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LOGSAFE

2006 Report to the Legislature

as required by Minnesota Laws of 2005, 1st Special Session,
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This report is provided in compliance with Minnesota Laws of 2005, 1st Special Session, Chapter 1, Article 3, Section 7, Subdivision 4: "... shall report to the 2006 legislature on the safety and education program for Minnesota loggers under Minnesota Statutes §176.130."

Information in this report can be obtained in alternative formats by calling the Department of Labor and Industry at 1-800-342-5354 or TTY at (651) 297-4198.

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Executive summary

LogSafe is a safety and education program for Minnesota loggers, provided by the Minnesota Department of Labor and Industry (DLI). The state law passed in 1990 created the program to reduce the logging industry's high injury rates and workers' compensation insurance costs.

The LogSafe program consists of a series of safety seminars, on-site trainings, consultations at logging sites and sawmills, and participation at trade shows and annual meetings (Table 1.4).

Each year, Minnesota sawmill owners pay 30 cents for each cord of wood purchased or acquired in excess of 5,000 cords, into a targeted industry fund, \$125,000 of which covers the cost of LogSafe. The remainder is paid as workers' compensation premium "rebates" to participating logging companies.

DLI has administered LogSafe continually from 1990 to the present. The seminar training was contracted to Lake Superior Technical College in 1991. In 1995, DLI began conducting the safety seminars as a direct service of its Workplace Safety Consultation (WSC) unit.

Since the program's inception, logger participation has grown and it continues to be well received by the logging industry.

- Since 1991, attendance at LogSafe seminars has increased from about 500 to more than 1,200 (Table 1.1).
- Logger-reported satisfaction with the training seminars has remained at about 80 percent overall, since the program's first evaluation in 2002. Nearly the same percentage reports the training is useful in their day-to-day work and their worksite is safer because of the training (Table 7.2).

Since 1990, in parallel with nationwide trends, Minnesota's logging industry has become safer.

- Between 1990 and 2004, the total number of workers' compensation paid claims (indemnity and medical) in the logging industry has declined from about 70 to about 30 each year (Table 4.2).
- There were 12 fatalities in the logging industry between 1992 and 1998, but only three between 1999 and 2004 (Table 4.4).
- Claim costs in logging were more than \$20 per \$100 of payroll in the early 1990s, but declined to about \$5 by the early 2000s. In contracting, the rate fell from about \$10 in 1990 to about \$4 currently (Table 5.2).

Workers' compensation insurance rates have also gone down significantly between 1990 and the present.

- The pure premium rate in logging declined from about \$30 per \$100 of payroll in 1990 to \$6 in 2006 (Table 5.3).
- The voluntary market rate in logging declined from more than \$37 per \$100 of payroll in 1990 to less than \$9 in 2006 (Table 5.3).
- Assigned risk rates in logging rose to a high of \$53 per \$100 payroll in 1998, but declined to about \$15 in 2006 (Table 5.3).
- Whereas the pure premium rate in Minnesota logging in 1990 was more than three times the average rate in contracting, by 2006, it was only 20 percent higher (Table 5.4).

The LogSafe rebate has reduced workers' compensation insurance costs for rebate claimants.

- The rebate per claimant payroll dollar declined from about 20 cents to about 10 cents between 1991 and 2003 (Table 2.1).

LogSafe rebates have grown.

- The rebate per employer-claimant increased from about \$5,600 in the first full-year of the program to \$7,900 in 2004 (Table 2.1).

Program expenditures have remained constant at about \$125,000 each year since 1991 (Table 3.1).

DLI subsidizes LogSafe by:

- providing Minnesota OSHA consultants at LogSafe training;
- providing program management and administrative support services; and
- absorbing any budget deficits.

DLI began instituting cost-cutting measures in 2002, including eliminating the *LogSafe* publication and eliminating seminar attendance incentives.

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LogSafe 1990 through 2005

Overview

Under the Targeted Industries Act Pertaining to Logging (Minnesota Statutes §176.130, passed in May 1990), LogSafe is a safety and education program for Minnesota loggers administered by the Minnesota Department of Labor and Industry (DLI).

LogSafe provides scheduled one-day, eight-hour safety seminars for loggers, customized training at logging sites and individualized consultations at logging sites.

Each year, Minnesota sawmill owners pay an assessment equal to 30 cents for each cord of wood purchased or acquired in excess of 5,000 cords, into a special logger's fund. Logging employers that purchase workers' compensation insurance and whose employees participate in LogSafe training can submit a claim to DLI for a rebate on their workers' compensation premium. The total amount available for rebates each year is equal to the amount collected in assessments, less \$125,000 that is allocated for LogSafe training. The rebate is allocated to claimants on the basis of payroll.

The LogSafe program is a service of the Workplace Safety Consultation unit of DLI. (See appendices A and B for the text of Minnesota Statutes §176.130 and associated Minnesota Rules 5222.3000 through 5222.3007.)

Scheduled LogSafe seminars are offered in the spring and fall, at sites near where loggers live and work. The fall seminars provide an opportunity to train new hires and those loggers who missed the spring seminars. Employers may alternatively request customized training at their worksite.

