
Figure 112. Respondent Perception of Firm's Technology Investment in Last 5 – 10 Years



In an effort to gauge whether past technology investment influenced a firm's valuation of technology transfer, responses were grouped to show which firms, by technology investment, value technology transfer. There does not appear to be a relationship between the two.

Figure 113. Technology Investment and Technology Transfer

A firm's perception of where it stands in new technology does not appear to influence its desire to have "technology transfer" as a priority for state efforts.



Open-Ended Questions

Firms were asked a series of open-ended questions. A complete listing of survey responses follows. *It should be noted that the opinions expressed are those of the survey respondents, and do not necessarily reflect the opinions of INRS or findings elsewhere in this report.* INRS has attempted to group and summarize responses, but readers are encouraged to read all responses in order to best understand the range of comments and suggestions received.

Respondents were asked what is the most important thing Maine could do to help the long-term competitive position of the forest industry. In a subjective grouping, the largest number of respondents (16) expressed desire to see a change in the business climate of the state. A number of respondents (7) also encouraged actions that would directly support good forestry, and five expressed a desire to see an attitude in state government that values forest industry. Other responses encouraged state government to not interact with the forest products industry, repeal recently passed regulations dealing with liquidation harvesting and collective bargaining, and encouraged change in international trade policy.

When asked what the industry could do to help its own long-term competitive position, the largest number (9) indicated that investment in new technology was critical to the industry's future competitiveness. A number of respondents encouraged the industry to encourage improved forest management (7) or work together to have an impact on political issues (7).

When asked what would encourage increased investment in their facilities, respondents overwhelmingly (15) indicated some type of change in the business or tax climate of Maine. Also important for encouraging future investment is confidence in the future supply of raw materials (5) and confidence in markets or profits (5).

When asked what would help employers find, train and keep workers, seven respondents suggested changes to the educational system, and seven suggested that if they could pay more (or offer better benefits), they would be better able to hire and retain employees. Five noted that changes to the state's social welfare system would increase the workforce, and a number noted that work in the forest industry is physically demanding, and many workers are not willing to meet these demands.

Respondents were asked who they would contact if they had a problem with Maine state government. Interestingly, the largest number of respondents (16) indicated that they would contact their local legislator, while the next largest number (6) indicated that they did not know who to call. This points to a need to make certain that legislators are aware of efforts and programs to help the Maine forest industry, and also points to a need for state agencies to better connect with the state's forest products industry.

Responses to Open-Ended Questions

The following are the questions asked and responses received to the open-ended questions asked in the survey, along with a description of the respondent.

Question 24 -- What is the most important thing Maine state government could do to help forest industries long-term competitive position? Why (please be as specific as possible).

- Stabilize the business climate (wood product manufacturer, <20 employees)
  - Insurance
  - Taxes
  - Regulations
  - Healthcare
- Stop passing forest regulations – forest practices act, liquidation harvesting, collective bargaining for independent contractors – all send messages that Maine is NOT an industry-friendly state. We have sent a negative message to employers and mills not to invest in Maine. (Pulp & paper facility, >100 employees)
  - Remove taxes on equipment
  - Lessen the impact of workers comp
- Stable tax policy that encourages investment. Regulatory environment similar to other paper producing states (i.e. less regulation) (pulp & paper facility, >100 employees)
- Stay out of it. (Wood product manufacturer, 20 - 50 employees)
- Stop logs from going to Canada. (Hardwood sawmill, 51 - 100 employees)
- Stop buying land. (Softwood sawmill, <20 employees)
- Reduce overall taxes. (Softwood sawmill, 51 - 100 employees)
  - Expand / continue incentive programs BETR, TIF, etc.
  - Faster regulatory process, permitting
  - Create pro-business attitude, climate
- The entire health of our forest products industry rests with the health and competitiveness of our paper mills. The majority are very outdated. Without solid, good paying pulp markets our landowners, cutters and truckers cannot earn a reasonable return on their investment and there will be no sawlogs for sawmills. If the paper mills continue to decline, the highest value for landowners will be to sell to out-of-state environmentalists and will take land out of forest products production. (Softwood sawmill, 20 - 50 employees)
- Some sort of limit on health care costs – out of pocket as well as hidden costs. (Softwood sawmill, <20 employees)
- Promote forest certification for medium-size landowners. Why? – Market share. Reduce the tax and regulatory burden. Reduce electrical costs.
- Give tax break to landowners growing timber for the future. (hardwood sawmill and wood product manufacturer, >100 employees)

