



# Northeastern Paper Mill Towns Economic Trends and Economic Development Responses

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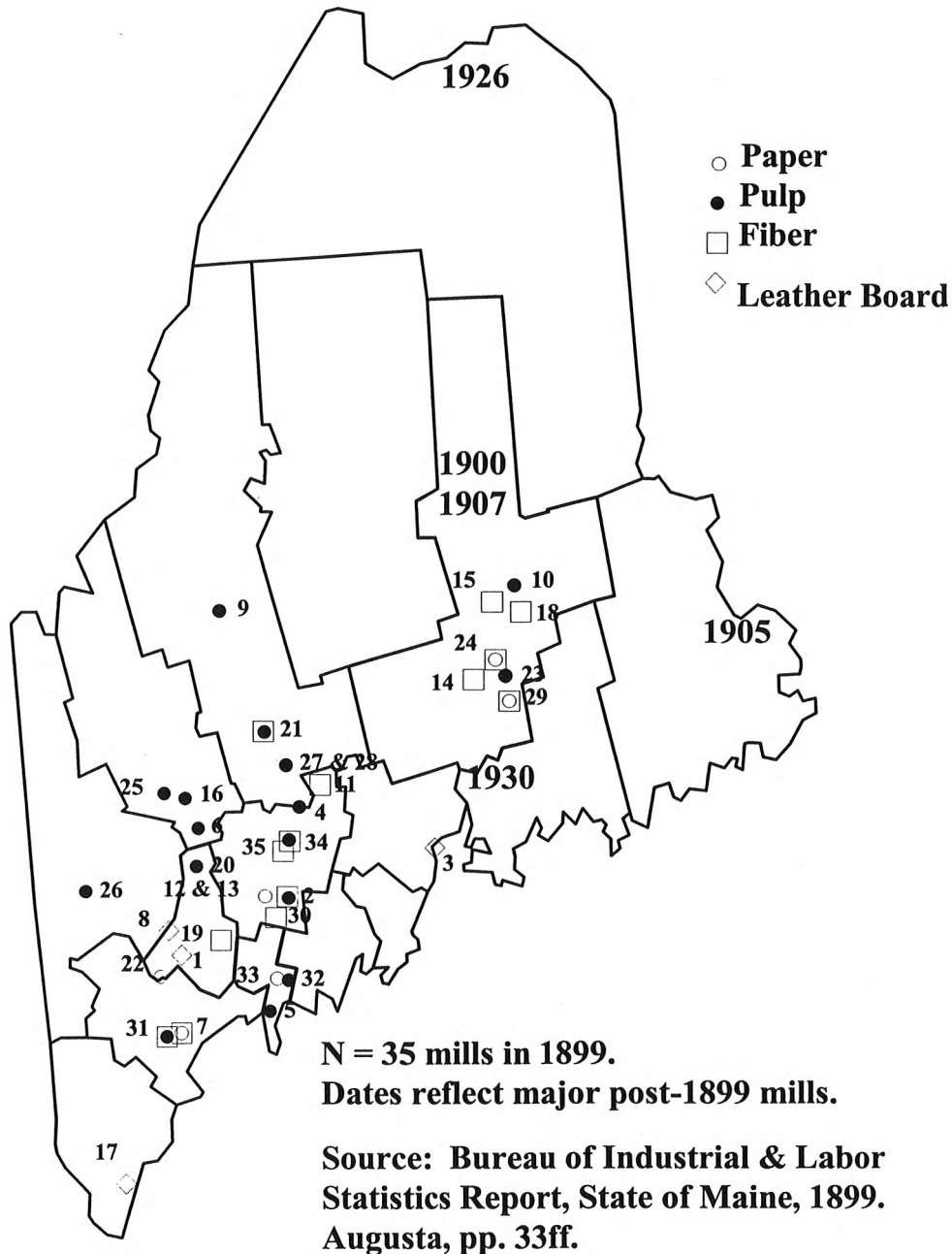


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# Paper, Pulp & Chemical Fiber Mills, 1899



*Frontispiece. A total of 35 pulp and paper mills were listed in the 1899 report of the Maine Bureau of Industrial and Labor Statistics. Some made products that have since disappeared from the marketplace. Several mills now in existence had not yet been built (indicated by dates on the map).*

*Cover photo. After being produced on paper machines up to 12 feet wide, the paper is cut to widths meeting customer needs and prepared for shipment. AFPR photo; mill location unknown. Used by permission of the Forest Historical Society.*

## ACKNOWLEDGMENTS

I appreciate helpful comments from Brad Wyman, Frank O'Hara, and Paul Sendak. This work was conducted for a project funded by the Eastern Maine Development Foundation, administered by Mike Bush, using funds from a legislative appropriation.

## HIGHLIGHTS

1. This report summarizes an informal survey of 26 paper mill towns in the Northeast. It describes their dependence on paper mills, gives examples of job losses from a sample of closings and downsizings, and provides examples of economic development responses.
2. Losses in the paper industry were part of a broad retreat of manufacturing. Since 1980, manufacturing in the five states of New York, Vermont, New Hampshire, Maine, and Pennsylvania fell by 1 million jobs, or by 31%. The job loss in the paper industry (including converting) in these same states was only 28%. And from 1980 to 1998, production of paper and board in the nine Northeastern states increased by 2 million tons.
3. Most of the outright closings of mills were fairly small plants. In only a few cases were the mills producing their own virgin pulp; rather they depended upon recycled fiber and market pulp.
4. More commonly, and especially for large mills, the picture was one of slow, incremental shrinkage of the workforce, often by attrition, that did not generate any sense of crisis or economic development need, even in small towns.
5. In a number of instances, plants that were closed were acquired by new owners, often refurbished, and adapted to new product lines. In the process, they usually lost jobs.
6. Community dependence on mills for tax revenues varied widely, but in six instances (out of 21 for which data were obtained), dependence exceeded 40%. In several cases, the mill valuations had declined significantly in the past decade.
7. Our motivation for this project was to "see what other people are doing" in towns affected by major paper industry downsizings. But, in our brief inquiry, there seem to have been few large-scale efforts undertaken to aid business attraction and local economic development in towns affected by slow, chronic job attrition or even outright shutdowns. Unfortunately, this gives us little to draw from in seeking lessons from other experiences in the region. The efforts and successes experienced in Edmunston seem noteworthy, but it seems to us that there are enough differences in circumstances there that direct borrowing from their experience, without a good deal of additional inquiry, might not be wise.
8. A reasonable guess would be that the lack of response reflected several factors.
  - a. Affected communities were small and lacked organizational capacity.
  - b. Widespread commuting patterns spread the impact of job losses widely, compared to what the situation would have been 50 years ago.
  - c. In small communities it seems that local leaders can make a difference. In many of these sample communities, it is possible that local leaders were not present or available to mobilize responses to the closings.

