Wisconsin’s Forest Products Industry Business Climate Status Report 2004
Preface

Wisconsin’s Center for Technology Transfer (CTT) is a non-profit, non-stock corporation with a mission of accelerating investments in energy efficient, environmentally friendly technologies into Wisconsin industry clusters. CTT was awarded its mission in February of 2002 by the Focus on Energy program, which identified the energy intensive, economically important industry clusters whose needs for advanced technology transfer could be served by the CTT. These clusters are Forest Products, Metal Casting, Food Processing, Printing, Glass, Biobased Products & Energy, Water & Wastewater, and Utilities.

Technology roadmaps had been developed for each industry cluster through U.S. Department of Energy grants and by Focus on Energy. However, a more in-depth understanding of critical issues facing industry clusters was still needed. CTT, in a joint effort with the U.S. Forest Products Laboratory (FPL) in Madison, initiated issue scoping sessions for the Forest Products cluster. One-on-one meetings with senior executives of Wisconsin forest products companies were conducted to assess the current state and future potentials of the industry group. The findings of these sessions document a litany of challenges facing the industry and are summarized at the end of this report.

Many of these challenges and the potential for investments in new technologies were discussed at Wisconsin’s Industries of the Future Technology Symposium held in Milwaukee on May 13, 2003. At the Symposium, Forest Products industry leaders identified the need for an in-depth assessment of the identified issues. This report assesses the business climate and permit challenges facing the Forest Products group and offers potential solutions.

The approach used in this report, with some modifications, could become a model for examinations of other industry clusters. Systematically updating and improving industry assessments of Wisconsin’s economically important industry clusters would offer policy-makers a valuable tool to help increase investments in productivity and efficiency in the state’s energy-intensive industries.

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Wisconsin’s Forest Products Industry
Business Climate Status Report

Abstract

This report presents the status of business incentives for the forest products industry and environmental permit requirement processes for the states of Michigan, Minnesota and Wisconsin.

**Wisconsin’s forest product industries are a very important component of the state, regional and national economies.** (Because of their common dependence on the resource base as well as intra-industry linkages, it is sometimes helpful to characterize these industries as a cluster.) These economies have undergone a recent recession. During this recession, **the forest product industries suffered job losses disproportionate to most other industries.** Wisconsin’s forest product industries appear to have suffered disproportionately more than in our neighboring states. Industry group fact-finding has identified **concerns with Wisconsin’s regulatory enforcement and business climate,** above and beyond structural changes in the economy and industry. This report will provide a status report on Wisconsin compared to Michigan and Minnesota (as a group often referred to as the Lake States) relative to these concerns; and, will make recommendations for improvement.
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“Attention to the environment is not a high priority when local and regional economies are not healthy. On the other hand, a healthy economy cannot be sustained without a healthy, livable environment.” Jim Bowyer, Head, Department of Wood/Paper Science, University of Minnesota, St. Paul, Minnesota

Introduction

This report presents the status of business incentives for the forest products industry and environmental permit requirement processes for the states of Michigan, Minnesota and Wisconsin.

After the longest economic expansion in history, the national economy finally fell on hard times. The National Bureau of Economic Research (NBER), an official panel of senior economists, has declared that the US entered recession in March 2001. The previous 10 years of economic growth had been the longest period of expansion in US history, the NBER said.

During the recession, the Nation suffered significant job losses. Manufacturing was especially hard hit. Wisconsin, being one of the states most heavily dependent on manufacturing (ranking 3rd in terms of percent of total jobs behind Indiana & Michigan, 2002) suffered accordingly (Figure 1).
Within manufacturing, the **most job losses** have been in industrial machinery and paper (Figure 2), according to the Wisconsin Department of Workforce Development.

The recession has been declared officially over. However, the national economy continues to be sluggish. While jobs have started to recover (Figure 2), the manufacturing sector in Wisconsin and especially the forest products industry have continued their downward trend (see Figures 3 and 4 below).
This is especially troubling to the state because of the widespread and pervasive impact of these forestry jobs.

**Importance of the Forest Products Industry**

Wisconsin’s forest products industry has **statewide, national and international prominence**.

**Forest Product Industry Cluster Definition**

Wisconsin's forest industry cluster is defined as being comprised of firms in the Standard Industrial Classification codes (S.I.C.) 24 - North American Industrial Classification System (NAICS) 321 Wood & Wood Products, that part of (S.I.C.) 25 - (NAICS) 337 - Furniture & Fixtures which manufactures wooden furniture and (S.I.C.) 26 - (NAICS) 322 Paper & Allied Products. Clusters are geographical concentrations of competitive firms in related industries that do business with each other and/or that share needs for common talent, technology and infrastructure.

**Table 1. Wisconsin’s Forest Product Industry Cluster**

<table>
<thead>
<tr>
<th>Category</th>
<th>Year</th>
<th>Value</th>
<th>% of all Mfrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Companies</td>
<td>2001</td>
<td>1,847</td>
<td>16.5%</td>
</tr>
<tr>
<td>Number of Employees</td>
<td>2001</td>
<td>93,177</td>
<td>16.0%</td>
</tr>
<tr>
<td>Total Payroll</td>
<td>2001</td>
<td>$3,165,774,452</td>
<td>13.6%</td>
</tr>
<tr>
<td>Value Added</td>
<td>2001</td>
<td>$8,909,845,452</td>
<td>15.0%</td>
</tr>
<tr>
<td>Cost of Materials</td>
<td>2001</td>
<td>$9,807,953,392</td>
<td>14.7%</td>
</tr>
<tr>
<td>Value of Shipments</td>
<td>2001</td>
<td>$18,719,139,236</td>
<td>14.8%</td>
</tr>
<tr>
<td>Capital Expenditures</td>
<td>2001</td>
<td>$565,046,500</td>
<td>15.2%</td>
</tr>
</tbody>
</table>

Source: Wisconsin DWD, U.S. Census
National Highlights
Wisconsin is the **#1 paper making state** in the nation and has been for 50 years.

In the United States, Wisconsin forest industry ranks **first in fine papers, first in sanitary paper products, first in high quality juvenile furniture, first in millwork, and third in hardwood veneers**. Wisconsin also leads the nation in forest product manufacturing capital expenditures; second in annual payroll, and second in total forest products employment. In Wisconsin, the wood products industry is the **State’s second largest manufacturing employer**.

Wisconsin Highlights
- Wisconsin forests are the state’s largest land cover and by far the state’s **largest land use**. The 16 million acres of productive forest cover 46% of Wisconsin’s land base.

- Wisconsin produces approximately **$20 billion annually** (when wood furniture is added in) in shipments (analogous to sales) from forest products, which is 2.5 times as much as our neighboring states of Michigan and Minnesota (Figure 5).

![Figure 5. Value of Shipments Wood & Paper,](image)

Source: U.S. Census

- Wisconsin’s forest products industry employs **1 in every 6 manufacturing jobs**. Plus, for every job in the forest products industry, an additional 1.6 jobs are created to support the industry (multiplier effect). Direct employment translates into 13.6% of all the manufacturing wage and salary income generated in the state (Figure 6). Almost $3.2 billion dollars every year.
• Manufacturing, including the forest products industry cluster, is especially important to the state because it is considered an export-base industry. That is, products are made here and sold outside the borders of the local and state economy, thus bringing new dollars into those economies. This influx of new dollars replaces the monies spent to buy products made elsewhere, leakage from the local economy, and provides a financial return to capital investment (companies) and labor (jobs).

• Wisconsin’s forests support our valuable tourism and recreation economy, creating an additional $5.5 billion annually in forest-based recreation, plus the benefits of clean water and abundant wildlife.

• Wisconsin has over 1,800 forest products companies.

• Wisconsin’s forest products industry creates high paying jobs - average wages for forest industry jobs are $38,000 annually, compared to the state average of $30,000. Paper mill workers earn $49,000 annually.

Source: Wisconsin DWD
• Wisconsin manufacturers depend on Wisconsin forestry. Over 90% of the state’s timber harvested is used by Wisconsin manufacturers.

• Wisconsin farmers depend on forestry. Wisconsin farmers are often times forest landowners and also often work in the forest products industry.

**Sustainable Forest Resource Highlights**
At a time when significant expanses of forestland are being lost in other states, Wisconsin’s forestlands actually **gained over 640,000 acres** between 1983 and 1996. The net volume of growing stock increased 12 percent during the same time period.

Most commercial forests are **privately owned** in Wisconsin, unlike many southern and western states where commercial forestlands are largely in the hands of the federal government or large forest industries.

• Wisconsin continues to **grow more wood than it removes**. About 490 million cubic feet is grown each year, while only 332 million cubic feet is removed.

• Wisconsin’s forests are just meeting the wood needs of Wisconsin residents. It’s estimated that Wisconsin residents consume 327 million cubic feet of wood annually, whereas we harvest 332 million cubic feet. Wisconsin is the only Midwest state that harvests what it consumes.

**Industry Location**
**Figure 8. Forest Industry Locations**
- Primary Industry
- Secondary Industry

Just as Wisconsin’s forest acreage is distributed over a large portion of the state, the forest products industries are also **located throughout**. Primary forest product industries are those companies converting roundwood (logs) to wood products such as lumber. The secondary industries (those making consumer products) are more concentrated in the southeastern quarter (Figure 8).
Trends in the Industry
In the recent recession, the forest industries have declined. The severity of this decline is hard to pinpoint as economic data sources have a significant time lag.

Despite a slight decline in 1991 the value of shipments of the forest industries has increased from $8.1 billion in 1982 to almost $20 billion in 2001 (Figure 9).

![Figure 9. Value of Shipments](image)

Source: U.S. Census, Data not compiled for intervening years.

The number of firms has started to decline due to consolidation and closure. (Many of the medium size firms have closed while the larger firms have continued to grow) (Figure 10).

![Figure 10. Number of Companies](image)

Source: U.S. Census
Paper Industry Trends

Approximately 5,000 jobs have been lost (this translates into approximately $200 million in lost payroll) in the Wisconsin pulp and paper making industries since 2000.

Because of the deteriorating economic circumstances of the paper industry, the Wisconsin Paper Council met with statewide stakeholders in October 2002 to discuss the paper industry cluster. This study group generated two reports in 2003, “The State of Wisconsin’s Paper Industry, Parts I and II.”

Focusing on the “Big Picture,” the study group came up with a list of fundamental economic changes, which are responsible for the industry problems.

Overcapacity (nationally)
– Since 1999, 21 machines in Wisconsin have been shut down, leaving 137 still operating.

Consolidation
- Paper companies consolidating in order to capture market share and replace older assets.
  - 1980 – 35 paper companies in Wisconsin. Today there are 28.
  - 1990 – 13 companies headquartered in Wisconsin. 11 today.
  - Five years ago no paper mills were owned by foreign corporations. Today six are.

Globalization
- Almost overnight paper products have become a global commodity
  - Foreign competition/consolidation
  - Strength of US dollar
  - Since 1997, 90% of increased US demand was captured by imports

Capital Spending/Reinvestment
- Paper machines are some of the most expensive pieces of equipment
  - Price for new machine between $300 million - $500 million
  - Upgrades can cost tens of millions of dollars
  - Capital spending dropped significantly since 1994-
  - 2001 to 2003 capital spending in WI was at the lowest level in 30 years
  - Wisconsin’s asset base is some of the oldest in the country

Wisconsin is not getting its share of capital investment in the paper industry. This has been well documented in the popular press and by anecdotal response. However, it readily shows up according to the latest US Census of Manufacturers. And, this mirrors the figures from 2000, as well. Figure 11.
“The bottom line is that the paper industry and its cluster partners, including the state, must work together to maintain the positive aspects of Wisconsin’s overall business environment and improve those aspects that hamper the ability of companies to be the low cost producer and attract new investment. This means focusing on key cost drivers – fiber, labor, energy, environmental regulation - and identifying ways to reduce costs and increase investment.” Wisconsin Paper Council, The State of Wisconsin’s Paper Industry

Wood Product Industry Trends

- For the three-year period 1997 to 2000 the number of logging contractors decreased by 418 (a decrease of over 20%).
- Similarly, at least 15 medium to large sawmills have closed in the last 5 years.

Pressure from both a soft domestic economy and fierce foreign competition has played a role in the forest industry decline and associated job losses.

Primary Wood Products
This cluster of the forest products industries is made up of sawmills, veneer plants, log home manufacturers and loggers. The majority of the firms are sawmills. The majority of the production capacity is concentrated in the northern half of the state where the bulk of the timber is grown. The actual plant locations are fairly evenly distributed throughout rural Wisconsin with the smaller plants located in southern and southwestern Wisconsin. Southeastern Wisconsin has very few primary wood processing plants but has the majority of the secondary wood products plants.

The primary wood products firms have an industrial output of $2 billion and employ 28,000 workers. This industry has been in a state of change due to foreign competition and general economic pressures.

Many sawmills have been modernizing to remain competitive. The number of medium size mills has decreased from 106 in 1996 to 73 in 1999. The amount of timber used by
this industry has decreased by 6%. Larger mills are installing state of the art equipment while increasing numbers of medium size mills are closing. Figure 12 shows the composition of the forest products industry cluster according to employment size of the firms.

Small sawmills have increased but account for only about 6% of the production. In the last five years, 15 medium to large mills have closed or gone idle. Recently, two of the largest sawmill companies ceased production. Combined these two companies accounted for approximately 100 million board feet of sawn lumber annually, 15% of Wisconsin’s lumber production, and employed 180 people.

The need for skilled labor both in the woods and in the mills has been a problem for these firms. The average age of a logging contractor in Wisconsin is 52 according to the Wisconsin Professional Loggers Association (WPLA). Until the recent recession, sawmills and veneer plants could not find the workers that they need.

Secondary Wood Products
The cluster for secondary wood product manufacturers is composed of furniture, fixtures, cabinets, and parts. In 2000 this cluster had a value of shipments that produced $3.8 billion of output and employed 38,000 people. The firms are highly concentrated in southeastern Wisconsin. They provide needed markets for the lumber and veneer produced by Wisconsin’s primary forest industries.

This area of the forest product cluster has been severely impacted by competition both from China and Canada. For example a company in China can purchase US lumber, ship it to China, manufacture furniture, and ship a product back to the United States for 20 to 30% less than it can be manufactured for in the United States (Table 2). In this table it is not known if favorable Chinese exchange rates are included in the computations. The largest component of Chinese-Made Overhead is the transportation costs.
Table 2: Comparison of US and Chinese production costs.

<table>
<thead>
<tr>
<th></th>
<th>American-Made</th>
<th>Chinese Made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials</td>
<td>56.6%</td>
<td>53.1%</td>
</tr>
<tr>
<td>Labor</td>
<td>17.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Overhead</td>
<td>25.7%</td>
<td>25.1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>79.8%</td>
</tr>
</tbody>
</table>

(Overhead includes G&A, Profit & Transportation: Lawser 2003)

This competition has most recently caused Richardson Brothers Furniture in Sheboygan Falls to move their production to China and Bolivia. In 2001 Richardson Brothers locally employed more than 350 people making fine furniture as they had done for the last 140 years. When the closure announcement was made they were down to 140 employees. As of December there will be 40 people making boat interiors. This was done to save the company. The sales and distribution will still continue.