- Have a change in attitude towards the industry. Despite all the contributions the industry makes it appears that we are often in conflict at the legislature or with the bureaucracy. (Softwood sawmill, 51 - 100 employees)
- Wood costs are too high compared to other states; lack of workers to cut the logs. (Engineered wood facility, >100 employees)
- Tax imports, and be more business friendly. (Softwood sawmill, 20 - 50 employees)
- Lower taxes, lower welfare programs so there will be incentive to work low-paying jobs, foreign trade with China's work force being cheap, less regulations. (Hardwood sawmill, <20 employees)
- No National Park. Allow foresters to manage the forest lands as they have been trained to do. Support sustainable forestry practices to ensure that the wood needs of the Forest Products Industry are available into the future. (Engineered wood facility, >100 employees)
- Resign and let some businessmen get in there and run this state like it should be. (Wood product manufacturer, 20 - 50 employees)
- Recognize the forest industry *as an industry* it (the government) wants as a part of the Maine economy. (Softwood sawmill, 20 - 50 employees)
- Listen more – dictate less. This administration has too many pre-conceived beliefs. Has too few appointed officials that know the forestry business. Stop thinking that only government has the answers.
- Don't drop BETR tax [refund]. Reduce taxation and continue to improve regulatory environment. (Softwood sawmill, >100 employees)
- Keep forestland open to harvesting without timber reducing restrictions. (Wood product manufacturer, 20 - 50 employees)
- Stay out of it – make things worse. They have no one qualified. (Hardwood sawmill, <20 employees)
- Stay out of our business affairs. It isn't possible to legislate or make a rule for every little problem out there. (Hardwood sawmill, 20 -50 employees)
- Reduce regulatory agencies from enforcement to partnership. It is painfully obvious that Maine's solution to budget deficit is in enforcement and penalties to industry.
- Support the idea of processing all available forest products (logs) in Maine. This will increase our manufacturing industry and provide jobs for Maine workers and tax dollars. (Softwood sawmill, 51-100 employees)
- My perception of the legislature is that they feel the forest products industry and manufacturing industry is not important, and grandstand about how big corporations are hurting the workers of Maine, but they are driving business out of the state through excessive taxes, regulatory constraints, etc. We are hurting employees more by forcing business out of the state. Specifically, our industry concerns are aggravated by talk of a Northern Maine National Park, excessive logging regulations, etc. I think some of the logging regulations were probably necessary, but we have forced little operations out of business. (Hardwood sawmill, 20 - 50 employees)

- Creative incentives that would help in foreign competition. (Engineered wood facility, 20 - 50 employees)
- We see little price elasticity…raw stock (turning squares) continue to go up but we can't push it through to customers. Actions that would help smaller sawmills stay in business would help overall prices and help stabilize prices. This goes to cost of doing business in the state…taxes, healthcare, workers comp, etc. (Wood product manufacturer, 20 - 50 employees)
- Most farmers have state aid when having bad years. Why can't small sawmills or businesses have help in environmental aid such as getting rid of wood waste, sawdust, and bark. (Hardwood sawmill, <20 employees)
- You can't. The Pacific Rim will do us all in. The whole country. Start cutting back on state overhead to get ready for it. (Softwood sawmill, 20 -50 employees)
- Find a way to get electrical costs and costs of doing business on par with Canada. They are experts at exploiting their resources. Hydro, forest products. (Hardwood sawmill, <20 employees)
- Allow economic forces to work. The state is putting money in old mills which will not survive, and this is putting pressure on remaining mills for the resource and putting them in jeopardy
- Reduce taxes, reduce workers compensation rates, and reduce health care costs. Cost of doing business in Maine is extremely high. Difficult to be competitive. (Softwood sawmill, >100 employees)
- The most important thing Maine state government could do to help the forest industry is to give as many advantages to small woods contractors as they can. Help them with tax benefits and help them communicate with FAME, EMDC and USDA, for all the assistance available. (Softwood sawmill, <20 employees)
- Reduce regulation (hardwood sawmill, >100 employees). Examples:
    - New liquidation harvesting regulations rather than enforcement and education of existing laws
    - Encourage renewable energy sources and give them a competitive advantage
    - Fund a marketing sector similar to Canadian Provinces
    - Stay out of labor negotiations
- They have to make it more attractive to operate within the state -- such as taxes, mandates and other issues – that drive up the cost of doing business. (Wood product manufacturer, 20 - 50 employees)
- Reduce all the cutting regulations. (Softwood sawmill, <20 employees)
- Reduce taxes, stop the exportation of logs to Quebec, and get workers compensation back under control. Why? – To lower costs. Eliminate the RESTORE issue once and for all. (Softwood sawmill, >100 employees)
- Sustainable policies, especially on forestry and the environment. Incent landowners to grow more wood to support regional industrial base. (Pulp & paper facility, >100 employees)