## INTRODUCTION

This report reviews the reasons for employment downsizings in the paper industry, and their impacts, and then summarizes experiences of selected milltowns in coping with them. In an age of rapid technological advance, mature markets, and intensifying competition, many manufacturing industries are boosting productivity. Often this involves downsizing—of jobs, if not output—at existing plants.

When a small community depends heavily on a single employer, economic adjustment can be difficult when that employer finds it necessary to downsize. In the Northeastern paper industry, many mills were built early in the century, and some date back even farther. In some instances, they face fiber supply or cost limitations, or other constraints that make it difficult to expand to remain competitive. Over the years, such mills may adapt their product lines and upgrade equipment to remain competitive on quality and cost, and to seek new markets. The paper industry has been technically progressive and averages high labor productivity gains annually (Stier and Bengtson 1992). According to the Bureau of Labor Statistics, labor productivity in the paper industry increased by 3.1% per year from 1975 to 1996 (Stat. Abstract of the U.S.).

The Northeast has experienced a broad retreat of manufacturing jobs since 1980: in the five states included in the study, manufacturing jobs fell by

31.4% (see also, U.S. Dept. of HUD 2000). This was a loss of one million jobs (Table 1).

For this paper, we define “milltowns” rather loosely, simply as towns or cities containing a large paper mill. These towns range in size from very small, isolated communities with little other economic activity in their neighborhoods to larger cities with more diverse economies and greater resources for pursuing economic development strategies. (See Figure 1.)

Mill closings are noteworthy events, but they do not necessarily mean shrinkage in overall industry production or economic impact. For example, in Maine, in 1899 there were 35 pulp and/or paper mills. By 1999, there were 18 mills, but those remaining mills produced more than ten times as much tonnage of pulp and paper. Some of the early areas of paper mill development had large numbers of small mills founded from the 1890s to the 1920s. In one such area, the Black River Valley of New York, a local respondent noted that “from Watertown to Lyons Falls, there were 19 papermills. Now four are left.” In many of these areas, shrinkage or shutdowns in other manufacturing industries was significant over the same period. (See Figure 2.)

In the states studied here, the loss of jobs in the paper industry as a whole (including converting) was actually somewhat lower (in percentages) than for manufacturing as a whole (Table 2). Production data are available from different sources, but not for

Table 1. Manufacturing employment, 1980 and 1998.

Year	New York	Pennsylvania	Vermont	New Hampshire	Maine	Total
1980	1,445,100	1,333,227	50,932	116,231	113,726	3,059,216
1981	1,433,300	1,301,066	51,325	116,162	113,571	3,015,424
1982	1,352,500	1,176,725	48,693	112,227	109,584	2,799,729
1983	1,302,400	1,102,746	47,738	112,944	109,589	2,675,417
1984	1,326,300	1,123,357	49,039	122,700	110,626	2,732,022
1985	1,293,100	1,091,582	49,763	121,746	105,807	2,661,998
1986	1,251,600	1,050,012	49,348	116,010	103,850	2,570,820
1987	1,217,900	1,046,800	49,597	116,712	104,326	2,535,335
1988	1,212,500	1,061,227	50,231	117,858	107,963	2,549,779
1989	1,189,000	1,050,286	48,644	113,590	105,470	2,506,990
1990	1,131,400	1,019,748	46,502	105,575	101,879	2,405,104
1991	1,059,600	979,278	44,326	98,608	95,150	2,276,962
1992	1,014,400	951,027	43,728	97,721	92,689	2,199,565
1993	980,500	943,847	43,592	97,109	90,848	2,155,896
1994	956,100	944,862	44,134	100,740	91,394	2,137,230
1995	941,700	940,953	44,929	102,330	91,029	2,120,941
1996	924,400	909,942	45,983	104,284	88,332	2,072,941
1997	920,800	938,227	46,380	106,987	87,916	2,100,310
1998	911,700	943,060	47,325	108,631	87,144	2,097,860
Pct Ch. 1980-98	-36.9	-29.3	-7.1	-6.5	-23.4	-31.4

Source: State labor departments.