History

In the late 1980s, injury rates and workers' compensation insurance costs in the logging industry were exceptionally high. In response, the Minnesota Timber Producers Association (MTPA) and other industry trade groups sought relief from the state Legislature and, in May 1990, the Legislature passed the Targeted Industries Act Pertaining to Logging. At the time, the Assigned Risk Plan (ARP)¹ rate for loggers was \$49.35 per \$100 of payroll.

The legislation provided immediate relief to lower workers' compensation costs and sought to provide longer-term relief through improved safety in the industry. Additionally, studies were commissioned to explore ways to bring more loggers into compliance with workers' compensation coverage laws, thus increasing the pool of risk and lowering the average insurance rate in the industry.

The immediate relief came from an assessment on pulp and paper mills and sawmills for each cord of wood purchased from Minnesota loggers. The funds from this assessment were to be used to provide rebates to logging employers based on the amount of workers' compensation payroll reported.

To achieve the longer-term goal of reduced injury rates and insurance rates, the legislation required employers and their employees to attend safety seminars provided by DLI as a

¹ Employers unable to insure in the voluntary market — because of small size, lack of loss experience, a poor safety record or being in a high-risk industry — may insure through the ARP, which is administered by the Department of Commerce.

condition of receiving an insurance rebate. The legislation set aside \$125,000 annually from the assessment to fund these safety seminars.

In response to the new legislation, DLI established an advisory committee of people from the logging industry, hired a local logger to coordinate the program and contracted the first seminars, in 1991, through Lake Superior Technical College.

In September 1995, in response to a legislative directive not to contract out work that could be done by state employees, DLI ended its relationship with Lake Superior Technical College and began conducting the safety seminars as a direct service of its Workplace Safety Consultation (WSC) unit.

Since its inception, LogSafe seminars have covered a variety of hands-on safety topics (see Appendix C). CPR and first-aid training are offered at every seminar, so loggers can remain certified, as required by the OSHA logging standard (CFR 1910.266).²

Program

The \$125,000 annual budget for the LogSafe program covers the cost of a full-time staff person, all training materials and other costs associated with seminars (e.g., space rental and lunches for attendees), unscheduled trainings at logging sites and consultation visits to logging sites and lumber mills.

Each year, LogSafe provides about 20 scheduled safety seminars, 20 to 30 trainings at logging sites at the request of employers, 40 OSHA consultation visits at logging sites and sawmills, and 20 fee-for-service public-sector trainings (see Table 1.4 at the end of the chapter).

Seminars and on-site trainings

LogSafe seminars are free, one-day, eight-hour training sessions. Most are scheduled “classroom” training that includes lunch and all resource and training materials. Beginning in 2005, on-site equipment training is also offered once or twice a year, also in an eight-hour format.

In lieu of the scheduled seminars, LogSafe provides free on-site training at the request of an employer. On-site training focuses on a specific logging worksite or business facility. The training covers safe work practices, machine operation safety, hazard identification, machine de-energization and other areas pertinent to the specific logging operation. On-site chain saw safety training is provided to new employees or as a refresher course for veteran employees.

Since the seminars began in 1991, a variety of topics have been covered, including proper felling techniques, high-speed disc-saw safety, documenting and avoiding near-miss accidents, severe-weather safety, CPR and other first-aid techniques (see Appendix C).

The seminars provide an update about changes in workers’ compensation laws and OSHA rules and statutes, and draw attention to recent fatalities, near-miss accidents and mistakes that have resulted in logger injuries and fatalities. The seminars also provide a CPR/first-aid “track,” so loggers can remain certified. Other options have included all-day mechanized safety training, an all-day chain saw safety refresher and a half-day of training about developing a required safety and health program for workers, A Workplace Accident and Injury Reduction (AWAIR) program.

² Loggers are required by the OSHA Logging Operations Standard (CFR 1910.266) to be trained in CPR and first aid and to keep their certification current. LogSafe offers loggers re-certification through training at the seminar each year.

In 1990, timber harvesting usually involved a chain saw and cable skidder, exposing loggers to a high degree of danger. Today, Minnesota loggers use highly sophisticated machinery to harvest timber and may go for days without using a chain saw. The machinery cuts down the trees, removes the limbs and divides the trees to log lengths with the logging operator never leaving the enclosed cab.

The LogSafe program has kept abreast of these changes by focusing training on current injury trends and logger requests for training topics. Circumstances still often require loggers to use chain saws and skidders, and LogSafe continues to train loggers about how to safely fell trees by these means when the situation warrants.

Until 2005, attendance at scheduled LogSafe training increased yearly since the program began.³ In 2005, there was a decline in attendance to year-2000 levels. In 2005, about half of LogSafe seminar attendees were self-employed or employers and about half were employees (see Chapter 4).⁴ The most popular

³ The Sustainable Forestry Initiative® (SFI) program of the American Forest and Paper Association was one force behind increasing LogSafe seminar attendance in the mid-1990s. In 1995, the Minnesota Loggers Education Program (MLEP), a logging business membership organization, was established to provide training as required by SFI. In 1996, most Minnesota wood-consuming mills adopted SFI standards and instituted a policy to purchase wood only from MLEP members. MLEP membership requires that the business owner and one “in-woods person actively responsible for each logging site” participate in LogSafe (or other MLEP-approved) training annually. The increase in LogSafe attendance between 1995 and 1997, from about 650 to about 1,050, is associated with SFI and the establishment of MLEP.