- Stop passing laws that restrict the ease of doing business in Maine. (Softwood sawmill, >100 employees)
- Stop clearcutting. (Wood product manufacturer, 20 - 50 employees)
- Get more actively involved in enforcing all regulations. The regulations and mandates are there, but there is very little monitoring of them to make much difference. (Pulp & paper facility, >100 employees)
- Reduce worker's comp rates. (Softwood sawmill, <20 employees)
- Relax on the environmental issues. Plus make permits easier to obtain. (Softwood sawmill, <20 employees)
- Regulatory standpoint – continually make it more difficult to operate. Government should let market conditions do its thing, instead of passing laws it has no business in (e.g. collective bargaining bill). (Pulp and paper facility, >100 employees)

Question 25 -- What is the most important thing Maine forest industry could do to help its long-term competitive position? Why (please be as specific as possible).

- Convince the general public that our industry is important and necessary. (Wood product manufacturer, <20 employees)
- Markets dictate where money is spent. We have to compete for capital against several other states – it cost considerably more to operate in Maine (pulp & paper facility, >100 employees)
- Invest in new equipment. (Pulp & paper facility, >100 employees)
- Vote the government out. (Wood product manufacturer, 20 - 50 employees)
- The legislature must stop tinkering the harvesting process and create stability in the industry. Talk of a park, land sales, taking more wood out of productions further erodes confidence and stability in this industry. (Softwood sawmill, 50 - 100 employees)
- Find ways to encourage pulp and paper company to invest in Maine. (Softwood sawmill, 20 - 50 employees)
- Better forestry (hardwood sawmill and wood product manufacturer, >100 employees)
- Organize an effective campaign to get our message to the public that the business climate is not allowing Maine companies to be competitive. Continuously reacting to mill closures (Great Northern, Lincoln Pulp & Paper) is not a viable solution. (Softwood sawmill, 50 - 100 employees)
- Bring in more Canadian loggers. The people in Maine don't want to work. (Engineered wood facility, >100 employees)
- Work to get comp down, work on state tax structure. (Softwood sawmill, 20 - 50 employees)
- Stop liquidation harvesting on private wood lots and subdivisions of large tracks of woodland. Harvest for the future. (Hardwood sawmill, <20 employees)
- Use sustainable forestry practices to promote a healthy forest. Raw material is where it stands. (Engineered wood facility, >100 employees)

- Wait for the businessmen and vote. (Wood product manufacturer, 20 - 50 employees)
- I think the industry is willing to compete, it just faces a lot of structural problems, globally, that are beyond its control.
- Identify markets it can continue to be competitive in. (Softwood sawmill, 20 - 50 employees)
- Create a friendlier government – pro-business legislature and administration must be put in place. Industry needs to get more involved in electing good candidates.
- Forest industry could invest capital to reduce operating costs and maintain competitive position if state government was more business friendly. (Softwood sawmill, >100 employees)
- Group together to form health self-insurance group. (Wood product manufacturer, 20 - 50 employees)
- Wake up and stop overseas market. (Hardwood sawmill, <20 employees)
- Invest in technology and training. (Hardwood sawmill, 20 -50 employees)
- Reduce load limits on interstate
- Work together to support Maine companies first. Reduce or completely stop exporting raw material (logs.) (Softwood sawmill, 51-100 employees)
- Continue to re-invest in our businesses to keep the best technology that produces max yield with minimum labor. You hear lots of complaints about Canadians hurting our competitive edge, but they have some of the most high-tech mills in North America. (Hardwood sawmill, 20 - 50 employees)
- We are now looking to China & Brazil as sources to help us remain competitive. Once a source is found we will no longer be able to justify operation of the [Maine] mill. (Engineered wood facility, 20 - 50 employees)
- Invest in technology to reduce costs as much as possible. (Wood product manufacturer, 20 - 50 employees)
- Keep regulations low. What good are forest cut permits and reports? Take a plane ride every month and save us the trouble. (Softwood sawmill, 20 -50 employees)
- It may be too late to do anything. (Hardwood sawmill, <20 employees)
- Practice good forest management so that more restrictive laws are not passed. (Softwood sawmill, >100 employees)
- Reduce electrical costs
    - Reduce taxes
    - Harvest the growth on public lands
    - (Engineered wood facility, >100 employees)
- Promote new industry and technology in forestry. (Softwood sawmill, <20 employees)
- Embrace technology, elect a favorable legislature, conservation easements that guarantee working forest, tax reform. (Hardwood sawmill, >100 employees)
- Work together as an industry. (Wood product manufacturer, 20 - 50 employees)
- Stay up to date technically, remain competitive. (Softwood sawmill, >100 employees)