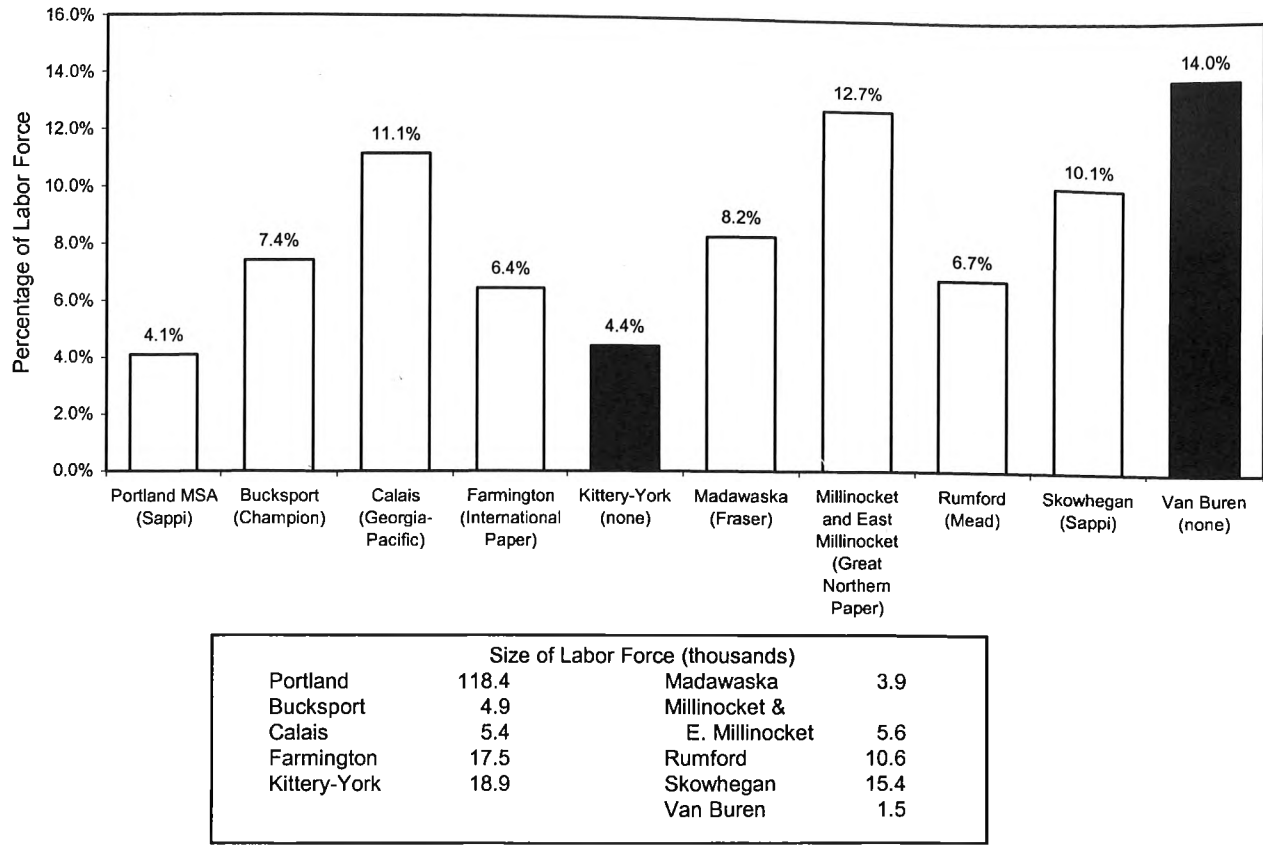


Figure 1. Maine labor market areas: unemployment rate, 1998. Dark bars: no papermill.

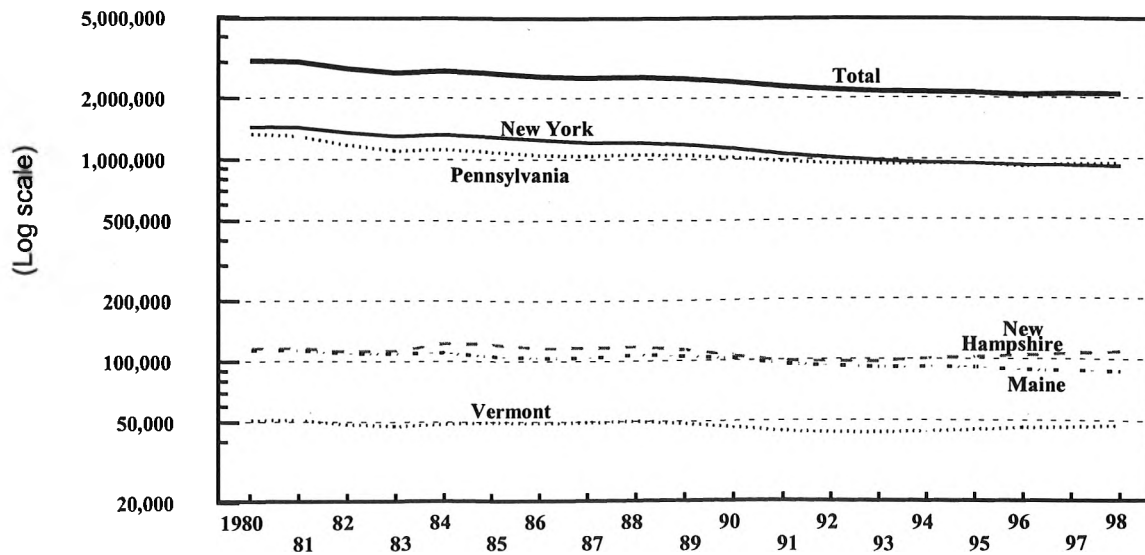


Figure 2. Manufacturing employment, 1980-98, selected Northeastern states. Sources: State Departments of Labor.

Table 2. Paper and allied products employment, selected Northeastern states, 1980–1999.

Year	New York	Pennsylvania	Vermont	New Hampshire	Maine	Total
1980	50,600	42,400	2,673	6,188	18,300	120,161
1981	49,700	41,900	2,515	5,875	18,300	118,290
1982	46,900	41,100	2,507	6,469	17,900	114,876
1983	44,900	40,700	2,591	5,349	18,100	111,640
1984	45,900	41,100	2,581	5,605	18,300	113,486
1985	44,000	41,100	2,684	5,564	18,000	111,348
1986	42,900	n/a	2,580	5,542	17,300	68,322
1987	43,200	41,600	2,473	5,569	17,000	109,842
1988	43,300	41,700	2,434	5,478	17,800	110,712
1989	42,400	41,400	2,418	5,460	17,600	109,278
1990	40,900	40,800	2,301	5,225	17,600	106,826
1991	37,200	39,900	2,201	5,360	17,200	101,861
1992	36,600	39,800	2,187	4,698	16,500	99,785
1993	36,400	39,500	2,210	4,695	16,100	98,905
1994	35,300	39,100	2,299	4,751	15,500	96,950
1995	34,600	37,700	2,150	4,740	14,800	93,990
1996	32,800	36,300	2,210	4,460	14,600	90,370
1997	32,600	36,800	2,207	4,432	14,800	90,839
1998	32,100	36,000	2,076	4,171	14,200	88,547
1999	31,700	35,100		4,437	13,800	85,037
Pct Ch. 1980–98	-36.6	-15.1	-22.3	-32.6	-22.4	-26.3

Source: State labor departments.