⁴ Table 4.1 estimates the number of loggers in Minnesota declined from about 2,600 in 1997 to about 2,300 currently. This means the proportion of loggers attending LogSafe seminars is increasing, though there remain about 1,000 loggers who do not attend in any given year. Because the incentive to attend LogSafe and get a workers’ compensation rebate is very high for employers, most of these 1,000 probably come from “non-employer establishments” (i.e., they are self-employed or are the relative of a proprietor). As noted in footnote 3, SFI standards require only that one business owner and one “in-

locations for scheduled training are (in order) Bemidji, Cloquet, Grand Rapids, International Falls and Eveleth, Minn. More than 70 percent of trainees attend seminars in these sites.

Table 1.1 LogSafe seminar and on-site training attendance, 1990-2005 [1]

<i>Calendar year</i>	<i>Attendance</i>
1990 [2]	363
1991	527
1992	567
1993	604
1994	648
1995	649
1996	895
1997	1,055
1998	1,000
1999	1,052
2000	1,100
2001	1,168
2002	1,196
2003	1,211
2004	1,226
2005	1,098

[1] Data from DLI.
[2] 1990 data is for half year.

Only a small proportion of trainees attend on-site training at the request of their employer.

Table 1.2 LogSafe on-site training, 1999-2005 [1]

<i>Calendar year</i>	<i>Number of sites</i>	<i>Attendance</i>
1999	36	
2000	17	69
2001	33	116
2002	23	127
2003	27	69
2004	20	86
2005	14	49

[1] Data from DLI. Attendance records were not kept prior to 2000.

woods person actively responsible for each logging site” participate in annual LogSafe seminars; thus, there is little incentive for noncovered loggers to participate, beyond the value of the training. Some owner-loggers also probably sell their wood to smaller, non-SFI-certified mills, so are not required to be MLEP members or to attend LogSafe seminars.

Safety consultation visits

Safety consultation visits are requested by loggers to help identify deficiencies that they may have in regard to workplace safety. The logger may request the consultation to cover a specific area of the workplace or the entire workplace. The typical consultation will review the company's safety and health programs, machine guarding, safe work-practices, employee interviews and other safety issues.

Safety abatement grants

Since the fall of 1997, the LogSafe coordinator has promoted the MNOSHA Safety Hazard Abatement Grant Program to loggers and mill owners. Program grants provide, on a competitive basis, state-match dollars for purchases of safety equipment.⁵ Since then, loggers have received more than \$740,000 in safety grants.

The safety abatement grants have provided resources to reduce the use of chain saws, which are the number one cause of logging injuries and fatalities. The grants have been used to purchase delimiting equipment, feller-bunchers, drop-deck low-boy trailers, slashers, log-loaders, log-processors, personal protective equipment, enclosed cabs, lifting cranes for service trucks and other safety-related equipment.

⁵ The Safety Hazard Abatement Grant Program awards employers in the state of Minnesota a dollar-for-dollar match — up to \$10,000 — for projects designed to reduce the risk of injury and illness to their workers, and based on safety/health on-site hazard surveys. The grants assist in covering the cost of obtaining safety equipment, operating and maintaining equipment, or purchasing or renting real property to meet criteria established by on-site safety inspections. Priority is given to projects that create production jobs in an area or prevent loss of jobs due to safety problems. Also given priority are projects in industries that are the current focus of Minnesota OSHA strategies. The grants are funded from the Assigned Risk Safety Account, derived from penalties assessed for violations of various workers' compensation laws. The grant application and instructions can be found on the Web at www.doli.state.mn.us/docs/04grantbook.doc.

Table 1.3 Safety abatement grants to loggers, 1998-2005 [1]

<i>Calendar year</i>	<i>Number of grants</i>	<i>Dollar value</i>
1998	9	\$ 90,000
1999	11	\$ 102,400
2000	6	\$ 49,000
2001	3	\$ 30,000
2002	9	\$ 90,000
2003	15	\$ 150,000
2004	15	\$ 150,000
2005	10	\$ 80,434
Total	78	\$ 742,534

[1] Data from DLI.

Other activities

In addition to safety seminars, on-site training and consultations, the LogSafe program maintains a presence at logging trade shows and conferences, and provides training to public-sector employees involved in tree removal.

The LogSafe coordinator and other WSC staff members maintain a booth about logging safety at the annual logging trade show and attend timber auctions throughout the state to promote safe logging and to establish relationships with Minnesota loggers and mill representatives.

LogSafe training of public-sector employees began after a fatality and several injuries to public-sector tree removal employees. Beginning in 2002, public employers are charged \$500 for each training session provided by the coordinator.

Public-sector employees are generally responsible for clearing trees that fall during a storm and block a roadway. These trees are often dangerous to remove because of the unusual and extreme pressures applied during a storm. Despite the elevated danger of this situation, the employees assigned generally do not have much logging experience and don't have the safer and more-modern machinery common on logging sites today. LogSafe training for these employees covers safe tree-felling methods, chain saw safety and maintenance, personal protective equipment and OSHA regulations.