China is not the only source for competition in this sector. Canada with their favorable exchange rate and lower fringe benefit cost has also developed a competitive advantage. The exchange rate and reduced benefits give Canadian firms about a 30% (mostly exchange rate) advantage when compared to similar firms in the United States.

Historically Canada was the major source for imported furniture to the USA but they have been surpassed by China, which in 2002 shipped over $4 billion of furniture as compared to about $2.5 billion of furniture by Canadian firms.

Not all firms have been losing ground. Some of the aggressive, vertically integrated solid wood manufactures have been able to grow their business and capture market share.

**Business Climate**

Wisconsin’s economy, especially manufacturing has been buffeted by national (the recession) and international conditions (strength of the dollar and trade relations), which have been exacerbated by a negative business climate image, especially concerning taxes and environmental regulations.

**Study Findings**

Contemporary studies (Tax Foundation, Progressive Policy Institute, Corporation for Enterprise Development, National Federation of Independent Business (NFIB), Wisconsin Manufacturers and Commerce (WMC), Wisconsin Taxpayers Alliance, as well as several ad hoc forest industry groups) in addition to numerous anecdotal reports (see the following newspaper article excerpts) have documented this negative or declining business climate in Wisconsin, whether measuring taxes, fiscal policy, business assistance or regulatory climate. While individual studies can be analyzed and debated, the fact that these trends persist indicates that something is happening.
“State could soon lose the rank of No. 1 in paper”
Milwaukee Journal Sentinel, June 21, 2003

“The papermaking cluster may be the most valuable in Wisconsin, and its leaders have asked for help on the regulatory streamlining.”
“A recent survey of members by Wisconsin Manufacturers & Commerce came to the conclusion that Wisconsin is the worst state in the country for regulatory effectiveness in the area of manufacturing.”
“It can’t get much worse than the public statement by Pete Correll, CEO of Georgia-Pacific, that he doesn’t even look at Wisconsin any more when he considers a new installation. Georgia-Pacific’s latest machine went to Oregon; the one before went to Louisiana.”
“It has also been reported that Procter & Gamble’s Green Bay operation lost out on that company’s latest machine. Indeed, P&G closed down its plant on the East River in Green Bay, shutting down four older paper machines at a cost of 300 jobs. The last two machines for P&G went to Missouri and Pennsylvania, even though the Green Bay plant is one of the most productive in its system. Ditto for the Georgia-Pacific operations that are highly productive.”

A recent survey of economic developers in Wisconsin, conducted by the Wisconsin Economic Development Association (WEDA) finds similar concerns. Closely, following finance issues, Wisconsin’s tax and regulatory environment are major concerns. These two concerns (finance & regulation) were indicated significantly more often than any other items.

A Wisconsin survey by the National Federation of Independent Business (NFIB) found that 65.1 percent of business owners felt "excessively burdened by state government regulations." More dramatically, more than 91 percent found it "impossible to know or be in compliance with regulations" or know and understand the most important regulations.

WI Rapids Daily Tribune June 22, 2003. The forest industry cluster is comprised of a very large number of small firms (Figure 13).

![Figure 13. Number of Forest Product Companies by Employment Size Range, 2001](image)

Source: U.S. Census
Forest industry-specific problems were initially identified in a series of comprehensive interviews with forest products company senior managers, conducted jointly by the Center for Technology Transfer (CTT) and the U. S. Forest Products Laboratory (FPL) starting in the summer of 2002. In May of 2003, WMC released its report “Making the Case for Regulatory Reform in Wisconsin.” It was developed from input from numerous organizations and individuals, over the course of many months, and from scores of meetings. Other organizations such as the Wisconsin Paper Council and Wisconsin Builders Association had similar calls for reform. Governor Jim Doyle, Department of Natural Resources Secretary Scott Hassett, other cabinet members and legislative leaders have also called for regulatory relief. Governor Doyle called for regulatory reform in his “Grow Wisconsin” proposal unveiled this summer and, again, at the recent Economic Summit in Milwaukee.

Nearly all of the WMC listening session participants reported that their companies were put at a competitive disadvantage due to Wisconsin's regulatory policies and procedures. Participating companies verified with specific examples how the state's regulatory system makes the cost of doing business here more expensive, and how that generally puts Wisconsin facilities at a cost disadvantage.

- Without exception, companies and consultants with experience in other states found Wisconsin's regulatory climate more hostile toward business than any other state, including neighboring Midwest states and California.

- The inability to obtain timely permits was the single most significant regulatory impediment facing companies wishing to expand or locate in Wisconsin. Business opportunities have gone to other states because of the ability to provide regulatory approvals more quickly.

- Agency staff who write permits and develop rules are not aware of, or are unconcerned about the business implications of their actions; including, an adversarial view of business requiring a “prove your right” approach.

That this common interest in regulatory reform occurs now presents a tremendous opportunity for accomplishment. The consensus is that Wisconsin needs to reduce regulatory burdens on Wisconsin businesses to encourage job creation and fuel a strong economy.

The need for some type of action is implied by looking at the growth of indirect business taxes over the past ten years. Wisconsin’s “take” has grown at a faster annual rate than either Michigan or Minnesota (Figure 14).
Figure 14. Growth in indirect business taxes.

Year: 1992-2001  
Statistic: Indirect business taxes*  
Unit of Measure: Average annual growth

*Indirect business tax – Indirect business taxes and nontax liabilities (IBT) consist of tax liabilities, such as general sales and property taxes, that are chargeable to business expense in the calculation of profit-type incomes and of certain other non-tax liabilities to government agencies (except government enterprises) that are treated like taxes - regulatory and inspection fees, special assessments, fines and forfeitures, rents and royalties, and donations.
Key Issues
The Wisconsin Paper Council study recommended a three-step action plan to strengthen the industry. These recommendations directly addressed the health and competitiveness of the paper industry in Wisconsin. They also aptly described the business climate needs of Wisconsin manufacturing, in general. The recommendations were:

1. **Tax Reform** - including a sales tax exemption for fuel and electricity used in manufacturing and converting to a single factor corporate income tax model
2. **Environmental Regulatory Reform** by streamlining the system and providing for regulatory flexibility
3. **Creating a Strong Energy Policy** - by providing for a low-cost, reliable, statewide energy system.

Because of the capital-intensive nature of the industry, the Paper Council also requested that the state take a look at interstate competition for investment and the role of **incentives**.

Business Taxes
The findings of Wisconsin’s ad hoc focus groups do not exist in a vacuum. Area Development Magazine (a national economic development trade publication) has been surveying business executives annually for eighteen years. Those people responsible for their company’s site selection decisions indicated that in 2003 the following were the **top ten criteria** most important in influencing their decisions:

1. Availability of skilled labor
2. Labor costs
3. Tax exemptions
4. State and local incentives
5. Highway accessibility
6. Corporate tax rate
7. Proximity to major markets
8. Occupancy or construction costs
9. Energy availability and costs
10. Environmental regulations

Regulations, taxes, energy and incentives comprise half of the list. In terms of importance, these results parallel the findings from Wisconsin companies.

Compare to Other Lake States
Looking strictly at rates (Table 3), it is difficult to make direct comparisons because the rates are applied differently in different states. For example, property tax rates per assessed value are applied to different assessment ratios, e.g. Wisconsin uses 100% and Michigan uses 50% of market value. One category that is comparable and in which Wisconsin excels is in Workers Compensation rates. Most often, the differences come in the latitude of other states to provide additional incentives unavailable in Wisconsin. First and foremost, Wisconsin’s Constitution under the “Uniformity Clause” prevents local tax rebates and abatements. Tax credits do not compete well versus “no taxes” which puts Wisconsin at a competitive disadvantage. Complete lists of the basic business taxes, business tax incentives and direct financial incentives are in the Appendix to this paper.
Taxing businesses that derive all of their income within Wisconsin is relatively straightforward. Taxing those that earn income from operations in other states and countries in addition to Wisconsin is a more complicated issue. Wisconsin’s system had created a tax penalty for multi-state businesses that chose to add jobs or expand their facilities within that state. In other words, every time a multi-state corporation added an employee or expanded their facilities, there was a direct tax increase for the creation of those jobs because the apportionment of income formula considered value of property and payroll. A single, sales factor corporate income tax was adopted in 2003.

Additionally, Wisconsin is one of a minority of states not providing an exemption for fuel and energy consumed in manufacturing. The Wisconsin Paper Council has recommended that Wisconsin law be changed to convert the tax credit for energy used in manufacturing to a sales tax exemption. Paper production is extremely energy intensive as is much of Wisconsin’s other manufacturing. This change was enacted into law in December 2003.

### Table 3. Major Tax Rates Summary.

<table>
<thead>
<tr>
<th>State</th>
<th>Corp. Taxes (%)</th>
<th>Corporate Apportionment of Sales Factor</th>
<th>Sales Tax Exemption on Energy</th>
<th>Sales Tax (%)</th>
<th>Avg. Business Property Rate/$1,000 Assessed Value</th>
<th>Workers Comp. Index (U.S. avg. = 1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>2</td>
<td>90%</td>
<td>Yes</td>
<td>6</td>
<td>$50.10</td>
<td>1.061</td>
</tr>
<tr>
<td>Minnesota</td>
<td>9.8</td>
<td>75%</td>
<td>Yes</td>
<td>6.5</td>
<td>$32.50</td>
<td>0.884</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>7.9</td>
<td>100%*</td>
<td>Yes**</td>
<td>5***</td>
<td>$20.55</td>
<td>0.845</td>
</tr>
</tbody>
</table>


*Changed to 100% in 2003. ** Exempted in December 2003. ***Currently, 58 counties also have a 0.5% county tax.

### State Tax Incentive Highlights

Michigan and Minnesota both provide major tax abatements and tax reductions to foster capital investment in targeted geographic areas and in desired industries.

**MI**
- Property taxes are applied to real and personal property at a 50% value rate.
- In Renaissance Zones (redevelopment areas) essentially no state or local taxes to existing and new businesses, generally up to 12 years to spur growth. Currently applied in 164 geographic areas.
- Ten new Agriculture Renaissance Zones were added this year.
- Michigan Economic Growth Authority (MEGA) can grant tax (refundable tax credits) breaks for up to 20 years and up to 100% for certain types of companies creating a minimum number of jobs.
- Single business tax (corporate income) is similar to a value-added tax. Will phase-out in 2010.
- Michigan prohibits additional local sales taxes.

**MN**
- Business property tax subsidizes residential (differential assessment rates).
- Property tax abatements can be granted for eligible economic development projects by local units of government.
- Job Opportunity Building Zones (10 of up to 5,000 acres) established where essentially there is not any tax liability. Also applies to biotech clusters.
- Seven communities have additional sales taxes.

WI  - Wisconsin’s Constitution, specifically, the “Uniformity Clause” prohibits state and local tax abatements. **Tax reductions can only be applied to “all” property of a given class.**
- Wisconsin **taxes personal property** other than M&E used in manufacturing.
- There is **no personal property tax on computers** used in business.
- Wisconsin provides **tax credits to eligible activities** in designated zones.
- **Single sales factor apportionment** formula adopted for corporate income tax.
- Fifty-eight counties have optioned to impose an additional 0.5% county sales tax.
- Football & baseball stadium sales taxes are added in Milwaukee & Green Bay.
- **No sales taxes on energy** used in manufacturing.

**Comparing to Other Countries**
KPMG’s “Competitive Alternatives Study,” for 2002 again ranks Canada as the number one **cost-effective country for business** in the world. The report is the result of 10 months of research in more than 85 cities throughout Austria, Canada, France, Italy, Germany, the Netherlands, the United Kingdom, the United States, and Japan. In all, 27 cost components deemed most likely to vary by location were examined for 12 specific types of business. Report compares G7 countries – the group of seven leading industrial nations.

**Figure 15. % Cost Advantage/(Disadvantage)**

- **Canada** (CA) is the overall cost leader for 2002 with a cost index of 85.5, representing a 14.5 percent cost advantage over the United States (US = 100.0).
- The **United Kingdom** (UK, 86.9) is ranked second overall, with costs 13.1 percent lower than in the US.
- **Italy** (IT, 88.6) has improved its 1999 cost position against every other G7 country, due in part to significant reductions in employer costs for legally-required employee benefits.
- The **Netherlands** (NL, 90.8) is new to this study for 2002 and ranks in fourth place, ahead of **France** (FR, 92.2).
• Austria (AT, 93.7) has a similar cost structure to France, and has a significant cost advantage over neighboring Germany (DE, 101.9).
• The relative cost position of the United States (US, 100.0) has declined since 1999, due to the appreciation of the US dollar against major global currencies.
• As in 1999, Japan (JP, 117.8) has the highest business cost structure among G7 countries.

Direct Financial Incentives

Wisconsin has come a long way in the provision of financial incentives. The last time Wisconsin undertook business climate initiatives of the same number and magnitude of those being considered now was in the mid-1980’s. Similarly, the state had suffered a demoralizing recession after a period of prosperity. Then Governor Earl initiated the previous economic planning process, called the Strategic Planning Council, which brought the first major business finance initiatives, major tax initiatives, and significant, new agency operation directives focusing on fostering business growth.

Key Incentives as listed by the States Themselves

All the Lake States have some incentive programs. There are a wide variety of programs available from grants and loans for real property to financing for labor training and infrastructure to tax credits and tax abatements. The table in the Appendix lists the details of the programs considered the most important by each of the respective states.

Table 4 provides a summary of these state financial incentives. Due to its Constitution, Wisconsin is unable to provide tax abatements. Therefore we need to look to other incentives.

<table>
<thead>
<tr>
<th>State</th>
<th>Grants or Forgivable Loans</th>
<th>Low Interest Loans</th>
<th>Reduced or Abated State Taxes</th>
<th>Reduced or Abated Local Taxes</th>
<th>Investment or Job Creation Tax Credits</th>
<th>Job Training Grants</th>
<th>Ad hoc Large Project Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>25%</td>
<td>Yes</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Loans</td>
<td>No*</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>50%</td>
<td>No*</td>
</tr>
</tbody>
</table>


Wisconsin’s financial incentive programs are structured differently than the other Lake States. At the state level, Wisconsin’s Development Fund (WDF), which is an umbrella term for the Customized Labor Training (CLT), Major Economic Development (MED) and Technology Development Fund (TDF) programs, has approximately $20 million per biennium. These grant and loan programs are administered at the state level. The most widespread local incentive program is Tax Incremental Financing (TIF), whereby local units of government acquire land or provide needed infrastructure. There are TIF financed projects in virtually all Wisconsin counties.

Minnesota’s Investment fund has only about $2.4 million per biennium but Minnesota Pathways grants for training are about $13 million. Additionally, local units of government are responsible for granting tax abatements.
Michigan’s job training program has $13 million available annually. These grants are paid to training providers. However, the largest tax incentives are with the geographically designated Renaissance Zones which provide an almost tax-free environment for up to 12 years.