Table 3. Total pulpwood receipts for U.S. Northeastern region, 1980–1996.

Year	Softwood	Hardwood	Total
1980	10,079.4	8,234.7	18,314.1
1981	11,055.9	8,461.5	19,517.3
1982	10,084.1	8,053.8	18,138.0
1983	10,013.4	8,414.7	18,427.9
1984	8,081.7	7,284.7	15,366.4
1985	10,001.9	9,695.9	19,697.8
1986	9,762.9	10,157.5	19,920.4
1987	9,184.6	9,850.2	19,034.8
1988	8,982.6	10,096.4	19,078.9
1989	9,720.5	10,390.3	20,110.9
1990	8,602.4	9,259.5	17,861.8
1991	8,900.8	9,124.7	18,025.5
1992	8,626.4	10,205.4	18,831.8
1993	8,763.6	10,889.0	19,652.6
1994	8,590.3	11,584.6	20,174.9
1995	6,915.1	10,713.9	17,629.0
1996	6,585.4	10,026.3	16,611.7

Source: Ingram et al. (1999).

the five specific states for which the employment data are shown. We can use the pulpwood consumption trend as a proxy (Table 3). A weakness of this proxy is that it cannot account for changing reliance on market pulp, for which there is no recent data. Pulpwood receipts vary from year to year, and the lowest point was reached in 1996. Still, the substantial decline in jobs does not appear in the pulpwood usage series, the reason being the ongoing pace of labor productivity improvement. For the nine Northeastern states, total production of paper and board increased from 1980 to 1998, despite the substantial reduction in employment (Table 4).

The leading paper-producing state in the region, by tonnage, is Maine. Here, despite the trends noted in this paper, the industry remains a significant part of the state's manufacturing base. The industry's share of manufacturing shipments fell from 34% in 1980 to 31% in 1997. This share does not account for any effects of the later 1990s cutbacks.

Closing and restructuring of small- and medium-sized paper mills is a national trend. According to the June 21 Forest Resources Association Bulletin (p. 2), between 1989 and 1999 52 pulpmills in the U.S. either closed permanently or switched to recycled fiber. In its January 2001

Table 4. Northeastern paper and board output, 1980, 1992, and 1998.

Year	Paper	Board	Total
1980	7,754	2,092	9,846
1992	8,325	2,301	10,626
1998	8,836	3,258	12,094

Sources: 1980—U.S. Dept. of Commerce, Bureau of the Census, Pulp, paper and board, 1980, MA-26-A (80)-1  
 1992 and 1998—American Forest and Paper Association.  
 Northeast: New England plus New York, Pennsylvania, and New Jersey.

issue, *Pulp and Paper Magazine* (p. 44) issued a listing of 47 mill cutbacks or closings in the U.S. and Canada during 1999 and 2000. In early 2001, two major New York mills (Deferiet and Lyons Falls) closed. It is not yet certain whether those closings are permanent.

### ECONOMIC IMPACTS OF PAPER MILLS

A paper mill has a high impact on nearby communities for three interrelated reasons. First, wage and benefit and skill levels are high. These translate into disposable income, which is respend in the

community and helps support real estate values. Second, paper mills run 24 hours a day because it is uneconomical to close down an energy-intensive flow process. So a paper mill is working all day and not just one shift, providing a proportionately higher level of employment. Further, paper mills generate large property tax revenues, which helps keep property tax levels within the milltown at a low level compared to non-mill towns of similar size. The range of town dependence on mill tax revenues is wide, however (Table 5).

Mills included in this study varied in their raw fiber sourcing; many smaller ones used deinked or market pulp (Table 6).

Generally, in smaller milltowns, support services and equipment suppliers for the mills are limited, so the "backward" linkages from paper mills into the local community are confined to limited contract services and wood procurement. In addition, because of the way paper is priced, it is unusual for paper-converting plants to be located adjacent to the primary paper mills (Maine Development Foundation 1982). They locate instead in the major urban market areas. Wages in converting are well below those in primary paper mills in any case.

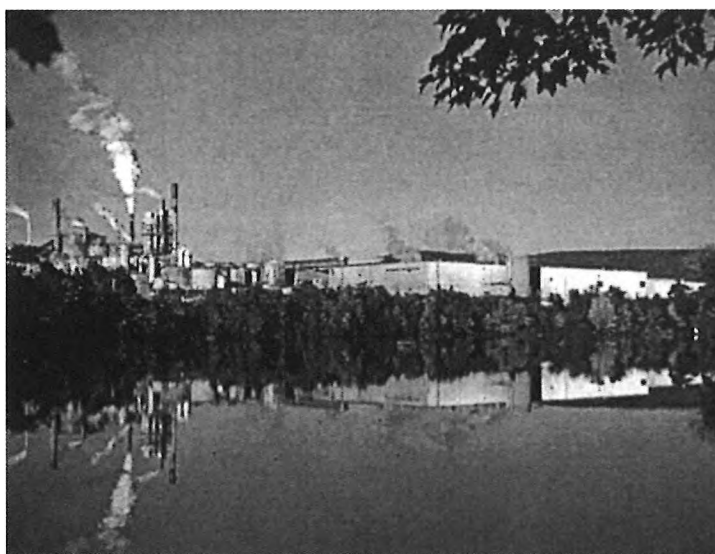
Table 5. Property taxes and population.

State/ Province	Town	Mill	Population	Percentage of Property Tax Revenues
ME	Woodland	GP	2,030	85.0
ME	Madawaska	Fraser Paper	4,800	67.0
ME	Millinocket	GNP	5,000	42.0
ME	Rumford	Mead	7,000	72.0
ME	Skowhegan	Sappi	9,500	60.0
ME	Bucksport	Champion	5,000	63.0
ME	Winslow	Kimberly-Clark	8,000	25.0
ME	Westbrook	Sappi	15,838	14.0
NH	Groveton	Groveton & Wausau	2,600	18.4
NH	Claremont	Coy Paper	13,900	0.1
NH	Berlin	American Tissue	11,600	31.0
VT	Brattleboro	GP	12,241	1.1
VT	Gilman	American PM		49.0
VT	Putney	Putney Paper	2,720	3.6
NY	Amsterdam	Amsterdam Paper	19,000	0.1
NY	Ticonderoga	IP	3,600	29.0
PA	Johnsonburg	Willamette	3,350	23.5
PA	Mehoopany*	Proctor & Gamble	618	56.0
NB	Dalhousie	Avenor	4,500	10.9
NB	Edmunston	Fraser	18,000	3.2
NB	Nackawic	St. Anne	1,137	35.4
NB	Bathurst	Stowe Consolidated	13,815	6.3

\*Mill is in Washington Township—Mehoopany labor market; Washington gets taxes.