Most training sessions include hands-on training.

Rebates

From the Targeted Industry Fund assessment collected annually, \$125,000 covers the cost of the LogSafe program; the remainder is paid as workers' compensation premium rebates to participating logging companies. Chapter 2 provides detailed information about these rebates and their impact on workers' compensation insurance rates for the logging industry.

Certificates of compliance

Minnesota Statutes §176.130, subd. 3, requires sawmills to collect a "certificate of compliance" with workers' compensation laws from every logger it buys wood from and to submit these certificates to the DLI commissioner upon request (see Appendix A). A copy of a certificate of compliance is included here as Appendix E.

Table 1.4 LogSafe activities, 1999-2004 [1]

<i>Calendar year</i>	<i>Seminars</i>	<i>On-site trainings</i>	<i>Consultations at logging sites</i>	<i>Consultations at saw mills</i>	<i>Trade shows, annual meetings, etc.</i>	<i>Public-sector training</i>
1999	22	36	0	5	1	23
2000	22	17	0	5	7	60
2001	21	33	0	1	3	16
2002	21	23	9	6	1	13
2003	22	27	28	7	0	19
2004	16	20	26	3	4	18
2005	17	14	14	0	7	22

[1] Data from DLI.

2

LogSafe rebates 1990 through 2005

Logging employers that purchase workers' compensation insurance and whose employees participate in LogSafe training (or another eight-hour DLI-approved training program) can submit a claim to DLI for a rebate on their workers' compensation premium. The total amount available for rebates each year is equal to the amount collected in assessments, less \$125,000 that is allocated for LogSafe training. This remainder is allocated to claimants on the basis of payroll.⁶ Information provided by sawmills determines the total amount of rebate dollars available each year (see Chapter 3).

Number of claimants and total rebates

The number of LogSafe rebate claimants rose until about 2000 and has declined since then. This corresponds closely with the rise and decline in the number of employer establishments⁷ during this period (see Appendix F). Total rebates, on the other hand, have risen gently since the program was

⁶ For example, \$1,059,711 was collected in assessments in 2005, so \$934,711 (\$1,059,711 - \$125,000) was available for rebates. Prior-year payroll reported by claimants was \$8,890,543, so the rebate per payroll dollar was \$0.105 (\$934,711 / \$8,890,543). A claimant reporting \$75,000 of payroll in 2004 would have received a rebate in 2005 of about \$7,885.

⁷ An establishment is an economic unit, such as a farm, mine, factory or store, that produces goods or provides services. It is typically at a *single physical location* and engaged in *predominantly one type of economic activity* for which a single industrial classification may be applied. An employer can have one or more establishments. If a large logging company has several permanent shops, each one would be considered a separate establishment.

initiated, except for a short period of decline between 1997 and 1999. Average annual growth in rebate dollars during the 1991 through 2004 period was 3.2 percent.

Rebate per claimant and per claimant payroll dollar

Rebate per employer-claimant declined through most of the 1990s and has gone up since 2000. This corresponds with the slow increase in the number of employees per establishment during this period (see Table 4.1). On the other hand, rebate *per payroll dollar* declined steadily between 1991 and 2001, from about 20 cents per payroll dollar to just less than 10 cents per payroll dollar. Since then, rebate per payroll dollar has remained flat at about 10.5 cents.

Table 2.1 Rebate per claimant and per claimant payroll dollar, 1991-2005 [1]

Calendar year	Total rebates	Number of claimants	Claimant prior year payroll	Average rebate per claimant	Rebate per claimant payroll dollar
1991 [2]	\$ 215,250	111	\$ 2,067,869	\$ 1,922	\$ 0.104
1992	\$ 621,907	110	\$ 3,194,618	\$ 5,654	\$ 0.195
1993	\$ 723,154	115	\$ 4,056,312	\$ 6,148	\$ 0.176
1994	\$ 754,919	131	\$ 4,829,601	\$ 5,750	\$ 0.156
1995	\$ 774,070	135	\$ 5,368,888	\$ 5,734	\$ 0.144
1996	\$ 790,151	134	\$ 5,538,879	\$ 5,897	\$ 0.143
1997	\$ 759,340	141	\$ 5,767,857	\$ 5,385	\$ 0.132
1998	\$ 751,628	144	\$ 6,462,230	\$ 5,220	\$ 0.116
1999	\$ 747,753	144	\$ 6,923,838	\$ 5,193	\$ 0.108
2000	\$ 757,150	143	\$ 7,472,732	\$ 5,295	\$ 0.101
2001	\$ 792,750	145	\$ 8,072,720	\$ 5,467	\$ 0.098
2002	\$ 818,563	133	\$ 7,812,793	\$ 6,155	\$ 0.105
2003	\$ 886,292	133	\$ 8,291,832	\$ 6,664	\$ 0.107
2004	\$ 924,784	130	\$ 8,682,963	\$ 7,114	\$ 0.107
2005	\$ 934,711	118	\$ 8,890,543	\$ 7,921	\$ 0.105

[1] Data from DLI. [2] 1991 data is for half year.