- Provide a stable platform on policies to enable a sustainable, affordable supply of fiber for the industrial base to be able to compete on a world market. (Pulp & paper facility, >100 employees)
- Concentrate on providing a supply of skilled workers. (Softwood sawmill, >100 employees)
- Stop clearcutting. (Wood product manufacturer, 20 - 50 employees)
- Exports to Canada (timber products) – it really affects pricing of all forest products in Maine.
- Stop taxing us to death. The state does not want any industry. This is supposed to be a tourist state, I guess, because they don't want any logging done.
- We have to be careful of over-harvesting (especially white pine). Southern Maine has to manage its resource base by concentrating housing development and leaving larger stands in timber production. (Softwood sawmill, <20 employees)
- Make imports more limited – possibly a duty. (Softwood sawmill, <20 employees)
- Grow trees faster, lower energy costs, find niche markets (FSC, for example), need stability at all levels – rules keep changing. (Pulp and paper facility, >100 employees)

Question 26 -- What would make you more likely to make capital investments in your Maine facility?

- Eliminate the personal property tax on business equipment (wood product manufacturer, <20 employees)
- Stable tax policy, business oriented administration and legislature, reduced regulatory burden. (Pulp & paper facility, >100 employees)
- Less government and insurance. (Wood product manufacturer, 20 - 50 employees)
- Help with workers comp, logs going to Canada. (Hardwood sawmill, 50 - 100 employees)
- Markets staying good. (Softwood sawmill, <20 employees)
- Process equipment that reduces the physical demands of the job and the need for labor. (Softwood sawmill, 50 - 100 employees)
- We have done well here and will continue to invest here. (Softwood sawmill, 20 - 50 employees)
- Lower worker's compensation, lower electricity. (Hardwood sawmill and wood product manufacturer, >100 employees)
- Higher rate of return on product, greater confidence that a continued supply of quality raw materials are available. (Softwood sawmill, 50 - 100 employees)
- By being certain the wood supply will be there in the future at a reasonable price. (Engineered wood facility, >100 employees)
- New tax structure. (Softwood sawmill, 20 - 50 employees)
- People buying wood products instead of plastic or metal. (Hardwood sawmill, <20 employees

- Assurances that the raw material (wood) needs can be met in the future. (Engineered wood facility, >100 employees)
- A stable and predictable forest policy and regulatory process -- after all poor regulations and high taxes are removed.
- Less risk with regulatory climate , resource availability and market growth potential. (Softwood sawmill, >100 employees)
- Making a profit. (Wood product manufacturer, 20 - 50 employees)
- Ability to anticipate a return on investment. (Hardwood sawmill, 20 -50 employees)
- Streamlined permitting process
- We presently invest an average of $1 million annually. (Softwood sawmill, 51-100 employees)
- Stable, cost-effective wood supply (engineered wood facility, >100 employees)
- Confidence in the future. (Hardwood sawmill, 20 - 50 employees)
- Market growth and stability. (Engineered wood facility, 20 - 50 employees)
- Already doing it. We need a level playing field when it comes to competing with countries such as China where their economy is manipulated by currency controls. (Wood product manufacturer, 20 - 50 employees)
- Lower the cost of doing business in Maine and lower electrical costs. (Wood product manufacturer, <20 employees)
- Stability in costs – health care, etc. The BETR program continues to be under attack. (Softwood sawmill, >100 employees)
- Tax benefits and Renewable Energy Credit system similar to that of Massachusetts. (Softwood sawmill, <20 employees)
- Enhance BETR program, reduce regulation, end senseless public referendums, increased markets. (Hardwood sawmill, >100 employees)
- Stop all foreign trade in wood products.
- More profitably. (Wood product manufacturer, 20 - 50 employees)
- The thought that we might someday have a more conservative group in Augusta. (Softwood sawmill, >100 employees)
- Best business climate in the country! (Pulp & paper facility, >100 employees)
- Better business environment in the state. (Softwood sawmill, >100 employees)
- Tax incentives (wood product manufacturer, 20 - 50 employees)
- We make investments every year. The size of the investment is dictated by the strength of the timber market. (Softwood sawmill, <20 employees)
- If it were profitable and if it adds to shareholder value. (Pulp and paper facility, >100 employees)

Question 27 -- What would it take to have you make significant investments in energy conservation?