Table 6. Fiber sources for mills.

State/ Province	Town	Company	Wood	Deinking	Market Pulp	Converting
Maine	Woodland	GP	X			
	Madawaska	Fraser Paper			X	
	Millinocket	GNP	X	X		
	Rumford	Mead	X			
	Skowhegan	Sappi	X			
	Bucksport	Champion	X		X	
	Winslow	Kimberly-Clark		X		
	Westbrook	Sappi	X		X	
New Hampshire	Groveton	Groveton	X			
	Groveton	Wausau			X	
	Claremont	Coy Paper			X	
	Berlin	American Tissue	X			
Vermont	Brattleboro	GP			X	
	Gilman	American PM			X	
	Putney	Putney Paper		X		
New York	Amsterdam	Amsterdam Paper			X	
	Ticonderoga	IP	X			
	Carthage	Ft. James			X	
	Deferiet	Champion	X			
	Newton Falls	Appleton			X	
	Bear Falls	Fiberhawk			X	
	Plattsburg	Imp Wall				X
	Glens Falls	IP	X			
	Glens Falls	FP	X			
	Little Falls	Burrows		X	X	
Pennsylvania	Johnsonburg	Willamette	X			
	Mehoopany	Proctor & Gamble	X			
New Brunswick	Dalhousie	Avenor	X			
	Edmunston	Fraser	X			
	Nackawic	St. Anne	X			



*International Paper Company's Androscoggin mill continues to be an economic mainstay of its local area, long after other International Paper mills in the state have been closed or sold. (International Paper Company photograph, by permission.)*

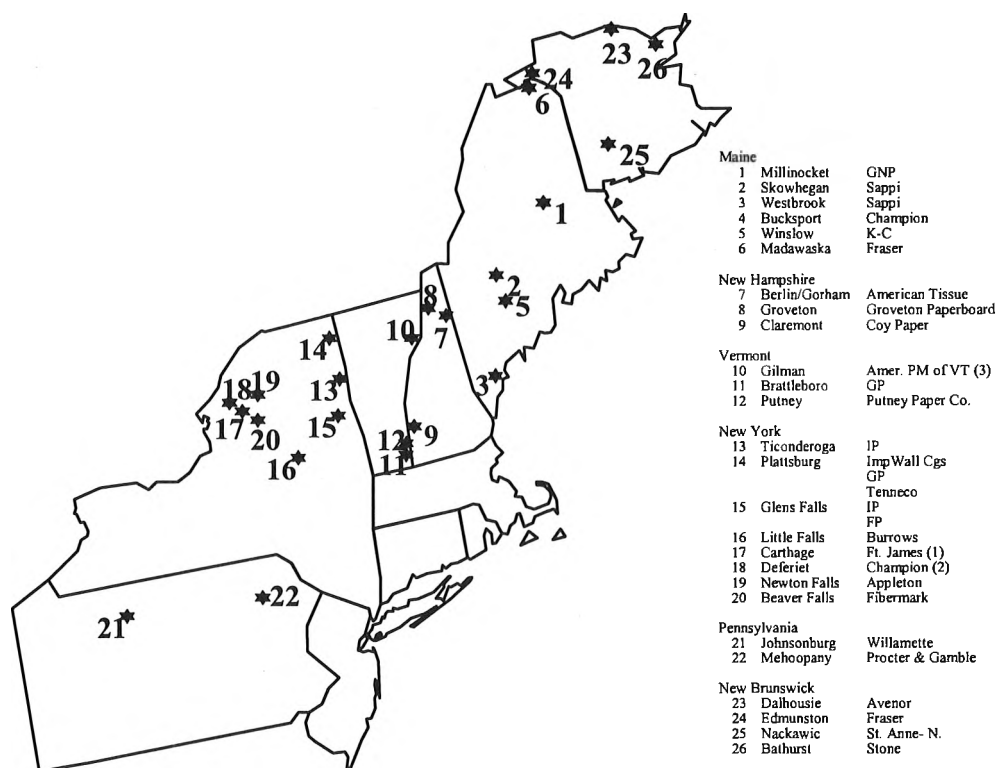


Figure 3. Milltowns studied.

Paper mill towns, like other rural areas, often have unemployment rates higher than the state average. This is due to the ongoing economic adjustments those areas are experiencing. High paper industry wage levels may also have an effect. By drawing and retaining workers hoping to "get on at the mill" they may have a tendency to cause these communities to have higher unemployment rates than the state average, as is true for Maine (Figure 1).

It is not easy to make a clean comparison between rural communities of similar size with and without paper mills, as there are so few examples to draw from. But a rough tendency for milltowns to have higher unemployment rates than the state average holds up in other states examined (Table 7).

Paper mill towns may seem to be attractive locations for sawmills. They obviously lie on established movement corridors for wood, and such a location would minimize chip hauling distances and cost. "Integrated manufacturing complexes" are not uncommon in the South and the West. Yet there are few examples in the Northeast (Woodland, Maine, is one) where sawmills or other major wood-using plants are located adjacent to paper mills. Often, respondents told us that there were no other wood-using mills in commuting distance.

Table 7. Milltowns and state average unemployment rates.

Pennsylvania, 1998	4.6%
Johnsonburg	6.0%
Mehoopany	7.2%
Lock Haven	6.9%
New Brunswick, 1999	10.2%
Campbellton-Miramichi	16.3%
Fredericton-Oromocto	7.5%
St. John-St. Stephen	7.5%
Edmunston-Woodstock	8.6%
New Hampshire, Nov. 1999	2.6%
Coos County (Berlin, Groveton)	5.2%
New York, Nov. 1999	4.8%
Glens Falls	4.7%
Clinton County (Plattsburg)	5.3%
Utica-Rome (Little Falls)	4.0%
Niagara	5.3%
St. Lawrence County (Deferiet)	7.9%

Source: State labor departments.