Rebate impact on insurance rates

The impact of the rebate on an individual employer depends on that employer's insurance company, experience rating, etc. As injury rates and insurance premium rates have declined during the years, the rebate has had an increasing impact. Whereas the rebate reduced premium rates about 39 percent in 1991, in 2003 it reduced premium rates about 47 percent.

Assuming insurance rates have continued their downward trend (an assumption strongly supported by the trend in pure premium rates shown in Table 5.4) while assessment receipts continue a slight upward trend, the rebate is currently paying approximately 67 percent of premium.

Table 2.2 Percent reduction in premium in logging, 1991-2005

<i>Calendar year</i>	<i>Initial rate[1]</i>	<i>Rate after rebate[2]</i>	<i>Percent reduction</i>
1991	\$ 38.35	\$ 23.58	38.5 %
1992	\$ 35.12	\$ 19.72	43.9 %
1993	\$ 30.93	\$ 16.49	46.7 %
1994	\$ 33.68	\$ 20.03	40.5 %
1995	\$ 36.68	\$ 23.77	35.2 %
1996	\$ 33.50	\$ 22.67	32.3 %
1997	\$ 28.01	\$ 18.13	35.3 %
1998	\$ 22.53	\$ 12.92	42.6 %
1999	\$ 18.59	\$ 9.43	49.3 %
2000	\$ 17.91	\$ 9.30	48.1 %
2001	\$ 19.31	\$ 10.59	45.1 %
2002	\$ 20.82	\$ 11.81	43.3 %
2003	\$ 20.06	\$ 10.59	47.2 %
2004 [3]	\$ 17.44	\$ 8.28	52.5 %
2005 [3]	\$ 13.96	\$ 4.55	67.4 %

[1] Data from the Minnesota Workers' Compensation Insurers Association. Rates here are "calendarized" to appropriately associate with rebate numbers. See Appendix H.

[2] The rebate numbers used in calculating this rate are for the payroll year for which the rebated insurance premium was claimed. It is the year prior to when the rebate was claimed and paid.

[3] 2004 and 2005 data is projected. See Appendix H.

Table 2.3 Percent reduction in premium for an average claimant, 1991 - 2005

<i>Calendar Year</i>	<i>Rebate per \$100 claimant payroll dollars[2]</i>			<i>Percent reduction</i>
	<i>Initial rate[1]</i>	<i>Rate after rebate</i>		
1991	\$ 38.35	\$ 19.47	\$ 18.89	50.8 %
1992	\$ 35.12	\$ 17.83	\$ 17.29	50.8 %
1993	\$ 30.93	\$ 15.63	\$ 15.30	50.5 %
1994	\$ 33.68	\$ 14.42	\$ 19.26	42.8 %
1995	\$ 36.68	\$ 14.27	\$ 22.42	38.9 %
1996	\$ 33.50	\$ 13.17	\$ 20.34	39.3 %
1997	\$ 28.01	\$ 11.63	\$ 16.38	41.5 %
1998	\$ 22.53	\$ 10.80	\$ 11.73	47.9 %
1999	\$ 18.59	\$ 10.13	\$ 8.46	54.5 %
2000	\$ 17.91	\$ 9.82	\$ 8.09	54.8 %
2001	\$ 19.31	\$ 10.48	\$ 8.83	54.3 %
2002	\$ 20.82	\$ 10.69	\$ 10.13	51.3 %
2003	\$ 20.06	\$ 10.65	\$ 9.41	53.1 %
2004 [3]	\$ 17.44	\$ 10.51	\$ 6.93	60.3 %
2005 [3]	\$ 13.96	\$ 10.50	\$ 3.46	75.2 %

[1] Data from the Minnesota Workers' Compensation Insurers Association. Rates here are "calendarized" to appropriately associate with rebate numbers. See Appendix H.

[2] These numbers are for the payroll year for which the rebated insurance premium was claimed. It is the year prior to when the rebate was claimed and paid. See Appendix H.

[3] 2004 and 2005 data is projected. See Appendix H.

3

Budget, 1991 through 2005

Table 3.1 Targeted Industry Fund sources and uses, calendar-years 1991-2005 (in thousands) [1]

<i>Calendar year</i>	<i>Assess-ments</i>	<i>Rebates</i>	<i>LogSafe program</i>	<i>Surplus/ (deficit)</i>	<i>Cummulative surplus</i>
1991	\$340	\$215	\$125	\$0	\$0
1992	747	622	125	0	0
1993	848	723	125	0	0
1994	880	755	125	0	0
1995	899	774	125	0	0
1996	915	790	120	5	5
1997	884	759	140	(15)	0
1998	877	752	132	(7)	0
1999	873	748	125	0	0
2000	882	757	135	(10)	0
2001	918	793	127	(2)	0
2002	943	818	121	4	4
2003	1,011	886	121	4	8
2004	1,050	925	123	2	10
2005	1,060	935	128	(3)	7

[1] Data from DLI.