- Something that makes a diesel engine more efficient (wood product manufacturer, <20 employees)

- Not an issue – we have a huge biomass boiler that has helped dampen the effect of high energy costs. We are a net seller of electricity. (Pulp & paper facility, >100 employees)
- Already making investments in energy conservation due to high energy costs in Maine. (Pulp & paper facility, >100 employees)
- Paybacks 2.5 years or less (softwood sawmill, <20 employees)
- Effective incentives to reduce payback period. (Softwood sawmill, 50 - 100 employees)
- Demonstrated payback period of 5 years or less. (Softwood sawmill, 20 - 50 employees)
- We have already done much to conserve energy with efficient motors and lighting. (Softwood sawmill, 50 - 100 employees)
- A good return on investment. (Engineered wood facility, >100 employees)
- Less costly energy. (Softwood sawmill, 20 - 50 employees)
- They would have to be cost effective and not because the cost of energy in Maine is higher than other areas. The high cost of energy in Maine is a reason to look elsewhere to expand right now. (Engineered wood facility, >100 employees)
- Have already determined that energy conservation is second most important thing to address (after markets) (softwood sawmill, 20 - 50 employees)
- Tax incentives and more stable energy market.
- Ability to anticipate a return on investment. (Hardwood sawmill, 20 -50 employees)
- Energy credits for business and residential renewable portfolio like other New England states.
- Viable return on investment (engineered wood facility, >100 employees)
- It would have to make economic sense for us to do so. (Hardwood sawmill, 20 - 50 employees)
- Short payback and financial incentives. (Engineered wood facility, 20 - 50 employees)
- A regulatory environment that would make it easy to be more responsive to needs of industry. (Wood product manufacturer, 20 - 50 employees)
- Tax benefits and Renewable Energy Credit system similar to that of Massachusetts. (Softwood sawmill, <20 employees)
- We are currently looking into a sawdust burner to heat all our facilities, but I am not sure that financially we can afford it. (Wood product manufacturer, 20 - 50 employees)
- Tax incentives, an easier DEP to deal with, and a positive cost/benefit relationship. (Softwood sawmill, >100 employees)
- Already doing everything that technology can provide. (Pulp & paper facility, >100 employees)
- Money for initial changeover. (Softwood sawmill, <20 employees)
- As long as you have a decent payback you can fund investment. (Softwood sawmill, <20 employees)

- It is in progress as a matter of survival. It is our second highest cost (behind fiber). (Pulp and paper facility, >100 employees)

Question 28 -- What would help you find, train and keep qualified workers for your facility?

- Schools that would still encourage kids to go into the trades – they spend all their time telling kids to go into "high tech jobs" (wood product manufacturer, <20 employees)
- Vocational colleges need to embrace forestry issues. Loggers are scarce and their age is high (pulp & paper facility, >100 employees)
- Less welfare. (Wood product manufacturer, 20 - 50 employees)
- Being able to pay more and give more benefits. (Hardwood sawmill, 50 - 100 employees)
- Expansion of the governor's training initiatives to include skilled labor (engineered wood facility, >100 employees)
- Teach the 3 R's in school. (Softwood sawmill, <20 employees)
- First the state must make it attractive for business to locate or expand. This would make it attractive to the youth and stem the migration of same. Furthermore there is a significant substance abuse issue that must be dealt with. (Softwood sawmill, 50 - 100 employees)
- Revamping of the welfare / unemployment system so that qualified laborers would have to work to earn basic necessities. (Softwood sawmill, 20 - 50 employees)
- The ability to pay a higher wage. (Softwood sawmill, <20 employees)
- Manufacturing jobs are difficult to staff, as the work is often not appealing to the younger generation. Skilled workers are often lured away to better opportunities than the forest industry. (Softwood sawmill, 50 - 100 employees)
- Most qualified people are leaving this part of it for higher paying jobs. We pay well for the area; however they can go elsewhere for more money. (Engineered wood facility, >100 employees)
- Cut welfare programs for people able to work. (Hardwood sawmill, <20 employees)
- Medical insurance. (Softwood sawmill, 20 - 50 employees)
- Uncertain. If industry was more profitable, we could afford to pay more. Blueberry and fishing industries take away qualified workers. (Softwood sawmill, >100 employees)
- Ability to pay more. (Wood product manufacturer, 20 - 50 employees)
- The state to stop providing social welfare. Our newspaper advertising for workers very rarely produces any applicants. (Softwood sawmill, 51-100 employees)
- <u>Money</u>. Our biggest problem has always been our ability to pay high enough wages to keep qualified personnel. (Hardwood sawmill, 20 - 50 employees)
- Steady, long-term market commitments, competitive raw material costs (logs). (Engineered wood facility, 20 - 50 employees)