**Competing for Major Projects**

According to the PHH Fantus Consulting Firm (a plant location consultant), companies seek incentives to help them reduce start-up costs, cut on-going operating costs, expedite the start-up process, upgrade the skills and qualifications of the workforce and distinguish one community from another. When negotiating with different economic development organizations, most companies are focusing on a small number of locations -- all of which meet their goals and objectives. Incentives essentially become the "tiebreaker." Incentives have been around for along time. However, in the 90’s, incentives became highly popular and highly competitive often resulting in very large packages, especially for automotive projects.

Wisconsin has not been as willing as surrounding states to provide special, large appropriations on a project-specific basis. For example, Michigan just pledged $115 million in incentives to bring a project called the “Global Engine Alliance” to Dundee, MI (See Appendix for other Big Deals of 2003).

The current trend among surrounding states, shown in their legislative initiatives for 2003 (see Appendix) is to expand their “no tax” incentive alternatives and to reduce corporate tax liabilities.

**Environmental Regulations**

Statewide focus groups of businesses, especially those including forest products companies, have been highly critical of Wisconsin’s environmental program administration.

**Regulatory Problems**

The environmental regulations have been criticized for violating some of the basic tenets of good regulatory policy:

*Certainty*-Wisconsin’s environmental regulations, especially air, are very complex and often seem to be interpreted differently by different people within the same agency. Due to this uncertainty, there is additional risk attached to making capital investments. This is without question the single largest issue for manufacturers looking to expand or build in Wisconsin. And, this problem is ubiquitous, as a construction air permit must be obtained before any soil is disturbed for construction. Only then can application be made for an operations permit.
**Timeliness**—The time period for obtaining many environmental permits has **lengthened** in the last five years. A recent Wisconsin State Journal study (12/7/03) showed a 75% increase in the time to obtain a major air permit from 1999 to 2003. And, the 2003 times had decreased by 20% from 2002. Up until a recent Governor’s Mandate, backlogs had also been building. Companies often complained about the time frame lacking any definitive start and finish dates.

**Efficiency**—In an economic sense, are the most **cost-effective** methods of environmental protection and improvement allowed by existing rules? Do benefits at least equal the costs of meeting new regulations? Are new technologies discriminated against? At the present time, these questions are not part of permit negotiations.

**Cooperative Implementation**—Focus groups from around the state have shown that collegiality in environmental permit negotiation is **very often lacking**. Business sees the regulatory agencies as punitive and fears retaliation. Regulatory staff view businesses as generally being suspect and requires them to prove their innocence. While the evidence is anecdotal, this obvious lack of trust is very problematic. Without trust, there can never be enough rules or enforcers of the rules to make the process work well.

**Other States**
Michigan and Minnesota provide **innovative examples** of environmental policy and regulations (Table 5).

<table>
<thead>
<tr>
<th>State</th>
<th>Environmental Priorities</th>
<th>Environmental Incentives and Initiatives</th>
<th>Environmental Reporting</th>
</tr>
</thead>
</table>
| Michigan | ● Regulatory innovation 
 ● Partnerships with businesses 
 ● Customer service 
 ● Streamline processes | ● Environmental Audit Privilege & Immunity 
 ● Clean Corporate Citizen (C3) program 
 ● Pulp and Paper Pollution Prevention Program 
 ● Standardized general air quality permits 
 ● Environmental Assistance Center | ● Required performance-based environmental reporting |
| Minnesota| ● Develop Environmental Innovation Strategy 
 ● Develop one all-inclusive environmental permit 
 ● Regulatory Innovations Legislation | ● Information assistance, grants and loans 
 ● Expand permit registration program (increased thresholds) 
 ● Standardized general air quality permits | ● Required performance-based environmental reporting |
| Wisconsin| ● WDNR Secretary agency operation initiatives (new) 
 ● Regulatory reform (new) enacted January 2004 | ● Air permit improvement initiative (new) 
 ● Business assistance (new) 
 ● WDNR Permit Problem Hotline (new) 
 ● Regulatory Performance Report (new) 
 ● Permit streamlining (new) 
 ● Best Practices 
 ● Permit tracking (new) | ● Required performance-based environmental reporting (not implemented) |
Environmental Priorities: Michigan has declared the following environmental priorities, which are largely outcome-based.

- **Regulatory Innovation:** Increase the number of businesses that perform self-audits under the MI Environmental Audit Privilege and Immunity Statute.
- **Partnerships with Businesses:** Increase compliance with existing regulation and increase the implementation of voluntary waste reduction initiatives.


Restructuring: Streamline processes to increase efficiency and effectiveness of service provided.

Similarly, Minnesota has enacted a statute calling for environmental regulatory innovation. At present, Wisconsin’s environmental priorities have largely emanated from intermittent management initiatives.

Environmental Incentives: To achieve these priorities, Michigan and Minnesota have also enacted several environmental incentives.

- **Environmental Audit Privilege and Immunity** - It is important to the success of Michigan's environmental protection efforts that businesses, municipalities, and public agencies take self-initiated actions to assess or audit their compliance with environmental laws and correct any violations found. For example, it is estimated that thousands of small businesses in Michigan have never applied for or obtained necessary environmental permits, fearing the disclosure of information to state agencies would lead to enforcement and penalties. The Environmental Audit Privilege and Immunity Law provides incentives for businesses to perform environmental audits and promptly report and correct violations. This will lead to increased compliance with environmental requirements and further protection of Michigan's outstanding natural resources. Since 1996, there have been 92 voluntary disclosures. For those with information, all had complied within 6 months. Over 2,000 businesses have made a notification of intent to self-audit.

- **Clean Corporate Citizen** – Michigan’s Clean Corporate Citizen (C3) is a voluntary program of public recognition and regulatory benefits for those companies, municipalities and institutions that practice sound environmental stewardship. The C3 program is built on the concept that these Michigan facilities can be relied upon to carry out their environmental protection responsibilities without rigorous oversight, and should enjoy greater permitting flexibility than those that have not demonstrated that level of environmental awareness. Clean Corporate Citizens who voluntarily participate in this program will receive public recognition and are entitled to certain regulatory benefits, including expedited permits.

- **Web-based Facility Survey** – Minnesota is using the internet to survey businesses in its development of administrative rules to greatly expand the application of registration permits.

Minnesota’s environmental innovation legislation calls for the development of programs with substantial self-monitoring and compliance in order to achieve major cost reductions in paperwork and reporting.
Wisconsin has been reluctant to espouse audit immunity and self-reporting. This type of voluntary compliance could help in dealing with the reduction in staff and resources brought about by budget constraints.

**Environmental Reporting** - Both Michigan and Minnesota require **performance-based environmental reporting** from their regulatory agencies. Incidentally, both these states have separate environmental enforcement and natural resource management agencies.

- **State of Michigan's Environment 2003, Second Biennial Report** - The Environmental Indicators Act was signed into law in December 1999. The law requires the Michigan Department of Environmental Quality (MDEQ) to work with the Michigan Department of Natural Resources (MDNR) to prepare a biennial report on the quality of the state’s environment, based on **scientifically supportable** environmental indicators and using sound scientific methodologies.

- **Minnesota Environment 2000** - A report on the environment, providing information on key conditions and trends in the state, including those specific to geographic regions. It highlights the environmental advances made in the paper, wood products, and mining industries over time.

Wisconsin’s Legislative Audit Bureau recently reported that the WDNR has failed to establish objective performance measures for air management programs as directed by 1999 Wisconsin Act 9, the FY 1999-2001 Biennial Budget Act (passed in October 1999).

Wisconsin has recently enacted major initiatives in addressing some of the environmental regulatory concerns cited above. Of greatest significance, are the initiatives to streamline operations and to provide assistance in the face of declining administrative resources by encouraging collaborative action. Successful environmental performance hinges on partnerships between the regulator and the regulated. Even though some of the initiatives are not statutory, they should be institutionalized. Further, performance-based environmental reporting has been highlighted as a “best practice” by the National Governor’s Association and others.

**Small Business Regulations**

Some other areas of regulatory reform still need to be addressed. For example, the forest products industry cluster contains a large percentage of very small firms. Small firms have been shown to be **disproportionately impacted by regulations** and can easily be driven into insolvency by application of the rules. Wisconsin’s Regulatory Flexibility Act is not being effectively applied, even though it has been in effect since the mid 1980’s.

**Small Business Regulatory Reform**

There is a strong feeling of regulatory uncertainty and concern among small business owners in Wisconsin. The 2002 Task Force on Regulatory Reform in Wisconsin made a number of recommendations having to do with the differential cost impact of regulations on small businesses. (The list of specific recommendations is in the Appendix.)

The recommendations fell into three general areas:

- **Regulatory Improvements**: Examining existing statutory provisions,
administrative rules and other state policies related to the regulatory process and recommending actions or legislative changes needed to ensure efficient and cost effective regulations.

- **Increased Compliance:** Finding ways to reduce the negative impact of state rules and regulations while assuring that smaller businesses achieve regulatory compliance without incurring unnecessary expense or inconvenience.

- **Regulatory Impact Analysis:** Working with state agencies to find better ways to analyze the impact of their regulatory actions on small entities and to determine if a rule will have a significant economic impact on a substantial number of small businesses.

**Cost of Regulations**
A heavy cost is attached to regulatory compliance, especially for small firms. A recent study done for SBA’s Office of Advocacy found that, firms employing fewer than 20 employees face an total annual regulatory burden of $6,975 per employee, a burden nearly 60 percent above that facing a firm employing over 500 employees.

The findings of the study also reveal that the disproportionate cost burden on small firms is particularly stark for the manufacturing sector. In that sector the cost per employee for small manufacturers is more than double the cost for medium-size and large firms.

This cost disadvantage facing small manufacturing business is driven largely by compliance with environmental regulations (Figure 16). In fact, for firms of less than 20
employees, environmental compliance costs are only slightly less than the cost of compliance for all other regulations combined (including taxes).

**Energy Needs**

Cost, availability and reliability of energy are paramount to industrial needs. Because of issues of deregulation and political complacency, electric power has resurfaced as an influential location variable. Here, largely due to regulatory constraints, Wisconsin has built no major, new generation or transmission facilities in the last two decades.

**Cost**

Wisconsin’s electrical energy costs, once among the most competitive and stable in the Nation, are now rising rapidly. Since the mid ’90’s, Wisconsin’s electrical energy costs have been rising as fast as inflation, whereas in the preceding 15 years they were not.

**Availability**

Wisconsin is isolated from much of the national electrical grid with only four interstate transmission lines. Both Michigan and Minnesota have more such lines.

**Reliability**

According to the Wisconsin Environmental Initiative, “Our aging energy infrastructure needs to be upgraded and enhanced in order to provide energy reliably…”

**Wood Energy Use**

Wood is one of Wisconsin's most abundant renewable energy resources. About four million tons of wood are burned annually for energy, half for residential heating, and the other half in commercial and industrial wood energy systems.

The paper industry cogenerates an estimated 4,185 megawatts of electricity annually — more than the output from several power plants — further helping reduce the amount that needs to be produced by electric-generating utilities. (WI Paper Council) Other than air pollution particulate and ash disposal problems, the major drawback to additional cogeneration capacity is the cost. Currently, excess electricity generated on-site is required to be purchased by utilities. The current purchase price is about 4.5 cents per kilowatt, compared to about 8 cents per kilowatt to produce.

On a national basis, the paper and allied products industry is the third largest energy-using group. But it is far and away the largest self-generator of electricity; over half of total fuel and electricity use is self-generated (primarily from spent pulping liquors, wood residues, and bark).

In fact, in Wisconsin over 50% of all renewable energy comes from wood. Wood is easily the most significant renewable resource used. Figure 17.
While half of this wood use is for residential purposes, 43% of the total is for industrial purposes. The major users of this wood energy are, not surprisingly, the forest products companies themselves. Issues of cost availability and disposal make this use a preferred alternative and releases other energy sources for other uses.

Business Climate Improvement Recommendations

Once touted for its progressive policy–making and competitive business climate, Wisconsin’s reputation has suffered recently. Environmental regulations are viewed as overly complex, punitive in administration, non-science-based and do not consider the costs of being untimely. Additionally, Wisconsin’s business climate had not kept up with other states, which have been constantly evolving their tax structures.

The need for improvement of Wisconsin’s business climate, especially as it pertains to the forest products industry, has not gone completely unnoticed. Recently, some very significant changes have occurred while some other needed changes have not.

Recent Significant Changes

Business Tax Improvements: In recognition of the need for Wisconsin to make changes to compete with other states and to help the state emerge from the recession, some major business tax changes have been proposed and adopted.

- **Single factor apportionment (Corporate Income Tax)** - With a single sales factor apportionment, corporations would be taxed based only on sales instead of the current combination of sales, property and payroll. Most of the surrounding states (Iowa, Missouri, Nebraska, Michigan, Illinois, Minnesota), have either fully adopted or are phasing in this formula. The single sales factor apportionment became law in Wisconsin in August 2003. This has important implications for Wisconsin’s forest product companies with multi-state locations.

- **Sales and use tax exemption for energy used in manufacturing** - The Wisconsin Paper Council recommended that Wisconsin law be changed to convert the tax credit for energy used in manufacturing to a sales tax exemption. Paper production is extremely energy intensive as is some other Wisconsin manufacturing. Under current law, tax credits, which were allowed to be carried forward for 15 years, were accumulating to excessive amounts.
since they often exceeded tax liability. Most states provide such an exemption. This change was subsequently enacted into law in December 2003.

Energy Policy Improvements: The Wisconsin Paper Council indicated that cost, availability and reliability of energy were paramount to their industrial needs. Economic developers have echoed this need for business in general. This issue has recently been significantly addressed by providing for expedited approval for power plants and transmission lines, approving a new major transmission source into central Wisconsin and general recognition of Wisconsin’s energy shortfall (Wisconsin Acts 31 and 89 and Public Service Commission (PSC) approval of the Arrowhead-Weston transmission line in the western part of the state).

Small Business Regulatory Reform: Wisconsin’s forest products industry is comprised of a large number of small firms. Small businesses often bear a disproportionate regulatory compliance burden and typically operate on small budgets. There have been several legislative proposals to revitalize the state’s Regulatory Flexibility Act and to refocus agency efforts on the cost impact of regulations on small business as well as customer service. These bills have also provided for amnesty for admitted noncompliance. This last feature is especially important, since over 90% of small business owners admit that it is impossible for them to fully know or understand the regulations. A bill addressing these small business concerns was recently signed into law.

Environmental Regulatory Reform: Environmental regulatory reform is currently being advocated by a wide group of proponents. These groups have requested efforts to streamline, standardize, clarify, be collaborative, be cost-effective, be science-based, identify accountability and provide for an internal appeals process within the regulations.