More importantly, paper industry wage levels establish a level of expectations for compensation that few other industries, especially startup plants, and most secondary wood-products plants, can meet. As a result, it can be difficult to attract new plants. Over and over, when we asked about new plants moving to a milltown, we were told that “there weren’t any.”

## CAUSES AND EFFECTS OF MILL DOWNSIZINGS

Ongoing productivity improvement often accounts for the loss of a job here, a job there, as another function is mechanized. As this happens, the adjustments are often made through attrition, so outright hardship can be minimized. At times, companies undergo periodic programs of early retirement incentives, which again cushion the impact on individuals.

Some of the older mills may contain as many as a dozen separate paper machines, some of which may swing from grade to grade (or for printing items, even color to color) with market conditions. These older, slower machines work well for batch orders for higher valued specialty papers that cannot be produced on huge commodity machines because their markets are small. In every paper industry downturn, the smallest machines are vulnerable. When a large machine is permanently closed, as many as 50 to 100 jobs may be eliminated.

Many mills in the Northeast do not produce their own pulp. At times, mills may close or rebuild their “pulp ends.” When a pulp end is closed, significant job losses are likely, with feedback effects into communities where the wood is cut and hauled. Pulp end closings in the Northeast in recent years include Sappi at Westbrook, Maine (1999), and Procter & Gamble, Mehoopany, Pennsylvania (1998-99). In a few other instances, mill woodpulp needs have been reduced by the installation of recycled lines. This maintains paper production, but redirects a portion of fiber spending into the supply stream for recovered paper. Downsizings can be cumulatively quite significant, on the order of hundreds of workers over a decade or more, as indicated in Table 8.

Some of the closings of the late 1990s were related to a burst of over-investment in recycled (DIP) plants earlier in the decade. Many of those plants did not survive the shakeout that occurred later.

## EXPERIENCES OF SELECTED TOWNS

### List of Towns Considered

We developed an initial list of likely milltowns from paper mill directories and general knowledge of the region. We emphasized towns where a large paper mill was likely the dominant employer. Disclosure rules generally prevent the publication by state labor agencies of local industry employment detail in areas where three or fewer firms exist in an industry—the “invisible industry” syndrome. For this reason, we had to obtain job data by direct interviews.

We considered milltowns in New York, Pennsylvania, New Brunswick, Maine, Vermont, and New Hampshire. Those for which information could be obtained are indicated in Figure 2. After completing our listing, we conducted interviews with town and county officials likely to be well informed about the changes at the mills and about labor market impacts and economic development responses. From the notes of those interviews, this summary has been compiled.

The information reported here was obtained from a mix of interviews with companies and local governments, directories, and other sources. When interviewing people who are relying on memory, the potential for error arises. It is not practical for this brief survey to search out primary documents to obtain authoritative information, but we believe the information presented fairly represents the situation being discussed.

### Impacts of Mill Workforce Downsizings

The impacts fall into several categories: impacts on individuals, impacts on employment, impacts on tax base, impacts on spending flows, and age structure of population.

#### Impacts on individuals

The immediate impacts on the individuals laid off are extremely serious. Losses can include reductions in income to whatever is brought in from unemployment benefits, loss of health benefits (common in this industry) and likely loss of prospects for retirement benefits. Not only are there likely to be few jobs available that pay what the paper industry pays, but commuting to a new job can increase costs.

In Maine, paper industry wages are extremely high, and similar wage relationships prevail in the other states as well:

Table 8. Employment trends, selected Northeastern paper milltowns.

	Company	Peak Jobs*	Job Loss	Year	Jobs Remaining
<b>Maine</b>					
1	Millinocket GNP	1800	900	Peak 1987 or 88	700
2	Skowhegan Sappi	Few	Few	Steady decline	900
3	Westbrook Sappi	350	350	1999	
4	Bucksport Champion			Slow decline	1076
5	Winslow K-C	600	275	1998	0
6	Madawaska Fraser	1400	400	Slow decline	1000
<b>New Hampshire</b>					
7	Berlin/Gorham American Tissue	1650	850	Peak 1987	800
8	Groveton Groveton Paperboard				240
9	Claremont Coy Paper	150	27	1990	0
<b>Vermont</b>					
10	Gilman Amer. PM of VT (3)	150	50		104
11	Brattleboro GP				180
12	Putney Putney Paper Co.	45	45	Steady redn.	75
<b>New York</b>					
13	Ticonderoga IP	75	75	97-98	700-900
14	Plattsburg ImpWall Cgs	600	150	97-98	0
	GP				500
	Tenneco				250
15	Glens Falls IP				
16	Little Falls Burrows		N/A	"Steady"	N/A
17	Carthage Ft. James (1)		300	350 in 1989	45
18	Deferiet Champion (2)		50-100	450 in 1999	350-400
19	Newton Falls Appleton			Future uncertain	
20	Beaver Falls Fibermark	100		Closed in 1999	
<b>Pennsylvania</b>					
21	Johnsonburg Willamette			Steady**	525
22	Mehoopany Procter & Gamble	500	500	Steady 80's-pres.	2500
<b>New Brunswick</b>					
23	Dalhousie Avenor			85-99	800
24	Edmunston Fraser	500	500	1979-99	650
25	Nackawic St. Anne- N.	40 +/-	40 +/-	slow	360
26	Bathurst Stone			slow	300

(1) Sold to Metro Paper; jobs planned to go to 75 in three years.

(2) Sold to Deferiet Paper in 1999.

(3) Formerly Simpson Paper.

\* Within study period.

\*\* Exc. for construction period for new machine, 1993-94.

	Ave. Ann. Wage 1998
Paper industry	\$47,586*
All manufacturing	\$33,227**
Construction/mining	\$28,572
Retail trade	\$15,607
Services	\$23,833
All covered employment	425,486

\*(1997, Census of Mfrs.)