- Need to have motivated employees that have good work habits. We can train but they need to want to work. (Wood product manufacturer, 20 - 50 employees)
- Need to have a program to train millwrights (currently none are available). (Softwood sawmill, >100 employees)
- Larger labor pool, an educational system tailored to this industry. (Hardwood sawmill, >100 employees)
- Better pay and better benefits (wood product manufacturer, 20 – 50 employees)
- It's not finding workers, it's keeping them. A lot of the younger generation finds it is hard work, and most don't want to work hard. (Softwood sawmill, <20 employees)
- Do away with the welfare state. Get tough on illegal drugs. Improve the work ethic. (Softwood sawmill, >100 employees)
- Positive business climate that provides hope for the next generation to stay and work. (Pulp & paper facility, >100 employees)
- More career fairs, better system to provide access to skilled workers, incentives for these skilled workers to stay in Maine. (Softwood sawmill, >100 employees)
- We are losing Maine jobs at a fast pace. A lot of people are moving away. Need more industry. (Wood product manufacturer, 20 - 50 employees)
- Does not apply. Our facility hires only people with college degrees in paper manufacturing of some form. Technical or engineering. (Pulp & paper facility, >100 employees)
- Affordable health insurance and a higher wage rate. (Softwood sawmill, <20 employees)
- Don't have a problem here. Many parts of this business, there isn't training for. Perhaps community colleges could do better training craftsmen for the pulp & paper industry. Most of our employees learn from on-the-job training. (Pulp and paper facility, >100 employees)

Question 29 - If you had a problem with Maine state government, who would you call?

- My state representative / senator – *16 responses*
- I don't know who to call – *6 responses*
- The governor – *5 responses*
- Commissioner / Bureau Director – *5 responses*
- Maine Forest Products Council – *2 responses*
- There is no one – *1 response*
- We try all the time, and it is hard to get anything done that's of great importance – *1 response*
- Peter Lammert – *1 response*
- Our peers and associations then collectively go see the problem folks – *1 response*
- Attorney or professional in the field – then the department involved – *1 response*
- Person responsible for whatever department it falls under – *1 response*

- The first thing that comes to mind is to call our congressman, but frankly that seems [unproductive]. We also belong to some industry groups who have the ability to lobby, and we voice our opinion there. – *1 response*
- The appropriate department specific to the problem – *1 response*
- I would look at the web site first – *1 response*
- Whoever is the most supportive and backs our industry – *1 response*

Question 30 -- Is there anything else you would like to tell us?

- Maine *must* control spending on health care infrastructure. We have too many facilities and underutilized equipment (wood product manufacturer, <20 employees)
- Maine needs to (pulp & paper facility, >100 employees)
  - Lower taxes
  - Lower workers compensation
  - Lower health care
  - Stop passing laws against industry
- Thank you for your interest and time in our industry. (Softwood sawmill, 20 - 50 employees)
- Very good survey. (Hardwood sawmill and wood product manufacturer, >100 employees)
- Tree growth tax law needs to be stabilized so landowner will have confidence in it. (Softwood sawmill, 50 - 100 employees)
- We are concerned about our future due to the rising cost of wood. Something has to happen to bring the cost down or we will not be here for the next 20 years. Everything is working against us. We have the highest freight rates and energy costs in the country. (Engineered wood facility, >100 employees)
- Good luck. (Hardwood sawmill, <20 employees)
- The cost of health care is higher here in Maine than at any of our facilities in the U.S. (Engineered wood facility, >100 employees)
  - Financial incentives are out there for job creation, but nothing for job retention until a company is about to close its' doors. Then government leaders come to the rescue. In many case competitiveness is gone – it is too late.
  - Our employees are taxed too much. Income tax, sales tax, property tax, license and fees for anything and everything they do. Does anyone in government think that this might contribute to the so-called brain-drain of our youth in Maine?
- Until we know what is ours in this state and taxes and regulations become reasonable there is little future.
- Major capital expenditures had been planned for [our Northern Maine] facility for 2004 – 2007. Due to recent problems (wood costs rising, governor's support of collective bargaining, liquidation harvesting regulations, etc.) our corporation has suspended planned capital investment.
- Stop burdening us down with regulation. (Softwood sawmill, >100 employees)