To address this situation, a broad coalition of interests (including forest products companies) working with legislative leadership proposed an omnibus reform initiative entitled the Job Creation Act of 2003, which was subsequently enacted on January 22, 2004 (2003 Wisconsin Act 118). The Job Creation Act of 2003 included many of the Governor’s ideas from his “Grow Wisconsin” proposal. It focused on regulatory accountability by making the following major changes:

- **Clarifying Chapter 227 (Rulemaking Process)** procedures to assure the regulated community has a fair opportunity to challenge agency actions that adversely affect their businesses. One of the significant changes is allowing affected parties to petition for an Economic Impact Report on regulatory proposals.

- **Modifying Chapter 285 (DNR Air Program)** to assure timely issuance of air permits, and otherwise streamline and consolidate administrative hurdles impeding business expansion in Wisconsin. Air Permit Streamlining -This is without question the single largest issue for manufacturers looking to expand or build in Wisconsin. A construction air permit must be obtained before any soil is disturbed for construction and timeliness is important. The Act also provides a clarification of when DNR can exceed Federal Standards.
- **Modifying Chapter 30 (DNR Navigable Waters)** to streamline permit requirements currently impeding construction and related economic development activities.

Some additional highlights of the omnibus regulatory reform bill included key provisions which arose out of review of neighboring state programs, including Minnesota and Michigan. For example:

- **Registration permits** are simple, one-page permits for facilities whose actual emissions are low, and which are not subject to federal regulations. Modeled after MN’s program, the Act creates a registration permit program for small sources to avoid needless permit negotiations on simple processes.

- **General Permits.** (Used for non-unique sources and emission units, i.e., standardized) Consistent with MN and MI programs, the Act expands the use of general permits for similar activities conducted by multiple companies.

- **Construction Permit Waivers.** Modeled after MI’s program, the Act provides DNR with general authority to waive construction permit requirements, including situations where the pre-construction permit presents an undue hardship.

There is a significant need for further refinement of preliminary assessment of neighboring state programs. For example, the statutory provisions provide DNR with general authority and certain parameters, but the real work will be in drafting implementing rules and designing specific streamlined permits such as registration and general permits. In that regard, Act 118 directs DNR to make permit streamlining a priority; to continually assess its permit program for opportunities to consolidate permits, expand exemptions and make available registration/general permits and construction permit waivers.

**Business Climate Changes Still Needed**

**Financial Incentives:** As one of Wisconsin’s major industry clusters, the forest products industry has yet to receive the recognition and focus of financial incentives which have been directed toward other major industries in the state. Three possible recommendations are:

- **Forest certification** has been slow to develop in the United States. There has been little economic incentive for the industries to do it. Research has shown that the companies cannot increase their prices to cover costs, but certification may help them gain or maintain market share. More recently, Time Warner has told its paper suppliers that they will only buy certified paper in the future. Both Domtar and Stora-Enso have asked the state to study the possibility of certifying state, county, and tax law forestlands. If state and county lands were certified, more than 23% of Wisconsin’s forestland would be certified. Adding forest tax law land to the certification roles would bring the total to 40% providing the volumes needed to help Wisconsin companies gain market share.

- **Forest Product Diversification Grant Program** - Currently the Wisconsin Department of Agriculture has a very successful program titled “Agricultural
Development and Diversification Grant Program.” This program offers grants to small business up to $50,000 for applied projects that will help them diversify or expand their markets. Looking at the past projects funded by this program, most were around $12,000 for projects that helped companies leverage other funds to open new markets for their product. This program had an allocation of $380,000 for 2003. A similar program would be very beneficial to use as a method to help entrepreneurs in the forest industries get small business started or to grow them to the next level. This type of effort can be very successful in helping a small company grow from 4 to 6 employees to 30 to 60 employees. One of the keys to this type of program being successful is being flexible on the type of projects funded. Because of increased international competition in the industry, such a program could be useful to develop value-added niche markets.

- **Targeting** - Make sure the forest products industries are explicitly considered in all other major financial incentive programs in the state.

**Energy:** Efforts to promote and subsidize renewable energy projects are urged to examine the important role of wood in providing energy.

**Environmental Regulatory Reform:** Due to recent events in Wisconsin, especially political and economic changes, too much of the focus has been deflected from the product or ultimate reason for doing certain governmental activities to the process of doing them. The ultimate goal is to help businesses be profitable, thus providing jobs and income, while keeping the environment clean for citizens to be healthy and enjoy. This duality is not reflected in the current standards.

Plus, the reach and number of regulations continues to grow in the face of diminishing governmental resources. The “command and control” regulatory strategies of the past are becoming increasingly ineffective. Collaborative efforts provide the promise of major achievements.

How would a collaboratory approach help relieve regulatory agency understaffing? The “80-20 rule,” or Pareto Principle, from sociology states that a small proportion of causes are responsible for a large proportion of results. Applied to environmental regulation, a small number of bad actors require a large amount of effort. Consequently, it is good management, getting the most results from the least effort, to focus on this group. This implies a two-tier system; with a less supervised tier for those companies, which have demonstrated reliability. Originally known as “Green Tier” (now called the Environmental Results Program), such legislation was proposed by the ad hoc advisory committee of business, agriculture, municipalities and environmentalists convened by DNR. DNR has also promised to benchmark with other states, particularly those running successful, environmentally effective programs. This is part of the basis for Stage II of the management changes being promised for DNR. These management changes should also examine the relationship between hiring practices, training and education of staff in order to achieve the desired results.
There is a successful precedent for collaborative administration of a regulatory program. Wisconsin’s Workers’ Compensation Program is held as a national model in its administration, in the operation of the Workers’ Compensation Advisory Council, in the scope and amounts of benefits provided, and in its abilities to minimize the transactional cost involved in settling claims. The system works because no one special interest group controls the process or can pervert the mechanism which, in order to survive, must evolve through consensus on the part of both labor and management. Applied to environmental issues this may be more difficult. As the recent Legislative Audit Bureau report has stated, “we found that DNR did not create the advisory group required by 1999 Wisconsin Act 9. According to DNR officials, invitations were sent to both industry and environmental groups; however, because environmental groups chose not to participate, DNR chose not to create the advisory group.”

**Pollution Prevention:** Most of today’s leading companies have internalized environmental responsibility and practice internal standard setting and oversight, which prevents noncompliance and improves environmental performance. This is done through the use of Environmental Management Systems (EMS’s). ISO 14001 is one such EMS. By helping to identify the causes of environmental problems and then eliminate them, an EMS can help save money while providing market benefits for the companies. The ability to use this approach requires collaborative agreements between the regulating agency and the company. Wisconsin has an experimental program, called the Environmental Cooperation Pilot Program whereby compliance agreements have been signed with six companies. The Environmental Cooperation Pilot Program (ECPP) promotes innovative environmental regulatory methods including whole-facility regulation. One of the collaborators is a paper company. Hopefully, this program can be extrapolated to others.

There is also an opportunity for trade associations to get involved in assisting their members with permit compliance. The Great Printers Project resulted in a joint printers/WDNR effort on forms simplification, standardization, consolidated reporting, increased compliance and pollution prevention. Similarly, the Auto and Scrap Recycling Associations have worked proactively with their members and the DNR to develop Cooperative Compliance Programs to establish industry-wide approaches to reducing or eliminating storm water contamination. These programs provide group training, foster information sharing, and promote best management practices. Traditionally, Wisconsin’s forest product companies have been fiercely independent. However, there are benefits to collaborative efforts, even if they are only done on an ad hoc basis.

**Information/Education/Advocacy:** The ongoing role of education and provision of information can help to alleviate some of the mystery and adversarial nature of dealings between business and regulatory bodies. There are resources available to help business deal with the ever increasing scope of government regulations. This information and assistance is most often difficult to find and inadequately publicized. Those institutions providing the services have to consider education and information as a never-ending process. Similarly, trade association and/or ad hoc industry groups need to undertake information discovery and dissemination as major projects. Five very beneficial resources deserve to be mentioned:
• **WDNR’s Permit Primer** - This interactive web site takes you through step-by-step, the various DNR programs to 1) determine what environmental requirements apply to you including if you may need any environmental permits and how to get them and 2) provide ways to save money and resources through pollution prevention, waste minimization, water conservation and resource protection. (General Permit Primer Information: 715-365-8936)

• **Wisconsin’s Business Wizard** - Using a series of five question-and-answer web pages, the Wizard provides customized information to help you start and operate a Wisconsin-based business. All regulations except environmental are covered. (1-800-435-7287) (or 1-800-HELP BUSines as a reminder)

• **WDNR’s Bureau of Cooperative Environmental Assistance** works with companies to meet and exceed environmental performance requirements through innovative, non-regulatory programs. There are industry specialists available for 13 sectors, one of which is wood products. (Wood Products Sector Specialist: 715-365-8936)

• **Commerce’s Small Business Clean Air Assistance Program** provides small businesses with information on air pollution regulations and other environmental issues and helps with air permits and compliance requirements. Fact sheets and other program publications are available electronically. Especially useful is the New or Existing Business Surveys, which help you, determine which environmental regulations affect you. (Clean Air Ombudsman: 608-267-9384)

• **WDNR’s Regulatory Performance Report and Permit Tracking Report on their internet site and Customer Feedback Line (608-266-0158)** are new initiatives which will go a long way toward establishing a collaborative dialog with its customers and consumers.

These efforts are all relatively new and will become increasingly useful, especially for small businesses, as they are modified with industry feedback. Given the amount of time involved in initial permit review, including resubmissions, another fruitful area of standardization would seem to include defining the material required for submission. The State of Minnesota has formally undertaken an attempt to come up with a single, comprehensive environmental permit.

• **Center for Sustainable Forestry Business** - The future of Wisconsin’s forest-based industry is not assured because of issues such as globalization, forest fragmentation, mergers, and competition. The Center for Sustainable Forestry Business (CSFB) has been proposed to facilitate solving policy, business, research and development issues that will enable Wisconsin’s forest industry, cluster businesses to be sustainable, stop the loss of high paying jobs and foster the creation of new jobs. The primary purpose of the “Center” will be to facilitate solving related problems through interaction between university, government and industry.
References


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Wisconsin Legislative Audit Bureau, February 2004, “An Evaluation Air management Programs Department of Natural Resources,” (Report 04-1).

Wisconsin Legislative Fiscal Bureau, January 2003, “State Economic Development Programs Administered by the Department of Commerce,” (Informational Paper 82)

Appendices

Basic Business Taxes

Business Tax Incentives

Direct financial Incentives

Update – Economic Development Incentives

Big Deals of 2003

The 2002 Task Force on Small Business Regulatory Reform Recommendations

Environmental Regulatory Reform Summary (Act 118)
Basic Business Taxes

Corporate Tax

Michigan:
The state single business tax is a modified value-added tax imposed on taxpayers engaged in business in the state. The tax rate was 1.9 percent in 2002. The rate is scheduled to decline 0.1 percentage point per year until the tax’s planned elimination in the year 2010. The tax is applied to a firm's adjusted tax base, which includes business income, interest expense, compensation, depreciation, and other adjustments allocated to Michigan. The first $45,000 is exempt. An investment tax credit for capital purchases located in Michigan has been available as of 2000.

Certain small businesses may elect to pay a 2 percent tax on adjusted business income rather than the standard single business tax. This rate will decline in proportion to the single business tax phase-out.

Minnesota:
Corporations pay a tax rate of 9.8 percent of net taxable income in the state. Income is apportioned with sales weighted at 75 percent, and property and payroll weighted at 12.5 percent each.

Wisconsin:
All businesses with income derived from Wisconsin sources are subject to either the 7.9 percent corporate income tax or the 7.9 percent franchise tax. Both taxes are based on net income and have the same rate structure. The only difference is that interest from federal obligations is subject to the franchise tax but not income tax.

The tax is determined by calculating income from all sources, subtracting the exclusions and deductions, allocating and apportioning the net income of the multistate corporations, applying the flat tax rate, and allowing for any credits. Federal income taxes paid are not deductible.

Income is apportioned 100 percent to sales.

Sales and Use Taxes

Michigan:
Has a 6 percent state sales tax.

Minnesota:
The general statewide sales and use tax rate is 6.5 percent; seven communities have legislative authorization to impose an additional tax ranging from 0.5 percent to 1 percent.

Wisconsin:
A 5 percent state sales tax is levied on retailers for selling, renting, or leasing certain tangible properties and for selling or furnishing certain retail services. In addition, 49 counties have a 0.5 percent county sales tax. A 5 percent use tax is imposed on the use, consumption, or storage of tangible personal property or taxable retail services on which a Wisconsin sales or use tax has not previously been paid. There is a retailers’ discount of 2 percent of the first $10,000 of state and county sales tax payable; 1 percent of the second $10,000; and 0.5 percent of any amount over $20,000.

Property Tax

Michigan:
The state has reformed the property tax funding system for school operations. Under the new system, businesses generally pay 24 mills in school property taxes.

Property taxes in Michigan are levied at the state and local levels. The taxable value of property is 50 percent of the current market value. Both real and personal property are subject to taxation. In comparing Michigan's property taxes to those of other states, Michigan's relative competitiveness improves as real property becomes a larger portion of the total property assets of a firm, since some states that tax only real property impose a much higher rate.
**Minnesota:**
Local governments tax all real property not specifically exempted. Most commercial and industrial property is assessed at 1.5 percent of the first $150,000 of market value and 2 percent of the remainder. Varying tax rates are set by localities.

**Wisconsin:**
Both real and tangible personal property, with specific exceptions, are subject to property taxation at the local level. Property is assessed at the local level by local assessors, except for the property of manufacturers, which is assessed by the Wisconsin Department of Revenue. Real property is assessed in the taxing district where it is located. Personal property is assessed either where it is intended to be kept or located, or where the owner or person in possession resides.

Intangible personal property and certain motor vehicles, trucks, trailers, and aircraft are exempt from the general property tax because they are subject to special taxes. Other special taxation items are public utilities, iron ore concentrates, vessels employed in interstate commerce, coal docks, grain elevators, scrap steel docks, and forest croplands. Property taxes are administered by local taxing officials.
Business Tax Incentives

Sales and Use Taxes

Michigan
Michigan allows no local sales tax. Many industrial and consumer goods and transactions are exempt from Michigan sales taxes: food, prescription drugs, medical devices, newspapers and periodicals, water, and commercial vessels. Also exempt are sales for resale, property in interstate or foreign commerce, computers used in industrial processing, custom computer software, information services, air and water pollution-control facilities, and energy fuels. Machinery and materials used directly in manufacturing are also exempt.

Michigan’s sales-and-use tax acts exempt tangible personal property when that property is used or consumed in industrial processing. For periods after March 31, 1999, industrial processing includes research and experimental activities. Any person may qualify for an exemption under industrial processing for research or experimental activities if specific criteria are met.

Machinery and equipment used in manufacturing, intrastate telephone and telegraph service, and certain commercial vessels are exempt from sales and use taxes.

Pollution-control equipment is exempt from sales and use taxes. Tangible personal property used or consumed in industrial processing, sales of water, and certain sales to radio and television stations are exempt from sales and use tax.