Overview

Since 1990, the total assessment and total rebates have increased, but the annual allocation for program activities has stayed constant at \$125,000. Rebates per claimant have gone up, rebates per payroll dollar have gone down, but rebates as a percentage of insurance premiums paid have gone up because of falling premium (see Chapter 5). As the program allotment has stayed constant while costs have increased, the budget has become tighter and some activities have been eliminated.

Revenue

Each year, Minnesota sawmill owners pay an assessment equal to 30 cents for each cord of wood purchased or acquired in excess of 5,000 cords, into a special logger's fund. Targeted

Industry Fund assessments have increased from less than \$750,000 in the first full-year of program operation to less than \$1.1 million, with a period of decline between 1996 and 1999. Average annual growth during the 1991 through 2004 period was 2.7 percent.

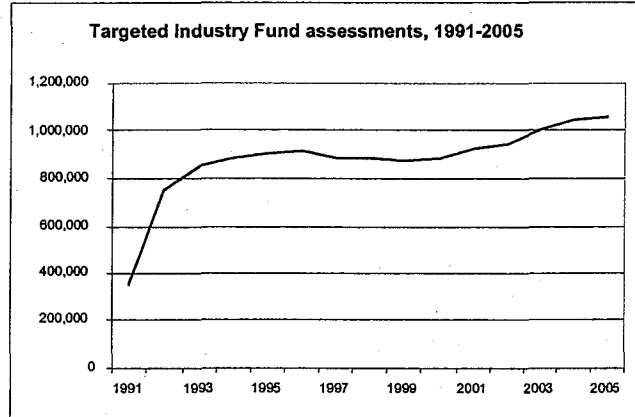
Program expenditures

Of the money paid into the Targeted Industry Fund each year, \$125,000 is allocated to the LogSafe program. The remainder is paid as rebates on workers' compensation premiums (discussed in Chapter 2).

DLI does not charge LogSafe for the time of Minnesota OSHA consultants at LogSafe training or for program management and administrative support services.

Table 3.2 Targeted Industry Fund assessments, 1991-2005 [1]

<i>Calendar year</i>	<i>Assessment</i>
1991 [2]	\$ 340,250
1992	\$ 746,907
1993	\$ 848,154
1994	\$ 879,919
1995	\$ 899,070
1996	\$ 915,151
1997	\$ 884,340
1998	\$ 876,628
1999	\$ 872,753
2000	\$ 882,150
2001	\$ 917,750
2002	\$ 943,563
2003	\$ 1,011,292
2004	\$ 1,049,784
2005	\$ 1,059,711



[1] Data from DLI.
 [2] 1991 data is for half year.

4

Minnesota loggers and logging safety

In terms of employment, the Minnesota logging industry is small: data suggests there are fewer than 2,300 full- and part-time loggers in Minnesota, about four-fifths of whom are self-employed. While this industry was once very dangerous, the situation has steadily changed, with injury rates now similar to those in contracting. Evidence and informal discussions suggest this is due to:

- a) incorporation of Sustainable Forest Initiative standards;
- b) a shift to more highly mechanized logging methods; and
- c) a shift toward larger logging operations.

Loggers

The number of loggers in logging establishments⁸ in Minnesota is slowly declining, from about 2,600 in the late 1990s to about 2,300 now.⁹ The decline — about 12 percent between 1997 and 2003 — is seen in both the number of employed and self-employed loggers. The percentage of non-employer loggers has varied between 79 percent and 82 percent during this period.

⁸ Another source of information about this topic is the 20 percent sample of the decennial census. This data reports that the number of loggers declined from about 2,300 to about 1,800 between 1990 and 2000. These numbers are somewhat lower than those in Table 4.1. The data in Table 4.1 is thought to be better, because it comes from nonsample sources.

⁹ See footnote 8.

Logging employers

The number of logging establishments with covered employees increased steadily through 1998, but declined significantly after that. The average number of employees per establishment has increased slowly since 1995.

Table 4.1 Number of employer-establishments and employees in Minnesota logging, 1990-2004 [1][2]

Calendar year	Establishments		Employees per establishment
	with employees[3]	Employees [4]	
1990	161	622	3.9
1991	172	593	3.4
1992	180	673	3.7
1993	175	672	3.8
1994	186	719	3.9
1995	190	708	3.7
1996	199	753	3.8
1997	203	791	3.9
1998	209	844	4.0
1999	209	827	4.0
2000	201	838	4.2
2001	198	804	4.1
2002	185	785	4.2
2003	184	805	4.4
2004	175	815	4.7

[1] "Logging" here refers to the logging industry, SIC 2411 in years 1990 to 1999, and NAICS 113310 in years 2000 to 2004.

[2] Data from the QCEW, DEED/LMI.

[3] See Table F.1 in Appendix F, assuming 13 establishments each year have zero employees (see Table 4.4).

[4] See Table F.1 in Appendix F. Includes nonlogger employees, such as managers, clerks, mechanics and machine operators.