\*\* (DOL Handbook)

### Impacts on employment

With their high wages, paper mills draw workers from a fairly large commuting radius around the mill. Many workers do not live in the immediate community. This tends to spread the labor market impact over a wider area than might be true in some other industries.

### Impacts on tax base

As a mill contracts, it often experiences poor financial returns. This creates an atmosphere of uncertainty over its tax situation and may result in legitimate write-downs in the asset value of the mill. The mill may appeal to the community for revaluation. In one instance, a mill was valued at \$92 million for local property taxes. The town agreed to reduce the valuation to \$68 million in the early 1990s, and then after a costly rebuild, the management announced that the mill was worth only \$24 million, a level that town was unwilling to accept. In Millinocket, the town suffered a decline in property tax valuation from \$479 million in 1987 to \$97 million in 1998 (in 1997 dollars).

### Impact on spending flows

Reduced payrolls will immediately reduce local retail spending. These reductions often occur in communities whose downtown retailing is already under stress from the outflow of spending to out-of-town malls (Figures 4 and 5).

### Age structure of population

As mills downsize, entry-level jobs are fewer each year, and young people must leave the community to find employment.

## COMMUNITY RESPONSES TO DOWNSIZINGS

Community responses varied widely among towns interviewed. In a number of instances, the downsizings were slow and steady and never amounted to a crisis, so little action was taken.

### Financing Improvisations

Given their importance to their towns, mills in financial trouble often end up drawing on an array of publicly assisted financial programs to reduce taxes, to aid in making investments, to assist in funding pollution cleanup costs, to help with training or other matters. Additional costs may be incurred in retraining, worker aid, and other programs to help the community adapt to downsizings.

### Accelerated Development Efforts

Many communities responded with an array of development and attraction programs, often aided by state and local funds.

1. Millinocket, Maine. Employment downsizing at Great Northern mills at Millinocket and East Millinocket has been familiar for more than a decade. Considerable attention has been paid to this area in economic development efforts. A sizable training presence has been established, and various feasibility studies have been conducted. Yet to date, there have been few successes in attracting new business to the region. Within the scope of this project, we were not able to document these activities or delve into possible reasons for this situation.
2. Edmunston, New Brunswick. The City of Edmunston, New Brunswick (pop. 10,000), poses an exception to the general picture of adjustment in Northeastern milltowns. Edmunston had 1,150 jobs at Fraser's mill in the late 1970s; this is now down to 650, for a loss of 500 high-paying jobs. The city has made a success of attracting new businesses and has increased total manufacturing employment from 1,800 in the late 1970s to 3,300 today. Edmunston relies more heavily on manufacturing than the province as a whole. New plants in the area economy included three plastics companies, firms in the garment trade totaling 1,000 jobs, and a call center with 150 jobs. There are several woodworking plants in outlying communities, including Begin Lumber, Clair (now Irving), with 100 jobs; Alliance (I-joist plant) St. Jacques, with 75 jobs; Fraser Cedar (shingles, etc.) with 20 jobs; C. L. Decor (turnery for rolling pins), with 15 jobs. The city has an active development effort and its major problem now is worker training. Due to the city's economic successes and the completion of the adjustment in the area's farm sector, this portion of New Brunswick has an unemployment rate below the province average.

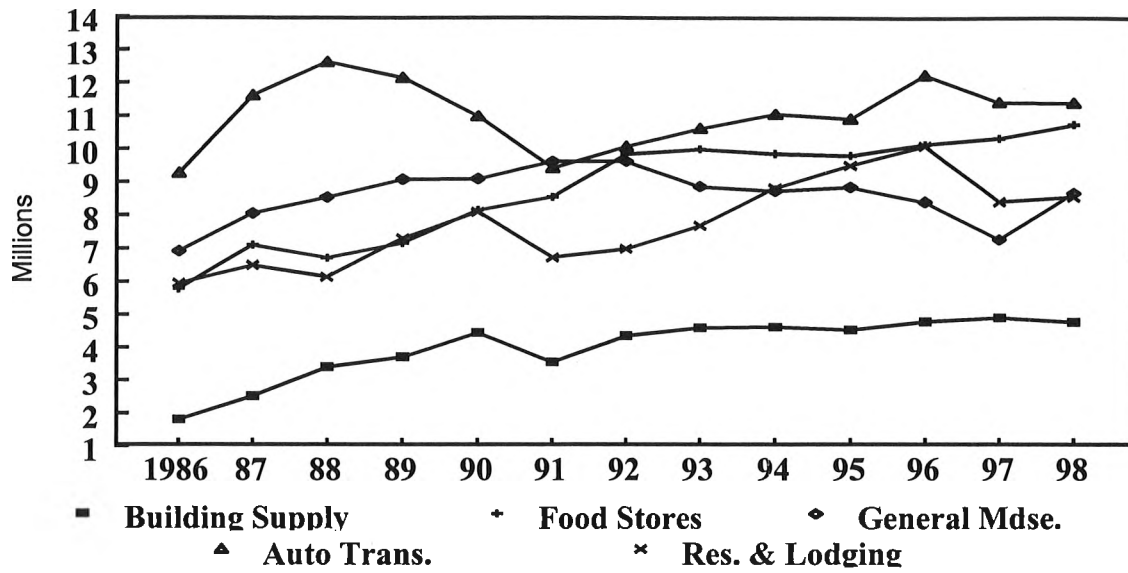


Figure 4. Millinocket ESA taxable retail sales. Source: Maine State Planning Office.