Minnesota
Capital equipment and machinery for manufacturers and special tooling are exempt. In addition to the sales tax exemption for manufacturers’ capital equipment, sales of property delivered outside the state are exempt from sales tax under certain conditions. An exemption from sales and use tax applies to commercial aircraft and flight equipment. Materials used or consumed in agricultural, industrial, or services production for retail sale and petroleum products subject to other excise taxes are exempt from sales and use taxes. An exemption from sales and use taxation is allowed on gross receipts from the sale of equipment used for processing solid or hazardous waste.

Wisconsin
Pollution-control equipment is exempt from sales and use taxes.

Sales to a contract or common carrier, if the seller ships the property via the carrier to a point outside the state under a bill of lading, are exempt from sales taxation. Property purchased from out of state is also exempt from sales tax.

Tangible personal property that becomes part of a waste treatment facility is exempt from sales and use taxation. The exemption extends to chemicals and supplies and replacement parts for the facility.

Sales and use taxation does not apply to manufacturers’ machinery and equipment; motor vehicles and truck bodies sold to nonresidents; equipment used to produce maple syrup; railroad rolling stock, accessories and parts, and fuel; motor vehicles purchased by common or contract carriers; aircraft and accessories sold to nonresidents for use outside the state; certain barges and vessels; and central telephone company equipment.

Fuel and electricity used in manufacturing is exempt from sales and use taxes.

An exemption from sales and use taxation is allowed for property that becomes a component part in the manufacture of property for sale, excluding fuel or electricity; fuel used to produce gas, steam, or electric energy; water delivered through the mains; motor or aviation fuels subject to the fuels tax; and containers and packaging materials for meat.

Property Taxes

Michigan
Michigan’s industrial property tax abatement provides incentives to renovate and expand aging manufacturing plants or to build new plants in Michigan. Industrial plants eligible for tax abatement are those that primarily manufacture or process goods or materials by physical change. Related facilities of Michigan manufacturers such as offices, engineering, research and development, warehousing, or parts distribution are also eligible for exemption. Recent legislation has expanded the definition of “industrial property” to include high-technology activity, such as advanced computing, advanced materials, biotechnology, electronic-device technology, engineering or laboratory testing, medical-device technology, product research and development.
Industrial property tax abatements are used to spur renovation and expansion of aging manufacturing plants and new plant construction. Abatements are approved by the local units of government and issued by the state, reducing property tax on buildings, machinery and equipment by roughly 50% for new facilities and 100% for renovation projects. They are available for up to 12 years everywhere in the state.

Pollution-control facilities may be exempt from state real and personal property taxes.

All business inventories are exempt from local ad valorem property taxes.

An exemption from personal property is allowed for products arriving from out of state and products destined for out of state.

A property tax exemption is provided for certain short-lived tools, wood-harvesting equipment, farm implements, and registered motor vehicles.

Raw materials and solid or liquid sugar owned by processors are exempt from local property taxation.

**Minnesota**

Personal property is generally exempt from the property tax. Property tax abatements can be granted for eligible economic development projects.

Personal property, such as inventories, stocks of merchandise, and most machinery and equipment installed for business purposes, is exempt from property taxation. Tax-increment financing is common and tax abatements are available on a limited basis. Certain property used for pollution-control purposes is exempt from property taxation.

**Wisconsin**

No property tax is imposed on manufacturing machinery and equipment, mechanics’ tools, and farm machinery and tools stocked by retailers. And no property tax is imposed on computers used in business.

Business inventories are exempt from property taxation.

Approved facilities for the treatment of industrial wastes and air pollution are exempt from property taxation.

Solar and wind energy systems are exempt from property taxation.

**Corporate Tax**

**Michigan**

The tax rate was 1.9 percent in 2002. The rate is scheduled to decline 0.1 percentage point per year until the tax's planned elimination in the year 2010. An investment tax credit for capital purchases located in Michigan has been available as of 2000.

**Minnesota**

A deduction against gross income is allowed for research and development expenses. A credit against the tax is allowed for a percentage of qualified expenditures made within Minnesota.

**Wisconsin**

Wisconsin has converted from a three factor apportionment formula to a single sales factor.

Qualified research or experimentation expenditures not chargeable to capital accounts are deductible from the corporate income tax or the franchise tax. Such expenses that are chargeable to capital accounts may be treated as deferred expenses deductible over a period of not less than 60 months.

**Special Programs**

**Michigan**

**Job creation tax credits:**

The Michigan Economic Growth Authority (MEGA) grants tax breaks for up to 20 years to some businesses that expand in or move into Michigan. Companies engaged in manufacturing, research and development, wholesale trade, office operations or high-technology businesses that are financially sound and have financially sound proposed plans are eligible for a tax credit against the SBT.

This is a refundable tax credit based on the incremental SBT liability attributable to an expansion or new location, and the amount of personal income tax attributable to new jobs being created. The maximum amount that can be awarded is based on the total wages paid at the new facility multiplied by 4.2 percent, plus the business tax liability resulting from the new facility. Each credit may be awarded for up to 20 years
and 100 percent of the amount attributed to the project.

To be eligible for a regular MEGA tax break, an in-state expansion must create at least 75 new full-time jobs at the project's facility, while an out-of-state business locating in Michigan must create at least 150. For a high-technology MEGA, the expansion or location in Michigan must create at least five new full-time jobs and 25 new full-time jobs within five years. Other eligibility criteria apply as well.

**Renaissance Zones:**
Michigan's Renaissance Zones are 164 geographic areas of the state designated as virtually free of state and local taxes for any business or resident presently in, or moving into, a zone. They are designed to provide selected communities with the most powerful market-based incentive — no taxes — to spur new jobs and investment. The 24 zones, consisting of 10 urban, seven rural, three former military bases, and three agricultural processing Renaissance Zones, are scattered around the state.

The duration of the zone designations ranges from 10 to 15 years, beginning as early as January 1, 1997. In all cases, the tax relief will be phased out in 25 percent increments over the last three years of the program.

**Brownfield tax incentives:**
Michigan's brownfield law is designed to encourage and assist developers who want to return property to productive use more quickly and at a lower cost than before, while still protecting human health and natural resources. Owners and operators of contaminated sites are no longer required to pay for cleanup actions unless they caused the contamination. Flexible cleanup standards give developers the option of proposing a solution to historical contamination based on future use of the property.

To promote redevelopment of brownfield sites, Michigan allows qualified businesses to claim a credit against SBT liability equal to 10 percent of the investment made on a brownfield site. Total credit per eligible investment is $1 million.

Under expansions to the brownfield law, credits are now granted per project. These credits, which can go to lessee or owner, can be as much as $30 million, but are limited in the number that can be issued; i.e., up to 15 credits per year can exceed $1 million. In addition, projects in 88 urban core communities around the state may receive credits for functionally obsolete, blighted, or contaminated property under the brownfield credit program.

The brownfield tax increment-financing feature has been expanded to allow not only for cleanup of contamination, but also demolition of structures, site preparation, and infrastructure improvements.

**Minnesota**

**Job Opportunity Building Program:**
Tax-free zones have been established in the area outside the seven-county Twin Cities metropolitan region, to promote job creation and business development. Businesses locating or expanding in these zones will receive exemption from most taxes for up to 12 years; the zone designations begin January 1, 2004. Tax exemptions include corporate income tax, sales tax on goods and services purchased for use in the zone, and commercial/industrial property taxes; for certain higher-paying positions, the business will receive tax credits for job creation.

**Wisconsin**

**Personal Income Tax**
Capital gains exemption for individuals who sell their businesses, homes, or farms to family members. Sixty percent capital gains exclusion for individuals.
Direct Financial Incentive Program Details

Michigan
Direct Financial Incentives

Site development and infrastructure grants:
Grants for public infrastructure improvements are made available to local communities that have an identified company that can commit up-front to job creation. An award of up to $10,000 for each new job created by the company can be given for 90 percent of the total infrastructure cost.

The Michigan Economic Development Corporation makes grants involving repayments to eligible local communities for prospective development of certified business parks when there is no specific company identified in advance. The fund provides money for public infrastructure improvements (water, sewer, roads).

Tax-exempt bonds:
Industrial Development Revenue Bonds can be used for loans up to $10 million in tax-exempt funds to foster economic development for manufacturing, cogeneration solid waste projects, and solid waste facilities. Bond proceeds can only be used to acquire land, building, and manufacturing equipment. For creditworthy companies only, interest rates normally range between 70 and 80 percent of prime.

Venture capital funds:
Michigan’s venture capital industry is steadily growing and over $2.4 billion is available to fast-growth companies by over 19 private venture capital funds. In 1997, Michigan companies secured approximately $65 million worth of venture capital. The figure shot up to $115 million in 1998 and $126 million in 1999. The year 2000 was a landmark year for venture capital investments in the state, topping $232 million.

Job training programs:
Michigan's Economic Development Job Training (EDJT) Program has been recognized as one of the top state-funded programs in the nation. Each year, the EDJT program provides grant funding to train Michigan’s work force. The program seeks to ensure that Michigan employers have the highly trained technical workers they need to compete in the global economy. The Michigan Economic Development Corporation (MEDC) administers this program. While training is customized to meet specific business needs, most participants are front-line workers who can apply the new knowledge and skills gained from this training to current as well as future jobs.

Existing Michigan businesses and their workers receive the most benefit from this program through an ongoing competitive process. However, the MEDC also expedites grant awards throughout the year to local education and training organizations for employers locating and expanding in Michigan, thereby creating significant numbers of new jobs in the state.

Technology-based initiatives:
Michigan is investing $1 billion over the next 20 years to create the Michigan Life Sciences Corridor.

Michigan’s 11 SmartZones allow municipalities to use tax increment financing for property acquisition infrastructure; business incubators; and other park facilities, management, and marketing. The 11 SmartZones are designed to stimulate the growth of technology-based businesses and jobs by aiding in the creation of recognized clusters of new and emerging businesses. The emerging businesses are primarily focused on commercializing ideas, patents, and other opportunities surrounding university or private institute research and development efforts. SmartZones were established in April 200. Recently, $2.5 million was awarded to six SmartZones to create a network of business accelerators. These business accelerators will provide services such as business-feasibility studies, market analysis, and mentoring to emerging businesses.

Michigan’s Emerging Technology Challenge Fund will help increase the number of commercialization and development opportunities that arise from research and technology developed at Michigan universities. This program will encourage these institutions to develop technology-oriented business initiatives that will help grow our economy. An advisory group consisting of private-sector members will be formed to review applications for the fund. This new program will be funded at $1 million a year for the next three years.

The new $5 million Michigan Growth Capital Fund is a financial catalyst to help develop some of Michigan’s most cutting-edge technological ideas. Eligible uses of the new fund include investments in organizations and programs that create and promote the development of new industry sectors in Michigan;
inducements to attract additional venture capital funds to finance technology development; support organizations, initiatives, or events that promote entrepreneurship; and the support of technology transfer and commercialization programs with universities and the private sector.

Launched in 2001, the LinkMichigan initiative is a plan to transform Michigan’s telecommunications infrastructure into one of the most robust and advanced in the nation. The four-step approach includes leveraging the statewide telecommunications needs to create a high-speed backbone, implementing tax and permit fairness, increasing access to high-speed telecommunication information, and providing community assistance funds for last mile telecommunications solutions.

The NextEnergy initiative is designed to make Michigan a leader in alternative energy technologies, including fuel-cell research. The nucleus of the NextEnergy initiative is the NextEnergy Center that will be located in downtown Detroit. Business and tax advantages will be available for alternative energy companies in Michigan.

**Minnesota**

**Direct Financial Incentives**

**Minnesota Investment Fund:**
Minnesota Investment Fund grants are available to local units of government for development projects that retain or create jobs, stimulate additional private investments in business developments, and increase the local tax base. Grants are available to local units of government and may be used for business loans and/or public improvements needed to support an economic development project. Loan repayment proceeds may be used to finance a revolving loan fund for future economic development projects in the community.

**Business loans:**
The Small Business Development Loan Program, administered through the Minnesota Agriculture and Economic Development Program, enables the approval of loans for business expansions at fixed interest rates. Loans are available for a maximum term of 20 years for land acquisitions, building construction/renovation, and machinery and equipment. Projects must enhance the local tax base and create and/or retain employment opportunities. A new or expanding industrial, manufacturing, or agri-processing business seeking financing for the acquisition of land, buildings, and machinery may apply. The program provides long-term and fixed-rate financing. The loan terms are based on the useful life of the financed assets. Interest rates are based on the market and set at the time of closing.

The Rural Challenge Grant Program provides grants to the six regional organizations that provide loans to new or expanding businesses to stimulate job creation, private investment, and economic growth in the 80 counties outside the Twin Cities area.

**Training programs:**
The Minnesota Job Skills Partnership Board awards grants of up to $400,000 for cooperative education and training projects between Minnesota businesses and educational institutions. The board acts as a catalyst to bring employers with specific education and training needs together with educational institutions that can design programs to meet those needs. The board also operates the Higher Education Loan Program (HELP) through which businesses may be awarded an interest-free loan of up to $250,000 to pay for worker training.

**Enterprise zones:**
The Minnesota Enterprise Zone Program uses state and local tax credits to reduce businesses’ cost of operating in Minnesota. Assisted businesses must be located within established zones on Minnesota’s western border.

Most businesses are eligible for enterprise zone credits. Exceptions include financial institutions, private recreational facilities, public utilities, and most franchise businesses, among others.

**Contamination cleanup:**
Grants are available to development authorities for contamination investigations, development of response action plans, or the cleanup of contamination on sites that will be redeveloped. Both publicly and privately owned sites qualify for this program and application requires a 25 percent local match.
Wisconsin
Direct Financial Incentives

Industrial revenue bonds:
Industrial Revenue Bonds (IRBs) are tax-free bonds issued by municipalities. The proceeds are loaned to new or expanding businesses for development projects. The interest rate is generally below the going prime rate. The federal government sets the annual volume cap for each state. The Wisconsin Department of Commerce’s Volume Cap Allocation Council approves the allocation of volume cap based on the overall economic and community development impact of the proposed projects.

Financing programs:
The Wisconsin Department of Commerce (COMMERCE) has a broad program of financial assistance available to businesses and communities for economic development. These programs cover fixed assets, training, and new product development, with some limited “soft-cost” financing available. For more information, call 1-800-HELP-BUS(iness).

The Major Economic Development Program is designed to assist businesses that will create jobs as they expand or relocate in Wisconsin. The program offers low-interest loans for business development projects creating a significant economic impact.

The Technology Development Fund helps businesses undertake the research and development of new products.

The Customized Labor Training Program is designed to assist companies that are investing in new technologies or manufacturing processes by providing a grant of up to 50 percent of the cost of training employees on the new technologies.

The Business Employees’ Skills Training (BEST) Program was established by the Wisconsin Legislature to help small businesses in industries that are facing severe labor shortages upgrade the skills of their workforce.

Commerce allocates industrial revenue bonding authority to local governments for business expansion and recruitment projects.

The Minority Business Development Fund provides loans or grants to assist in the development of minority-owned companies. Business must be 51 percent controlled, owned, and actively managed by minority group members, and the project must retain or increase employment.