Workers' compensation claims¹⁰

Although the number of covered loggers has increased from about 375 to about 490 between 1990 and 2004 (see Table F.1 in Appendix F), the total number of paid workers' compensation claims a year has declined from about 70 to about 30.¹¹

Table 4.2 Workers' compensation claims, paid indemnity and medical-only, Minnesota logging, 1990-2004 [1]

<i>Injury year</i>	<i>Paid indemnity claims[2]</i>	<i>Paid medical-only claims[3]</i>
1990	35	25
1991	44	35
1992	30	27
1993	37	25
1994	39	29
1995	32	23
1996	30	20
1997	26	18
1998	28	20
1999	21	15
2000	30	31
2001	15	20
2002	8	11
2003	16	20
2004	17	21

[1] "Logging" here refers to the logging industry, SIC 2411 in years 1990 - 1999, and NAICS 113310 in years 2000 - 2004.

[2] Developed statistics from DLI data. See Appendix G for details.

[3] Data from the Minnesota Workers' Compensation Insurers Association (MW CIA) was used to calculate the ratio of medical-only to indemnity claims each year for insurance class 2702 (logging). This ratio was applied to the number of indemnity claims in the previous column. See Appendix G for details.

¹⁰ The numbers cited in the text in this section are based on fitted linear trends, not the actual numbers in the tables. This is because actual values are volatile from year to year, especially in logging.

¹¹ The injuries discussed here are those to employee-workers and not to employers, the self-employed or other noncovered workers. There is currently no source of information about injuries among noncovered loggers.

Until 2000, more than half of these were indemnity claims; since then, medical-only claims have outnumbered indemnity claims. The downward trend in injuries has been fairly constant except for somewhat high injury-years in 1991, 1994 and 2000, and an exceptionally low injury-year in 2002.

Table 4.3 Occupation of injured worker, logging indemnity claims, Minnesota, 1993-2004 [1] [2]

<i>Occupation</i>	<i>Percentage of claims</i>		
	<i>1993 to 1996</i>	<i>1990 to 2000</i>	<i>2001 to 2004</i>
Logger	33.3	30.5	34.0
Machine operator	15.2	19.0	34.0
Driver	15.9	20.0	18.9
Laborer	16.7	17.1	9.4
Mechanic or repairer	2.9	4.8	3.8
Other	15.9	8.6	0.0

[1] "Logging" here refers to the logging industry, SIC 2411 for 1990 to 1999 and NAICS 113310 for 2000 to 2004.

[2] Data from DLI.

Fatalities

The number of fatalities in Minnesota logging has declined dramatically since 1992. There were 12 fatalities between 1992 and 1998, and only three fatalities between 1999 and 2004.

Table 4.4 Logging fatalities, Minnesota, 1992-2004 [1] [2]

<i>Calendar years[3]</i>	<i>Wage and salary workers</i>			<i>Total</i>
		<i>Others</i>		
1992 - 1998	4	8		12
1999 - 2004	[4]	[4]		3

[1] "Logging" here refers to the logging industry, SIC 2411 for 1990 to 1999 and NAICS 113310 for 2000 to 2004.

[2] Data from the Census of Fatal Occupational Injuries (CFOI).

[3] Logging is a fairly small industry in Minnesota and, although logging is a relatively risky occupation, the number of fatalities in any given year is small. To protect the privacy of the individuals involved, statistics can only be published for groups of years.

[4] Not publishable. See item three above.

5

Workers' compensation insurance in Minnesota logging

Workers' compensation insurance rates in Minnesota logging have declined along with injury rates (see Chapter 4). When the LogSafe legislation passed in 1990, the Assigned Risk Plan (ARP)¹² rate for loggers was more than \$50 per \$100 of payroll; currently the rate is closer to \$15. Between 1990 and the present, the pure premium rate¹³ fell from more than \$30 per \$100 payroll to about \$6 in logging; in contracting, the rate fell from a high of about \$10 to about \$5 during the same period.

The rates presented are generated by calculating the ratio of all premium paid — after credits and experience modifications and adjusting for deductibles — to all payroll. *They are different from quoted rates.*

Insurers

The workers' compensation insurance market for logging is small and concentrated. The number of workers' compensation policies identified by LogSafe claimants varied between 115 and 145 for 1990 through 2004. The number of insurers writing these policies was also small,

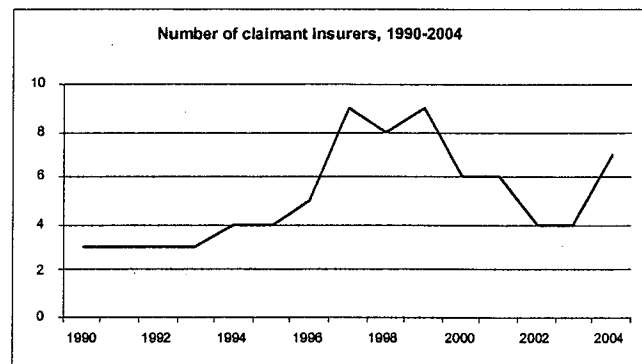
varying between three and nine during the same period. The top insurer covered about 80 percent of claimant payroll during this period, jumping up to about 90 percent in 1995 and 1996. The top three insurers covered between 90 and 100 percent of claimant payroll during this period.