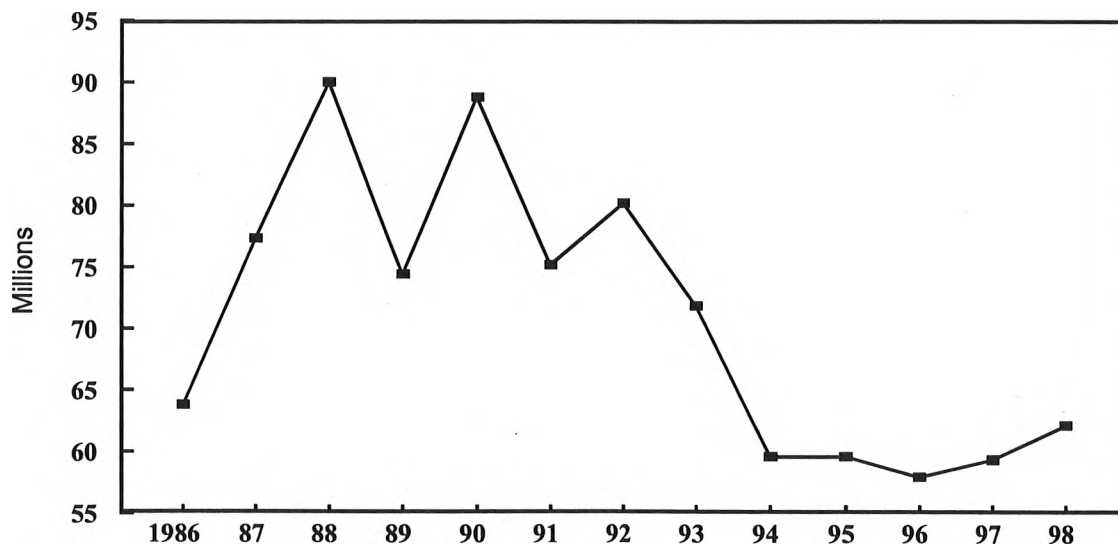


Figure 4. Millinocket total taxable retail sales. Source: Maine State Planning Office.

3. Nackawic, New Brunswick. This town of 1,200 has only recently established an economic development commission. It has a five-year development plan. Job shrinkage at the St. Anne mill has been slow and not yet a labor market problem.
4. Bathurst, New Brunswick. This northern New Brunswick city faces a long-term challenge, with a large mine with 800 workers that is expected to give out in ten to fifteen years. A nearby smelter employs 400. The 300-job paper mill seems stable in comparison to those issues. The city hopes to bring a connection to the new natural gas pipeline. A newly formed development commission is just getting going.
5. Plattsburg, New York. This is an unusual situation in which a long established milltown had a total of three paper mills, one of which closed entirely in 1997–98, with a loss of 600 jobs. The city was encouraged by the location of a large Bombardier plant there in 1995–96, employing 600. The area also lost a large Air Force base with 5,000 employees.
6. Mehoopany, Pennsylvania. The Proctor & Gamble (P&G) plant had more than 3,000 employees in the early 1980s and now employs 2,500. P&G closed its pulpmill last year, but it was “no loss,” since the 150 workers were absorbed into the rest of the plant by attrition. Loggers lost the pulp business and now have lower profits because they have to haul their logs farther. Landowners also make less from their wood because of these increased transportation costs. Many firms that depended on the pulp operation are going out of business. There is less need for oil, chain saws, skidder tires, log truck equipment — “it snowballs.” Families have less income, and spend less at the stores. There is research being done into value-added products, made from the former pulp log. Since the pulpmill closed, several sawmills with two to four workers each opened in a 60-mile radius. Most produce pallets and landscape ties. The sawmills use red maple, beech, oaks, birch and poplar. Stone pallets are smaller than normal ones, have sides and are very strong. Stone has always been shipped from local quarries, which produce Bluestone, Graystone, and shale, which is really hard red sandstone, and boulder outcroppings for landscaping. These rocks have to be shipped on good, sturdy pallets. There was an effort to bring in professionals who could educate the

workers about what products could be made from the wood species in the area. They held free workshops that “expanded workers’ horizons” about availability of loans for manufacturing products. Some sawmills added an additional mill for a pallet operation. There are some new companies “just out of reach.” There is speculation that a company may move an oriented strand board operation into lower New York State, to use the wood resource freed up by the closing of the P&G pulp mill. P&G is expanding its operation. They plan to add two paper machines in the next four years. There are many benefits from P&G’s expansion: increased warehousing, added trucking firms, increased usage of rail (*eucalyptus* for the paper industry is shipped by rail).

#### No Action

In many instances, the job shrinkage at the mills was slow and steady and had no immediately noticeable impact on the local community. In most such instances, no need for action was perceived.

#### Adapting to Other Employment

In a number of instances, local observers reported that labor market transitions had been facilitated by availability of jobs nearby. Often, papermill workers are accustomed to commuting long distances to work, and shifting commuting patterns does not always impose an additional hardship. In one instance, the mill’s human resources department assisted by posting jobs available elsewhere. In that case, however, some of the jobs available were in nearby retailing, where wage levels were probably not competitive with manufacturing. In a study in Maine, it was found that workers had difficulty finding new work that could replace earnings levels from former jobs in manufacturing (Pohlmann and St. John 1999).

#### Retirement

At mills owned by the large companies, or at unionized plants, early retirement offers often eased the transition to retirement for at least some employees. This was mentioned a number of times, but we were unable to compile a full record to see how common early retirement benefits were offered.

#### Outmigration

This was mentioned occasionally: “There is no other industry. Many workers between the ages of 20 and 35 moved away.” In another instance, we

were told, "a lot of workers have left the area." Outmigration in this age group due to a variety of causes has been the common experience of rural and forested communities in the Northeast since the Civil War.

## OBSERVATIONS

In towns heavily dependent on a single employer such as a paper mill, employment cutbacks have significant impacts on local economies as well as effects on the well-being of the affected employees and their families. In many instances, job losses at paper mills occurred at a slow rate, often with a high mix of retirement and attrition, and therefore were readily absorbed by local labor markets and not seen as a local economic development challenge.

In cases where large and unexpected job losses occurred, cities and states have mobilized retraining, industrial development, and infrastructure programs, and attraction efforts to try and make up for lost employment. With this size of sample, it is difficult to determine whether the programs themselves, or other natural advantages of the towns, were the reasons for successful outcomes. In a considerable number of these towns faced with declining paper employment, there has been no attraction of significant employment. The reasons for this vary from place to place and seem to show no general pattern.

Community-based studies of this subject seem to have been more extensively pursued in Canada (Randall and Ironside 1996), while in the U.S. regional and methodological studies seem more prominent.

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