The Rural Economic Development Program helps small rural businesses start up and expand their operations.

The Community Development Block Grant Program provides grants to communities to lend to businesses for job creation and retention activities. These grants can be used for capital assets, or for the public infrastructure necessary to support a business expansion.

The Brownfields Initiative provides grants to persons, business, local development organizations, and municipalities for environmental remediation activities.

The Recycling Loan Program is designed to help finance projects that will use recovered waste as raw material in making products. Eligible activities include equipment and working capital expenses. Eligible applicants include businesses that make a product from one or more eligible materials recovered from recovered waste. The maximum award is 75 percent of eligible project costs.

Enterprise Zones:
The Enterprise Development Zone Program offers tax benefits designed to encourage private-sector investment in economically distressed areas. The maximum amount of tax credits per zone is $3 million.

The Technology Zone Program provides tax incentives to new or expanding businesses involved in Wisconsin's high-technology sectors.

The Agricultural Development Zone (ADZ) program provides tax incentives to new or expanding businesses involved in Wisconsin's agricultural sector.
Updates Economic Development Incentives

**LEGISLATIVE UPDATE - 2003**

**Michigan**

Michigan Economic Dev. Corp.
Don Jakeway, President and CEO, 517-335-4590

www.michigan.org

The legislature and Gov. Jennifer Granholm authorized further Agriculture Renaissance Zones, intended to encourage the growth of food processing companies by offering tax breaks for a period of up to 15 years. Ten new zones added this year bring the total number to 20.

The state granted $10 million to Western Michigan University for its new Biosciences Research and Commercialization Center. The funding was authorized with the express purpose of retaining and fostering the talent and expertise cultivated at Pfizer Corp.

**Minnesota**

Department of Employment & Economic Dev.
Matt Kramer, Commissioner, 800-657-3858

www.Dted.state.mn.us

The new Job Opportunity Building Zones (JOBZ) program creates 10 zones of up to 5,000 acres (2,025 hectares) each where corporate income taxes, property taxes, sales taxes and taxes on investment earnings will be waived. A similar zone program has been set up to support biotech clusters.

A business infrastructure grant program has been established. The state can pay for up to half the cost of public infrastructure for business development projects, capped at $1 million.

The state's workforce development agency has now been merged with its economic development agency, enabling one-stop service to businesses.

**Wisconsin**

Wisconsin Dept. of Commerce
Corey L. Nettles, Secretary, 608-266-7088

www.commerce.state.wi.us

In July 2003, Gov. Jim Doyle signed a budget that raised no new taxes to make up for a $3.2-billion deficit, eliminated 2,300 state jobs and trimmed state agency payroll by $400 million. Among the preserved programs is a road building budget that increased by $77 million, including funding for the $810-million Marquette Interchange reconstruction in Milwaukee, the largest transportation project ever pursued in the state.

Legislation encouraging the siting of power plants was passed, and an executive branch agreement with the Dept. of Natural Resources will cut the regulatory review process for transmission lines in half.

The single sales factor tax law was signed in July. Under the previous law, corporate taxes were calculated based on a combination of payroll, property, and sales. Beginning with a gradual phase-in in fiscal year 2006, corporate taxes will be calculated based only on sales of goods or services. When fully implemented, the single sales factor tax would result in a net tax reduction of $45 million annually.

"Most of the items included in this plan do not require legislation – they simply require a new commitment from government to work harder, faster and smarter to improve the business climate," Gov. Doyle said of his new "Grow Wisconsin" plan, unveiled in September.

Doyle plans to introduce legislation to create a $10-million training fund to offer free training to companies that create significant numbers of new, high paying jobs or need to introduce new technologies to retain workers in a competitive world economy.

From: Site Selection magazine, November 2003
Big Deals of 2003
(The largest deals of 2003 as reported by the various states)

Michigan

DUNDEE, MI-GLOBAL ENGINE ALLIANCE ($115 million in incentives)
DaimlerChrysler is involved in another of this year's Big Deals—the company is in partnership with Hyundai and Mitsubishi in a venture called Global Engine Alliance. The joint venture selected Dundee, MI as the place to build a facility for production of a new family of 4-cylinder aluminum engines to be used in vehicles of all three automotive partners. Reportedly 12 states were trying to win the plant; later, the list was narrowed to Michigan, Indiana, and Illinois.

The deal, which was announced back in February and made official in April, is estimated to represent about $400 million in capital investment. The new, 450,000-square-foot facility is being constructed on a 260-acre site in the 700-acre Village Industrial Park in Dundee. The facility is expected to create 172 new jobs in its first year of operation (2005) and 400 new jobs over a five-year period. Another 736 jobs could be created indirectly, according to a study by the University of Michigan.

In February, the Michigan Economic Development Corporation (MEDC) awarded Single Business Tax credits worth up to approximately $14.4 million over a 20-year period and up to $400,000 in Economic Development Job Training grants to encourage the company to choose Dundee.

Additional assistance for the company includes a 50% abatement of the company's new real and personal property taxes by the village of Dundee, worth an estimated $21.9 million over 12 years; a $5 million Community Development Block Grant to Dundee for land acquisition, site preparation, and improvements to support the new facility; and MEDC support of Dundee's application for road infrastructure improvement grants, valued at $1.6 million, to support the new facility. Governor Jennifer Granholm has stated that the incentive package is worth a total of $115 million, including up to $400,000 in training grants.

Source: Business Facilities Magazine

Minnesota

WYOMING, POLARIS INDUSTRIES ($1.5 million plus 12 years of tax exemptions and an on-site training program)
ST. PAUL, Minn., Nov 6, 2003 (BUSINESS WIRE)(excerpted) -- Governor Tim Pawlenty on Thursday commended the decision by Polaris Industries Inc. to build a new product development facility in Wyoming, MN, saying it illustrates the company's longstanding commitment to providing high-quality jobs in the state.

Construction is expected to begin in 2004, should be completed in late 2005, and is expected to cost about $25 million.
When operating at full capacity, the facility will employ up to 300 people. Some of the jobs will be new positions. The remaining jobs will be filled by consolidating the company's current ATV, personal watercraft and Victory Product Development facilities in Spirit Lake, Iowa and Osceola, Wisconsin as well as some work currently handled in Roseau.

The 600-acre Wyoming site will allow for on-site field-testing, and will provide ample room for future expansion. The city was selected from a list of potential sites following a 16-month national search.

A number of state incentives will help the project along:

-- The entire 620-acre building site is in a pending application for a proposed Jobs Opportunity Building Zones (JOBZ), which if approved would qualify the company for up to 12 years of local and state tax exemptions.

-- Through the Minnesota Investment Fund, the state will provide an interest-free loan of $500,000 for 10 years to help cover the costs of the expansion.

-- Through the Greater Minnesota Business Development Infrastructure Grant Program, the state will provide a grant of $1 million to reroute a county road around the perimeter of the property.

-- Through the Minnesota Job Skills Partnership program, the state will work with Polaris to support a customized training program at the Wyoming facility.

The incentives, said Governor Pawlenty, were critical to the company's decision to expand in Minnesota. "These are exactly the kind of jobs and the high-quality work that we need to invest in and retain for Minnesota to remain competitive and for our economy to grow," he said.

The new facility will be among the first in Minnesota built using Leadership in Energy and Environmental Design (LEED) standards, which aim to reduce or eliminate negative environmental or human impacts in five areas: sustainable site planning; safeguarding water and water efficiency; energy efficiency and renewable energy; conservation of materials and resources; and, indoor environmental quality.

"We're extremely proud of our environmental record and industry-leading innovation in addressing environmental issues with our products," said Tiller. "Naturally, we're extending that mindset to our new product development facility and making sure we build a facility that is good for our people, our customers, our company and our neighbors. This site will be an asset to the area and the state."
Wisconsin

VERONA, WI-EPIC SYSTEMS CORPORATION ($7 million in local infrastructure)
In June, Epic Systems relocated to and expanded in Verona, WI, having previously been located in the capital, Madison. The fast-growing medical software company is building a 500,000-square-foot new headquarters office complex, investing at least $100 million into phase one. The small city of Verona is spending about $7 million for sewer and water improvement and road site improvements to accommodate the Epic campus, using tax incremental financing.

HUDSON, STATE OFFERS $1.15 MILLION TO ATTRACT GM FACILITY ($1.15 in incentives)
HUDSON, Wis.—Wisconsin is providing more than $1 million in financial assistance to entice General Motors Corp. (GM) to move a parts distribution center from Minnesota to Wisconsin. GM's service and parts operation is building a 404,000-square-foot facility at the St. Croix Business Park in Hudson in northwestern Wisconsin. The automaker signed an agreement last month to purchase 30 acres in the business park for the $34 million project.

The Wisconsin Department of Commerce is offering a major economic development grant of $850,000 to the city of Hudson for land acquisition costs. A $300,000 labor-training grant will also be provided to GM for the training of the facility's 140 employees. Minnesota had offered $2.8 million in incentives to GM to keep the facility in Edina, Minn., but the company selected Wisconsin because of much-lower building and operating costs.

The 2002 Task Force on Small Business Regulatory Reform

Changing the Way Wisconsin Does Business

Recommendations:

- Create a centralized, searchable website that will post new rules under development and other regulatory actions underway in all state agencies.

- Write clear-cut rules that will not be open to interpretation. Use simple plain language and reduce cross-referencing to other statutes.

- Restructure current positions to appoint a Small Business Regulatory Coordinator within each agency to act as a contact person on small business regulatory issues and rulemaking activities.

- Create a Small Business Regulatory Review Board to enforce components of the Regulatory Flexibility Act.

- Design compliance schedules that provide additional time for small businesses to understand and comply with new regulations.

- Waive civil penalties for violations whenever a business voluntarily discloses a compliance issue and takes corrective action in a reasonable amount of time.

- Require state agencies to either justify why their regulations, permits and/or licenses are still needed or sunset those rules/requirements.

- Update the Regulatory Flexibility Act, Equal Access to Justice Act and Scope Statement within the administrative rule process to clarify and promote the original intent of the laws.

- Adopt a state version of the Federal Data Quality Act which requires agencies to ensure the quality of the data used when issuing new regulations.

- Allow for the judicial review of any penalties that result from actions or inactions taken by small business owners due to inaccurate or inconsistent information or advice received from state agency personnel.

- Require an agency to include enforcement provisions in the regulations. If the agency does not indicate how the rule will be enforced, the rule will not receive approval from the Small Business Regulatory Review Board.
Environmental Regulatory Reform Summary (Act 118)

Source: Legislative leadership press release - 1/19/03.

The Job Creation Act of 2003 includes sweeping reforms of regulations regarding Rulemaking Procedures (Chapter 227), Air Management (Chapter 285), and Navigable Waters (Chapter 30). The road to this compromise legislation was a long one, starting in early 2003 with listening sessions across the state to identify the key regulatory hurdles facing Wisconsin businesses. The problems and preliminary recommendations were set forth in WMC’s report “The Case for Regulatory Reform in Wisconsin.” Other groups such as WEDA and the Wisconsin Paper Council, along with the Legislature and the Doyle Administration, made regulatory reform a top priority this session. The reforms are summarized below:

**NAVIGABLE WATERS (CHAPTER 30)**

- Permits will be prioritized into three categories
  - Exemptions where appropriate
  - General permits for routine activities with minimal environmental impact
  - A streamlined individual permit process.

- General permits will save DNR and the applicant time and resources
  - Conditions of the permit will be specified by DNR rule
  - An applicant informs the department of a project, and describes how the project conforms to the general permit conditions
  - The applicant may proceed after a 30-day waiting period, unless the department indicates that the project does not meet the conditions.

- Individual permits will be more timely and predictable
  - The DNR will issue a decision within 30 days of holding a public hearing (There is no “presumptive approval” requirement.)
  - Public hearings will take the place of more expensive and time-consuming contested case hearings at the beginning of the process.
  - Contested case hearings, where needed, will occur on a defined timetable

- The two most critical permits for economic development: grading and ponds, will be processed as general permits. Currently these permits take an average of 4 months to process.

- The bank of a navigable waterway (which is the area subject to grading permits) will be clearly defined in a temporary statute, followed by a rulemaking process.

- Replacing small culverts will be exempt, while placing new culverts will be the subject of a general permit.

- The public rights in navigable waters will be protected
  - Contentious permits will continue to receive individual review
    - Stream relocations
    - New dredging activity
● Large piers
● The DNR may require greater scrutiny of all newly-exempt projects and general permits if a site investigation determines there is potential for significant adverse impact to public rights or the environment.
● Projects that go to a contested case hearing will automatically be stayed, and may be put on hold until the hearing is complete.

AIR MANAGEMENT (CHAPTER 285)

Air Permit Streamlining
Obtaining necessary air permits in a timely manner is the single biggest regulatory impediment for manufacturers looking to expand or build in Wisconsin. This bill modifies Chapter 285 to help assure timely permits, and otherwise streamline and consolidate administrative hurdles impeding business expansion. None of these components lower environmental standards – business must still meet all applicable emission standards – but they do reduce unnecessary red tape and related delay and costs companies face when trying to expand or locate in Wisconsin. These provisions would include:

● Direct DNR to promulgate new permit exemptions for sources that do not present any meaningful air quality threat.
● Create a registration permit program for small sources to avoid needless permit negotiations on simple processes.
● Expand the use of general permits for similar activities conducted by multiple companies.
● Allow persons to petition for exemptions, and registration and general permits, and require DNR to act on the petition within 30 days.
● Require DNR to make permit streamlining a priority; to continually assess its permit program for opportunities to consolidate permits, expand exemptions and make available registration/general permits and construction permit waivers; and, to submit a report to the Legislature within 6 months on its permit streamlining efforts, including related draft rules.
● Allow for the construction or installation of equipment prior to obtaining a construction permit in situations where the requirement presents an undue hardship or as otherwise deemed appropriate by DNR. (Permits would still be required for the operation of the equipment.)
● Provide a process that allows businesses to appeal proposed monitoring requirements that they deem unreasonable.
● Require DNR to issue a "completeness determination" within 20 days of permit application submittal that triggers deadlines for permit action. Once an applicant responds, the DNR has 15 days to review the submittal and may not ask for additional information before making the final determination.
● Reduce the length of construction permit deadlines and provide for agency accountability for missed deadlines.
Clarifying when DNR can Exceed Federal Requirements

Provisions in the Jobs Creation Act provide additional clarification of when DNR may exceed federal requirements. These provisions maintain all of DNR’s existing authorities to develop Wisconsin-specific programs, but make clear that such programs should be consistent with federal programs and to the extent possible not put Wisconsin businesses at a competitive disadvantage. The bill would:

- In the absence of federal standards, require DNR prospectively to base its finding of need for state-only hazardous air standards or ambient air quality standards on a public health risk assessment. DNR is also to evaluate and select cost-effective compliance alternatives and compare its proposals to programs in neighboring states.
- When federal hazardous air standards exist, expand current requirement that DNR adopt similar, no more restrictive standards, to require related administrative requirements also be consistent.
- Clarify that if federal hazardous air standards address state-only pollutants, those state pollutants are not also to be regulated by DNR.