- Maine isn't at all interested in company our size. (Hardwood sawmill, <20 employees)
- For all the unemployment that is advertised, we don't see it in [northern Maine town]. We have closed one shift because of lack of labor and are continually looking for trainable laborers with a good work ethic. (Softwood sawmill, 51-100 employees)
- In regard to competitive pressures, my biggest concern about foreign competition is the manufacturing base leaving the U.S. Our business caters to manufacturers, and over the last ten years we have had several large customers close their doors due to foreign competition. We make pallets, so there is little concern about them being shipped here, but if continue to lose customers our future is suspect. (Hardwood sawmill, 20 - 50 employees)
- After 24 years I have returned to my roots in [Northern Maine]. The whole area is very depressed economically with not much future ahead. I feel strongly that something viable such as laminated flooring can be a big boost to the Northern Maine area. The market is strong, the future bright and hardwood species native to Northern Maine would allow a good selection for the production line. Especially hard maple. (Engineered wood facility, 20 - 50 employees)
- I appreciate the purpose of this survey, but we are up against the WORLD. The little, environmentally concerned Maine won't impact anything by itself. Just like Iraq. People were happy when they were safe, but they didn't know all the background tactics that made it safe for them. (Softwood sawmill, 20 -50 employees)
- Maine is an extremely expensive state to do business in. There is a shortage of skilled workers, especially millwrights. There does not appear to be a firm, focused direction by the state government to improve the forest products industry in the state. (Softwood sawmill, >100 employees)
- There will not be any mills if logs are not allowed to freely flow to appropriate markets. (Hardwood sawmill, >100 employees)
- Our future is predicated on our ability to attract capital, which is highly leveraged by the opportunity for capital to generate return. The greater the risk the greater the cost of capital. Maine's business climate is not seen as very friendly in the investment community. (Pulp & paper facility, >100 employees)
- Stop clearcutting and trucking wood to Canada. (Wood product manufacturer, 20 - 50 employees)
- Let's get state & federal spending checked. We should have our leaders run the government more like a business and stick to a budget. We should be ashamed of being one of the highest states to be taxed and one of the lowest in income. (Softwood sawmill, <20 employees)
- Stop sending surveys! (Softwood sawmill, <20 employees)

Appendix C

Forest Industry Survey Cover Letter

Innovative Natural Resource Solutions LLC
107 Elm St., Suite 100-E, Portland, ME 04101
Phone 207/772-5440, www.inrsllc.com

April 2004

Name
Company
Address
Town

Dear Name,

Innovative Natural Resource Solutions LLC (INRS) is working with the Maine Forest Service, Department of Conservation and the Maine Technology Institute to anticipate and plan for changes to the state's forest industry. All sectors of Maine's forest industry face significant challenges – and many of these challenges are only expected to increase. An increasingly competitive global marketplace makes it critical for the state to take steps to work with Maine's forest industries to understand, evaluate and help address these challenges.

This survey is part of a detailed assessment of Maine's forest industries and their future. As a forest industry leader, your insight into the current state and future of the industry will help us better understand – and address – the challenges you face. We ask that this survey be completed by the person at your facility most familiar with the broad range of policy issues that impact your bottom line. Most often this will be a mill manager, owner, or other individual in a key management position.

Please take the time to complete this questionnaire and return it in the enclosed postage paid envelope. If there are questions you don't know the answer to, please write "don't know" near the question and move on. You may be assured of complete confidentiality. We do not ask you to put your name or business affiliation anywhere on the survey. The results will be presented in aggregate form only, and you will not be personally associated with the answers you give.

As a "thank you" for participating, when you have completed and mailed the survey please fill in your name and address on the enclosed post card, and mail it in separately. We'll select one respondent as the recipient of a $100 gift certificate from L.L. Bean

If you have any questions or concerns, or would like to supply additional information under separate cover, please do not hesitate to contact me at the above address, or at kingsley@inrsllc.com.

Again, we appreciate your time and insight.

Sincerely,

Eric Kingsley, Vice-President

Forest Industry Survey – Page 1

Facility Information

Please provide the following information so that we can better understand your business.

1. How would you characterize your facility?
   - Softwood Sawmill ☐
   - Hardwood Sawmill ☐
   - Wood Product Manufacturer (turnery, furniture, etc.) ☐
   - Pulp / Paper Mill ☐
   - Wood-energy facility ☐
   - Engineered wood products (OSB, plywood, etc.) ☐

2. What is the ownership structure of your facility?
   - Privately held – sole proprietor ☐
   - Privately held – group ☐
   - Publicly held ☐

3. How many employees do you currently have?
   _____________ Full Time
   _____________ Part Time
   _____________ Seasonal

4. Are you the largest employer in the community where you are located (circle one)?
   Yes *No* *One of the largest*

5. Are you the largest taxpayer in the community where you are located (circle one)?
   Yes *No* *One of the largest*

6. What is your position at the mill / facility (circle one)?
   Owner *Manager* *Supervisor* *Other* _______________

Competitive Pressures

7. Please check the three areas of the country or world that are the largest direct competitors with your facility, today and in the future:

Today	Location	5 Years	Location	10 Years
_______	Maine	_______	Maine	_______
_______	New England	_______	New England	_______
_______	United States (other)	_______	United States (other)	_______
_______	Canada	_______	Canada	_______
_______	South America	_______	South America	_______
_______	Europe	_______	Europe	_______
_______	Asia	_______	Asia	_______
_______	Australia / N.Z.	_______	Australia / N.Z.	_______
_______	Russia	_______	Russia	_______
_______	Other (__________)	_______	Other (__________)	_______

Forest Industry Survey -- Page 2

Forest Industry Health

8. Please circle your perception of the forest industry's overall health -- today and in the future.

Today					5 Years			
Bad	Poor	Good	Excellent		Bad	Poor	Good	Excellent
1	2	3	4	Overall Industry Health (U.S.)	1	2	3	4
1	2	3	4	Overall Industry Health (ME)	1	2	3	4
1	2	3	4	Sector Industry Health (U.S.)	1	2	3	4
1	2	3	4	Sector Industry Health (Maine)	1	2	3	4
1	2	3	4	Your Firm's Health	1	2	3	4

9. In the past year, has your facility had curtailments / reductions in operations? *Yes* *No*

10. Has your facility made major investments in new equipment, or have plans to do so?
    __________ Within the past year
    __________ Plans for the coming year
    __________ Plans for the next 5 years

11. If you plan to make new investments, or have recently, please describe your source of capital.
    __________ Not applicable
    __________ Bank / lending institution
    __________ Private investor
    __________ Internal company sources
    __________ Other (please specify)__________________

12. Do you believe that your facility will be operating in 20 years? *Yes* *No*

Programs Available to Maine Forest Industry

13. Please indicate your familiarity with the following programs available to Maine forest industries, and whether you believe these programs / organizations address your needs:

Awareness					Fits Your Needs			
Who?	Heard of	Very Familiar	Have Used		Don't Know	Not at All	Some-what	Very Well
1	2	3	4	FAME – Finance Authority of Maine	1	2	3	4
1	2	3	4	MTI – Maine Technology Institute	1	2	3	4
1	2	3	4	Efficiency Maine	1	2	3	4
1	2	3	4	Manufacturing Extension Partnership	1	2	3	4

Forest Industry Survey – Page 3

Doing Business in Maine

14. If your firm were considering a new forest industry operation (please assume necessary reso availability), would you consider locating in Maine? *Yes* *No*

    a. What other states, provinces or countries would you consider?
    ____

15. Do you currently generate electricity for your own use? *Yes* *No*

    a. If there were technical assistance or financial incentives to generate your own electricity, would you consider doing so? *Yes* *No*

    b. If generating your own electricity were cost-effective, what payback period would be required for you to give it serious consideration (in years)? ________

16. Do you currently have trouble finding qualified workers? *Yes* *No*

    a. Do you believe that you will have trouble finding qualified workers in 5 years? *Yes* *No*

17. Have you researched public sector or private sector workforce training opportunities?
    ________ Researched
    ________ Used
    ________ Not aware of any
    ________ Not an issue

18. Please estimate the average age of your employees (years) ________________

19. When was the last time you hired a new employee? ________________

20. When was the last time you laid an employee off? ________________

Forest Industry Survey – Page 4

Technology Issues

21. Do you foresee major technology improvements in your sector in the next ten years?
    ________ Continued process improvement
    ________ Significant changes
    ________ Changes large enough to make existing mills obsolete
    ________ Significant changes in non-wood competitors with my sector

22. If you were looking at major technology changes, what could Maine do to encourage you to invest?
    ________ Technology transfer (getting information to mills)
    ________ Regulatory changes (e.g., permitting)
    ________ Regulatory stability
    ________ Tax changes
    ________ Tax stability
    ________ Funding assistance
    ________ Other (please specify__________________)

23. For your forest industry sector, where do you see your facility in terms of new technology investment in the last 5 to 10 years (globally)?
    ________ Top 10%
    ________ Top 50%
    ________ Bottom 50%
    ________ Bottom 10%

Open-ended Questions

24. What is the most important thing Maine state government could do to help forest industries long-term competitive position? Why (please be as specific as possible)

25. What is the most important thing Maine forest industry could do to help its long-term competitive position? Why (please be as specific as possible)

Forest Industry Survey – Page 5

26. What would make you more likely to make capital investments in your Maine facility?

27. What would it take to have you make significant investments in energy conservation?

28. What would help you find, train and keep qualified workers for your facility?

29. If you had a problem with Maine state government, who would you call?

30. Is there anything else you would like to tell us?

Thank you for taking the time to complete this survey
Please return using enclosed self-address stamped envelope