Review of State Implementation Plans & Nonattainment Recommendations

Under existing rule-making procedures (Chap. 227), State Implementation Plans (SIPs) and nonattainment designation recommendations are not considered rules despite the fact they create federal mandates to produce dozens of rules and related regulatory programs. Thus, under current law, there is no opportunity for meaningful public or legislative review on these critical policy determinations required by the Clean Air Act.

This bill requires a streamlined process to allow for public and legislative review of proposed SIP revisions and nonattainment designation recommendations, including:

- Require submittal of draft SIPs and related documentation to the Legislature 60 days before they are due EPA, and require DNR to respond to legislative comments. Require a public notice of the availability of these documents.
- Require DNR provide the Legislature with a description of existing Wisconsin SIPs with recommendations on priorities to remove components not required by the federal Clean Air Act. (Generally, these measures would remain as state rules.)
- Require that “Control measures or strategies” for SIPs be promulgated as rules prior to the SIP’s submittal to EPA.
- Provide that existing SIP measures for Total Suspended Particulates (TSP) be removed and enforced only as state requirements.
- Require submittal of DNR recommendations and related documents for nonattainment designations to the Legislature 60 days before they are due EPA, and require DNR to respond to legislative comments. Require a public notice of the availability of these documents.
- Clarify that Wisconsin may not recommend ozone nonattainment designation of any county unless that county violates the federal standard, unless otherwise required by the Clean Air Act.
I. Agency Records
The Job Creation Act requires all agencies to more thoroughly document their justification for rules by expanding analysis and related record requirements. Existing law merely requires the agency "reference" its authority, and provide a "brief" summary of the rule that goes out to hearing. Requiring agencies to provide more comprehensive analysis and justification will help assure thoughtful deliberation by agencies and provide affected parities with a more meaningful opportunity to assess and comment on regulatory proposals. Under the Act, the agency's record would be expanded to include:

- An explanation of the agency’s authority to promulgate the rule.
- A detailed statement explaining the basis and purpose of the proposed rule, including how the proposed rule advances relevant statutory goals or purposes.
- A summary of and preliminary comparison with any existing or proposed federal regulation that is intended to address the activities to be regulated by the rule.
- A summary of the factual data and analytical methodologies that the agency used in support of the proposed rule and how the related findings support the regulatory approach chosen for the rule.
- A comparison of similar rules in adjacent states.
- The analysis and supporting documentation used in preparation of its Small Business Analysis and Economic Impact Reports.
- A summary of public comments to the proposed rule and the agency's response to those comments, and an explanation of any modification made in the proposed rule as a result of public comments or testimony received at a public hearing.

Economic Impact Reports
Creates the right for affected parties to petition for the preparation of an Economic Impact Report on their regulatory proposals. The report would include:

- An analysis and quantification of the problem, including any risks to public health or the environment that the rule is intending to address.
- An analysis and quantification of the economic impact of the rule, including costs reasonably expected to be incurred by the state, governmental units, associations, businesses, and affected individuals.
- An analysis of benefits of the rule, including how the rule reduces the risks and addresses the problems that the rule is intended to address.

In addition, the Act would require certain agencies to prepare fiscal estimates of the anticipated costs that will be incurred by the private sector in complying with the rule, but only if the agency first determines the rule may have a significant fiscal effect on the private sector.
**Miscellaneous Administrative Procedures**

Clarifies other Chapter 227 procedures to assure the regulated community has a fair opportunity to challenge agency actions that adversely affect their businesses. These provisions include:

- Authorize the award of certain costs against parties who bring legally or factually frivolous claims.

- Establish a system for assigning hearing examiners to ensure, to the extent practicable, that hearing examiners are assigned to different subjects on a rotating basis. The system may include the establishment of pools of examiner responsible for certain subjects.

- Prohibit Administrative Law Judges (ALJ) from deciding certain constitutional issues.
Wisconsin Forest Product Industry Challenges

- Forestry Businesses in General
- Pulp and Paper Industry Specific
- Solid Wood and Composites Industry Specific
Wisconsin Forest Products Industry Challenges

The following list of perceived challenges facing the Wisconsin forest products industry are based primarily on five individual discussions between a task force and representatives from three paper mills and two sawmills. (Task force members are listed in the Information Sources section found at the end of this report.) Additional items, particularly in the technical sections, are from the sources listed at the end of this report.

No attempt has been made to determine the relative importance, accuracy or to obtain a consensus of the challenges. Multiple statements on the same subject, such as permits, have been included to provide the array of perceptions held by industry.

For the benefit of the reader we categorized the challenges as to Policy, Business, Capital, Technical, and Education with full recognition that many issues overlap.

Because many of the issues are in controversial areas, a detailed analysis is needed in terms of a clearer definition of the challenge, looking at all aspects and then determining how, when, where, and who should attempt to resolve issues embodied in the challenge.

The task force members believe that many of the resources already exist to deal with these challenges. The next step is to identify these resources.

Forestry Businesses In General

International:

Policy
- Foreign governments absorb some of the workers compensation through government paid benefits like health insurance.
- Foreign entities cannot own public utility power generating facilities in the US.
- Global environmental regulations vary—businesses need a level playing field.
- International Trade Barriers affect market access.
- Disparity between tariffs levied on imports into our domestic market and those imposed by other countries need correcting.

Business
- All facilities surveyed face international competition. The forest products industry is rapidly being integrated into the global economy.
- Effective global marketing strategies are needed for the forest products industry in Wisconsin.
- Increased competition from China in furniture and paperboard, Canada in softwood products, Europe and others in pulp and paperboard, and other forest products from Chile, Scandinavia, New Zealand, and Russia.
• Exchange rates affect multinational company decisions on where to make facility/capacity investments.

Education
• Develop a compilation of successful strategies used by companies to find niche markets and other methods to cope with globalization.

National:
• Present tax laws do not favor investment.
• There is a lack of available fiber from national forests in Wisconsin. (It has been suggested that different national forests are able to provide significantly different quantities of wood for use by industry.)
• It would be helpful to overhaul the Fair Labor Standards Act (FLSA) so that it allows an employer to give incentives to all employees without having to endure onerous calculations to adjust for overtime considerations each time you choose to award bonuses.
• Need to work with Department of Commerce to help solve policy issues.
• The Byrd amendment regarding softwood lumber needs to be reviewed.
• Need a study of present infrastructure to determine what adjustments can be made to improve it. (Need to encourage innovative research to support infrastructure improvements.)
• Need approval of categorical exclusions for small timber sales on federal lands.

State:

Permits:

Policy
• Permits are a major problem due to complexity and long time delays. Some companies believe there is no real way to cooperate with State of Wisconsin permitting agencies. Companies are reluctant to make even small changes because of the permit process.
  --It takes too long to get things done. Supposedly the problem is due to lack of sufficient WDNR staffing to process permits.
  --Timeliness for getting permits appears to be completely out of line with other states.
  --Policy issues at the WDNR make it very difficult to get the job done, and usually result in high capital expenditures.
  --Need to push proactively for fast track permitting.
  --Streamline permitting to allow greater use of coal.
  --Difficulty dealing with the WDNR bureaucracy in Madison.
• Regulatory framework to support the implementation of emerging technologies. (i.e. permit for air emission relating to new combustion technologies or new fuel use)
• Need standardized requirements for reporting of Volatile Organic Compound (VOC) emissions on raw materials and like production units.
• Need innovative state and federal programs that will establish environmental and energy goals for the industry and eliminate regulatory barriers to achieving them.
• Allow permit credits for innovative technology applications (provide motivation to change).
• Need consistent and aligned rules or regulations governing the environmental aspects of the industry
• Determine cost/benefit on rulings for run-off, environmental regulations. (Major issues are storm-water run-off and air emissions.)
• Establish how so called “pollutants” fit into the natural system.
• State emissions regulations should match but not exceed federal regulations.
• Rules should apply through life of asset.
  • Need to encourage innovative research to support infrastructure improvements.
• Need to develop and rewrite environmental policy from a command and control philosophy to a policy based on accomplishment.
• The WDNR and companies need to work together to better understand what the real problems are with permits and try to resolve them. It is important to standardize the process throughout the state.
• One way to speed up the process is to have automatic approval in x number of days if no action is taken by WDNR.
• Develop programs that give industry ownership and incentives to excel in environmental issues.
• Consider a hybrid version of International Standard Organization (ISO) 14000 environmental certification. Such a system, if mutually agreed upon, stands to take industry out of a defensive posture with regards to their environmental track record/history and gives them a chance to be proactive in policy development improvement and implementation.

Business
• There is a disproportionate negative impact of increased regulations on small mills. (High labor and capital costs)

Capital
• High capital costs to meet environmental concerns.

Technical
• Benchmark the permit processes used by other states.
• Need science-based regulations: facts and data to guide effluent quality requirements.
• Need to determine full range of permits involved, air, water, VOC, wetland, etc. and see if any of the permit processes used are examples of success.

Education
• Promote the triple bottom line for industry accounting.
Perceived Wisconsin Business Climate:

Policy
- Wisconsin doesn’t give forestry the kind of attention that it deserves.
- Feeling by some that Wisconsin is anti-business.
- The industry has advocacy groups but no real middlemen to help solve the complex issues facing forestry businesses.
- Wisconsin does not see itself as a manufacturing state.
- Other states are perceived to be pro business and work to make business feel welcomed.
- Current regulations hinder joint co-generation projects. (Viewed as public utility, regulations increase exponentially.)
- The state Family Medical Leave Act (FMLA) needs to be standardized to the Federal Act.

Business
- Need for sharing information on technology advancements—working together as an industry.
- Need more positive public relations and community support.
- It is believed that Wisconsin is less generous with economic polices than other states.
- Need aggressive programs to find means to implement new ideas.

Technical
- It is important that Wisconsin benchmark their present polices with other states such as Michigan, and Minnesota.
- Important for the Center for Technology Transfer (CTT) and the Forest Products Laboratory (FPL) to work together.

Education
- Need for a single organization in the state that could handle the problems and questions of the forest industry.
- Need to develop a comprehensive program to increase awareness of the importance of the wood industry to the state in terms of jobs, tax revenue, community stability, forest health, clean water, wildlife and recreation.

Taxation:

Policy
- Government subsidies and tax breaks vary between states and countries.
- Need exemption from sales tax on fuel and electricity used in manufacturing.
- Need to implement a single sales factor for corporate income tax apportionment.
- Provide solutions to include investment and educational incentives.
- Provide incentives that encourage new research and development (R & D).
- Provide incentives to phase out obsolete or inefficient capacity.
• Provide incentives to existing businesses—taxation, labor support/credits, investment/technology, tariffs/supports.

Business
• Benchmark taxes against other states.
• Benchmark taxes against other countries that compete.

Capital
• Industrial revenue bond investments to build new mills can negatively affect existing mills.

Education
• Complete a study and report on the use of the Wisconsin Forestry mil tax and its positive and negative impacts.

Forest Resources:
Policy
• Need to assure plentiful and suitable timber or other fiber resources for the state industry.
• Fragmentation of the forest is happening at an alarming rate. This affects ability of businesses to procure raw materials. Lack of available wood supply.
• Need to reduce concentration of excessive material in overstocked forests.
• Present legislation has pushed farmers to abandon programs that are aimed to help forestry. Farmers are once again allowing their cattle to graze in the timberlands. (Limited grazing may be helpful if properly done. Bacterial infections are one problem associated with grazing)
• Long time (up to 12 months) taxpayers have to wait for certain tax credits or payments.

Business
• Complete a study of the increase in Wisconsin growing stock, the limits of its availability for utilization, and options.

Technical
• Provide help to Non-Industrial Private Forest (NIPF) landowners in the development of forest management plans and assistance in working with loggers and lumber companies to meet their forest plans.
• Non-industrial woodland is not properly managed.

Education
• Many private woodlands are not managed because of lack of trained foresters to make or approve forest plans. (Continuing need to educate landowners)
• Need to bridge consumer/public disconnect with science/study findings on forest management.
Review the literature and provide a report on possible utilization of each species. For example the use of saw-dry-rip to utilize species that are hard to dry without severe defect. This would help industry to better utilize species that are not commonly used, but are in abundance.

**Energy:**

**Policy**
- Need for reliable energy supplies over time.
- Need to improve the electrical grid inside state and linking Wisconsin to other states, especially to the west. Transmission capacity is becoming a critical concern with deregulation.
- Need regulated pricing mechanism for fixed and interruptible power.
- Price volatility: Improve control of natural gas pricing.
- Need ability to access open energy markets.
- Need to open the generation market to Independent Power Producers.
- Need reliable sources of fuel—renewable, less fossil fuel dependent.
- Dam removal issues: balance environmental improvements versus renewable energy. Hydropower needs to be revived.
- Use of artificial wetlands for final finishing of wastewater treatment (low energy and tertiary treatment).

**Business**
- Need to replace oil and gas for steam production by wood, wind, solar, or other renewable energy source, for building and process heating.
- Ability to remain energy competitive while utilizing aged steam-generating systems.
- Need to review the WDNR report on good sites for district heating and follow-up on opportunities.

**Technical**
- Need clean, economical energy source to produce steam and electricity.
- Need to develop flexibility in fuel uses to optimize facility costs and environmental factors.
- Need to develop a portable cogeneration unit for utilization of dead and down material in fire prone forest areas. Work is progressing on a 1 mw unit that is portable. It should be ready in three years. It will take 3 semis to transport the unit.
Pulp and Paper Industry Specific

Policy
- Lack of siting of energy plants next to pulp mills where the excess steam from the energy plant can be used by the pulp mill.
- Limited supply of spruce and its continued decline in availability.
- Paper companies need incentives and reduced barriers to further produce their own energy.
- Difference in corporate management emphasis: In Europe the emphasis appears to be on strategic planning and profitability, in the US on safety and production.
- Need improved industry collaboration for realistic implementation of environmental controls to satisfy new regulations.
- Reforestation of multiple species/eco-system restoration with as little lost time as possible is needed.

Business
- Investor risk—A group of investors with no assets can invest in an old mill and if the mill goes broke the investment is limited to that single investment. If an established company with assets invests in a mill, the company’s whole asset base is at risk.
- It is reported that softwood bleached Kraft pulp can be made cheaper in Europe and shipped to US than it can be made in Wisconsin.
- Use of biopulping and other new process developments need to be adopted by industry to reduce energy. Possible new incentives need to be considered.
- The difference between commodity and niche marketing needs to be analyzed and the results reported.
- Employees’ inability to multi-task due to contract limitations results in increased outsourcing and increased manufacturing costs.
- Based on long-term biomass management, the pulp and paper industry is contemplating what it should be doing 20 years from now?
- The industry should push for more strategic planning and profitability without decreasing its emphasis on safety and production.
- There is increasing competition from alternative materials such as returnable plastic containers.
- Transactional selling through the internet has made business less personal. There is a big increase in the use of the internet for buying.
- Shut down of non-competitive mills and subsequent loss of employment and tax revenues appear to be increasing.
- State demographics are important. Wisconsin population is not large and somewhat isolated in terms of market areas.
- Transportation is critical. Trucks from Wisconsin in many instances have to return to Wisconsin empty.
- Base labor salaries are lower in Europe than US.
- Non-integrated mill fiber supply is of concern.
- Need efficient collection and utilization of recovered paper from rural areas.
- Need to develop concept of biorefining in which multiple chemicals are produced from biomass.
• Purchased furnishes are contaminated with ground wood and inorganics that cause wide swings in the papermachine operation.
• Need to shut down mills at night, in the summer months, due to energy shortage.

Capital
• Difference between privately and publicly held companies. Need for acceptable return on investment (ROI) for the private companies or available investment funds are placed where they will get the ROI, thus starving existing operations.
• Concern over potential competition from “plastic paper” makes the industry question the wisdom of large capital investments in a conventional paper mill.
• Pulping and papermaking are high capital cost businesses.
• Technology is getting better but more expensive and the costs are not scaled linearly.
• Need chemical recovery systems with lower capital cost.
• Need low capital cost means for removing dissolved solids.

Technical
• Increased postage rates result in customers demanding lower grammage sheets but with all the same properties of present higher grammage sheets.
• Bigger, wider, and more technologically advanced paper machines, over the long run, makes a lower cost product with less labor intensity.
• Need to close up the mill—VOC’s, CO$_2$, SO$_X$, NO$_X$, etc. either through better understanding of chemistry or scrubbing technology.

Resource:
• Need more uniform chip delivery to the digesters
• Need to utilize whole tree resources: produce chemical feedstock and bark utilization.
• Need to be able to utilize lower value wood for papermaking. (e.g. waste wood, non-traditional species)
• Need new approaches for securing wood fiber for the pulp mill
• Need biotechnology research for improved fiber supply.
• Need alternative fibers. (e.g. non-wood)
• Need to develop a plan for the use of all components of the wood resource—waste identification and potential.

Pulping:
• Need an economical method to reduce the high wood yield losses associated with the Kraft pulping process.
• Need new approaches to making paper less sensitive to moisture
• Vessel elements in oak are a product quality problem.
• Red pine is available but is not very good for chemical fiber. How to pulp red pine to improve its properties? Red pine furnish produces a sheet with higher porosity than spruce. Sheet opacity produced from red pine furnishes is low.
• Need pulping chemistries that work at temperatures below 100$^\circ$C.
• Need new pulping and bleaching technology, alternatives to Kraft process: higher yield, faster process, no sulfur.
• Need improved and energy efficient processes for mechanical pulping.
Need to overcome loss of opacity in paper made from alternative fiber sources.

Need efficient energy utilization in refining of chemical pulps.

Need raw material sources that are easy to pulp: low cost, low energy, and have less environmental impact.

Need pulping process that can effectively and efficiently pulp mixed wood species without overcooking some and under cooking others.

Need non-sulfur pulping technologies that will reduce generation of odorous compounds.

Need breakthrough in pulping reaction speed.

Need breakthrough in pulping selectivity.

Need breakthrough in pulping yield.

**Papermaking:**

- Need to improve process knowledge through new sensors, controls and statistical process control techniques.
- Need new approaches to make fiber bonds less sensitive to moisture.
- Need better methods to remove water from the sheet before drying.
- Need new technology such as nanotechnology to provide replacements for coatings and fillers for present papers. Important that replacements be recyclable.
- Need to use less water per ton of product. (Energy and environmental benefits)
- Need to produce better, lower basis weight (grammage) packaging grades through modeling and optimization.
- Need more efficient paper drying.
- Reduce percent of water in stock put on wire. (less pumping)
- Need closed-mill; effluent-free, fiber production systems.
- Need to produce lightweight, high-opacity paper using new technologies.
- Need to develop waterless, non-solvent paper coating. (e.g. powder coating technology)
- Need to research air and water discharges from each specific pulping and papermaking process and mitigate its release to the environment.
- Need to develop waterless paper forming.
- Replace steel moving pieces with titanium pieces, once the process of titanium production equals that of stainless steel.

**Energy/Chemical:**

- Need a standardized benchmark database to evaluate energy efficiency of current and new processes.
- Need in-system energy and raw material recovery.
- Need combustion processes that produce lower emissions with higher heat transfer efficiencies.
- Need replacements for conventional recovery furnace that will maximize energy efficiency and energy production while minimizing critical pollutant emissions, CO₂ emissions, and residuals.
- Need technology to efficiently reclaim waste heat energy from process air and water.
- Need low temperature, low-pressure steam use.
• Need cost effective control technology for coal and wood waste boilers.
• Need low capital cogeneration process that can utilize alternative fuels.
• Explore distributed generation opportunities as well as cogeneration using various fuel sources.
• Improve bark burning (wood wastes) in boilers.
• Need energy production from paper mill residue
• Need clean coal technology—develop better techniques for reduction of pollutants from coal.
• Gasification processes of wood need development to improve energy generating efficiencies.
• Need alternative power supplies and emergency backup powers, Example: fuel cells.

Recycling of Recovered Paper:
• Need to restore recovered paper properties. (Reverse hornification)
• Major recycling problems exist with contaminated recycled old corrugated containers (OCC) particularly wax treated containers.
• Need for new cleaning techniques that integrate easily into existing cleaning systems.
• Need economic ways to remove inorganic material from wood fiber in sludge so that both materials can be reused and landfill costs reduced.
• Need improved and standardized methods for measuring concentration of stickies. (fast, reliable, reproducible, etc.)
• Need usable, filler recovery, from “waste “ paper, system.
• Need beneficial reuse of solid waste—get out of the landfill business.
• Need new value-added products from waste byproducts; sludge, ash, bark.
• Need assistance in recycling waste products or making them inert for easy disposal.
• Need improved efficiencies in fiber recovery to minimize waste production.
• Need conversion technologies that allow paper recycling sludge’s to be converted to ethanol economically.
• Need new processes for recycling highly contaminated papers.
• Need to deal with anionic trash

Environmental:
• Need new methods to treat condensates to allow maximum recycling with minimal environmental and energy impacts.
• Develop facts and data to support land application. (sludge, ash, woodyard run-off)
• Use membrane technology to concentrate bleach plant wastewaters for disposal by incineration, with reuse of the filtrate in the bleach plant or elsewhere.
• Identify and implement a low-cost means for mercury removal from sediments and effluents.
• Need treatment processes that operate reliably.
• Need cost-effective ways to reduce effluent discharges.
• Need to reuse treated wastewater—both industrial and municipal.
• Need lower temperature loadings to receiving steam.
• Need lower nitrogen and phosphorus levels in our effluents.
• Need dissolved organics destruction, i.e. wastewater without secondary treatments.
**Education**

- Need better understanding of real paper brightness needs and public acceptance of lower standards: lower brightness and higher lignin content.
- Need to attract young talent to industry.
- Need new methods to gather, analyze and present environmental data and information to maximize public understanding and minimize misunderstandings.
- Education is problem: some recent hires are unable to read rulers or analog gauges.
- Need education and systematic assault on key energy wastes in pulp and paper industry. Focus on energy dollars per ton, not only tons.
- Need better understanding of energy field and opportunities—big picture.
Solid Wood and Composites Industry Specific

Policy
- Would like to see forestry as a separate department not part of the WDNR. State forester does not have line authority under present system.
- Need uniformity in application of dust control rules. Dust from a parking lot is regulated but dust from a farmer’s field is not.
- Need resolution of dust emissions.
- Change in approach to business development to one in which a company could start up and then the State would come in and identify the permits required to continue versus one requiring permits up front and miles of red tape. Currently it appears easier not to start a business in Wisconsin and move to another state.
- Difficulty with producing certified wood when the suppliers of the logs are not certified. (Economic benefits of certification do not warrant certification costs but certification may result in a gain in market share)
- Need for cooperation between companies. (Anti-trust concerns)
- Ash disposal from boiler plant is a concern.

Business
- Lack of profit in the industry. (Low profit margins are common place)
- Present wood resource is declining in quality and thus it is hard to meet customer’s specifications. Business has been lost due to inability to meet customer specifications due to declining wood quality of resource material.
- Need to gather and assemble data and information on the state of the industry
- Industry needs assistance in working with suppliers, double checking recommendations. (This is a real problem due to some questionable salesmen. One approach is to have seller certify the equipment for x number of years.)
- Aversion to risk taking: Desire to be, “the first to be second,” in the use of new technology. Being a beta site is very expensive.
- Potential employees appear to prefer working in other industries that they perceive provide better opportunities.
- Need to work with suppliers to have the latest technologies demonstrated in your plant.
- Numerous salesmen, all pitching new and improved processing products—what to believe?
- Companies may need to pay more attention to the cleanliness and other aspects of the working environment.
- Competing with the infusion of competitively priced, imported wood products into established markets.
- High cost of transportation.
- Need for new, specialty markets for lesser-used species such as aspen, basswood, hemlock and red maple. (Aspen is in demand in northern part of state.)
- Meeting the demand for chip quality for the paper industry when the raw material quality is decreasing.

Capital
- Wood dust control regulations are expensive.
• Many small companies cannot afford the capital to operate and meet the many regulations now imposed.
• Need new steam generating equipment. (Low pressure steam turbines exist) (For district heating hot water is better than steam in most cases.)
• Cost reduction for recovering preservative chemicals from treated wood. (Can be done but expensive)
• Internal testing of new equipment and processes takes time and money. Need new cost effective methodologies.
• Need improved corrosion resistant materials.

Technical
• Need study of real health risks from wood dust along with the explosive aspects of dusts—wood dust is listed as a carcinogen.
• Need an independent source for technology evaluation—like a consumer’s report.

Resources:
• Need better overall conversion efficiencies of sawmills and other primary manufacturing.
• Need better methods of reclaiming wood fiber. Present debarking methods result in too much fiber loss. (10% loss of the log.) (Technical Advice Available)
• Need low impact logging and ecosystem manipulation. (Technical Advice Available)
• Need tree growing technology.

Processing:
• Optimize log breakdown and grade yield to increase profitability. (Technical Advice Available)
• Difficulty with automating the saw milling of hardwood versus softwoods. (Technical Advice Available)
• Need for optimizers for defects and computer scanners. (Technical Advice Available)
• Develop slicing operation versus sawing to reduce kerf waste. (Veneer slicing is commercial but thick slicing as a replacement for sawing is not.)
• Need continuous process for producing preservative treated wood.
• Use of steam to run process machinery.
• Thin kerf sawing technology can reduce waste. Also include target set reduction. (Technical Advice Available)
• Need new sawing technology like laser cutting, but it must be economical.
• Sawdust retention on boards is a problem with bandsaws. (Vacuum systems)
• Present sensors cannot distinguish between defects in wood and mineral stains. (Under development)
• Need better way to scan logs to increase yield and quality. (Technical Advice Available)
• Variable frequency drives for induction motors.
• Develop optimized rough mill configuration. (Technical Advice Available)
• Need alternative lubricants for saw blades. (Bio-lubricants)
• There are many advances in adhesive technology; a rapidly changing technology. (Both green and dry gluing applications) Need ways to effectively and economically evaluate new adhesives.
• Laser and water jet cutting have been successful but not commercialized for wood.
• The study of supercritical fluids is being conducted at Oregon State.
• Develop a simple methodology for a company to use to evaluate new equipment. Need computer models of new systems to determine robustness.
• Saw, dry and rip should be revisited for converting alternative wood species.

Markets:
• Need uses for solid wastes. (Mill residues)
• The use of alternative species in the construction of wood bridges is a possible outlet.

Energy:
• Need boiler instrumentation to monitor and reduce emissions.
• Need co-firing wood residue with coal in power plants. (Technical Advice Available)

Residues:
• Need to be able to recycle boiler ash.

Education
• Universities are moving more toward forest ecology and away from forestry. (At present the job outlook for forest management graduates is better than for forest ecologists.)
• Some non-industrial private landowners sell trees from their forest lands when they need cash not when it is the best time to sell based on good forest management practices. This results in harvesting pole timber (young trees) rather than wait until they become saw timber. Also, letting trees become over-mature before harvest (if at all) and loss of value in the wood.
• Clearinghouse databases are needed.
• Lack of good employees with the loss of dairy farms.
• Increase awareness of existing solutions such as optimizers for defects and scanners, but they are expensive.
• Need volume/grade/yield studies both at the sawmill level and in secondary processing, utilizing various milling configurations (Technical Advice Available)
• Many people don’t understand the necessity to cut down trees for proper forest management.
• The image of the solid wood industry is poor in the minds of some people.
• The industry needs a skilled labor force.
• Knowledge transfer is limited within the industry.
• Need public relations to show the importance of the forest products industry in Wisconsin.
• Need for better-trained work force, in-house training programs, better interface with present educational entities.
• Need process control, laser scanning demonstrations, and seminars.
• The industry needs to sponsor sawing technology demonstration seminars (to include lubrication advances as well as new saw configurations, blade tipping techniques, etc.) (Technical Advice Available)
• Need to benchmark, but it is hard to compare from mill-to-mill, and in Wisconsin you could guess who was who. Hardwood Manufacturer’s Association (HMA) did a benchmarking study, but it was too general. Yield improvements of as little as 2% have a significant impact on profits. (Confidentiality is essential)
• Worker Training. (Training is available)
• Need to incorporate necessary job skills into standard school curriculum. (e.g. metric and conventional measurements, basic math skills, problem solving, writing skills, importance of regular attendance.)
• Technical skills training—Who will trouble shoot the new computer assisted equipment required to maintain our competitive edge? One respondent said, “I have seen more technology change in the past 5 year than in previous 50” . The wood products industry is experiencing a high-tech evolution.
• “Wood LINKS” training program is a potential solution; it is effective, but it needs help, needs money.
• Need to emphasis the desirability of making a profit rather then increasing quantity of product.
• Study and prepare a report showing the cost saving through application of improved process control and product mix.
• High school shop classes –hands on—are needed.
Information Sources:

One-on-one contacts with three large paper companies and two solid wood companies in Wisconsin.
Wisconsin Pulp and Paper Industry Roadmap (Energy Center of Wisconsin)
Needs Assessment of the Wisconsin Solid Wood & Forestry Industry (Wisconsin Industries of the Future)
Wisconsin Paper Symposium, Green Bay, WI (October 23, 2002)
Legislation and Policy (American Forest and Paper Association)
Meeting: Terry Mace, WDNR, Scott Bowe, UW-Madison, John Koning, Steve Hubbard and Mike LaBissoniere UW-Madison Graduate Students
Meeting: Sue Levan-Green, Adele Olstad, Jean Livingston, John Zerbe, Richard Bergman, and John Koning. (John Dramm, provided written input)
Meeting: John Koning and Bob Ross

Task Force:
Masood Akhtar Center for Technology Transfer
John Koning Forest Products Laboratory
Ted Wegner Forest Products Laboratory