Table 5.1 Number of claimant insurers and claimant policies; percentage of payroll by top one and top three claimant insurers, 1990-2004 [1]

Calendar year	Number of claimant insurers	Number of claimant policies	Percent top 1	Percent top 3
1990	3	111	82.9%	100.0%
1991	3	110	79.0%	100.0%
1992	3	115	80.4%	100.0%
1993	3	131	78.0%	100.0%
1994	4	135	81.0%	98.9%
1995	4	134	88.2%	90.8%
1996	5	141	91.7%	98.0%
1997	9	144	79.6%	96.4%
1998	8	144	77.7%	94.7%
1999	9	143	78.4%	92.4%
2000	6	145	78.0%	98.3%
2001	6	133	78.0%	98.7%
2002	4	133	80.8%	99.4%
2003	4	130	80.5%	97.0%
2004	7	118	76.9%	92.6%

¹² Employers unable to insure in the voluntary market — because of small size, lack of loss experience, a poor safety record or being in a high-risk industry — may insure through the ARP, the insurance program of last resort administered by the Department of Commerce. Rates in the ARP are set by the Department of Commerce. These rates are currently about 30 to 35 percent higher than the average filed rates in the voluntary market.

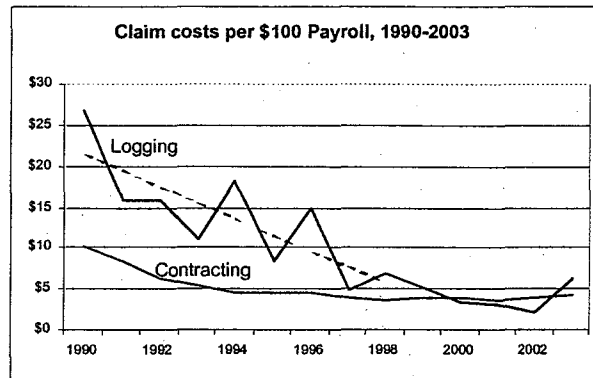
¹³ Pure premium rates represent expected indemnity and medical losses per \$100 of covered payroll. They are determined annually by the Minnesota Workers' Compensation Insurers Association, the state's workers' compensation data service organization and rating bureau. They are the starting point for rate-setting by individual insurance companies in the voluntary market.



[1] Data from DLI.

Insurance claims

Logging is a very small industry, accounting for one- to two-hundredths of a percent of insured payroll in the state. However, the percentage of insurance losses originating in logging has trended strongly downward, from about two *tenths* of a percent in 1990 to about five *hundredths* of a percent in 2003. This compares to contracting, which accounts for about 6 percent of statewide payroll and 22 percent of statewide insurance losses. Logging now performs about as well as contracting, following a period of sustained improvement in the early- to mid-1990s. This can also be seen by comparing claim costs to payroll in the two industries. Claim costs were more than \$20 per \$100 of payroll in logging in the early 1990s, but declined to about \$5 in the early 2000s. In contracting, the rate fell from about \$10 in 1990 to about \$4 currently.



[1] "Logging" here is insurance industry payroll class 2702; "contracting" is a group of 77 insurance codes, mostly in construction.

[2] Data from the Minnesota Workers' Compensation Insurers Association (MWCIA). See Appendix H.

Table 5.2 Claim costs per \$100 payroll, logging and contracting, Minnesota 1990-2003 [1] [2]

Policy year	Logging	Contracting
1990	\$ 26.78	\$ 10.14
1991	\$ 15.87	\$ 8.21
1992	\$ 15.63	\$ 6.16
1993	\$ 11.01	\$ 5.10
1994	\$ 18.21	\$ 4.40
1995	\$ 8.32	\$ 4.40
1996	\$ 14.85	\$ 4.28
1997	\$ 4.62	\$ 3.67
1998	\$ 6.64	\$ 3.49
1999	\$ 5.06	\$ 3.84
2000	\$ 3.28	\$ 3.71
2001	\$ 2.82	\$ 3.50
2002	\$ 1.91	\$ 3.65
2003	\$ 6.07	\$ 4.08

Insurance rates

Insurance rates in logging have fallen significantly since 1990. This can be seen by looking at pure premium rates, rates in the voluntary market and ARP rates (see Table 5.3). Voluntary market rates have fallen from more than \$37 per \$100 of payroll in 1993 to less than \$9 per \$100 of payroll in 2006. Pure premium rates have fallen from about \$31 in 1990 to about \$6 in 2006. ARP rates behaved very differently from other logging insurers during this period, though these rates have also fallen consistently and sharply from a peak of more than \$50 per \$100 of payroll to nearly \$15 in 2006.

Table 5.3 Pure premium rates and average bottom-line rates in the voluntary market and Assigned Risk Plan, logging, Minnesota 1990-2006 [1] [2]

Policy year	Pure premium	Voluntary market	ARP
1990 [3]	\$ 31.18	\$ 37.60	\$ 52.90
1991 [3]	\$ 23.49	\$ 34.23	\$ 48.14
1992 [3]	\$ 28.46	\$ 31.57	\$ 44.41
1993 [3]	\$ 21.06	\$ 25.80	\$ 40.27
1994	\$ 26.14	\$ 35.10	\$ 45.16
1995	\$ 27.82	\$ 34.23	\$ 48.38
1996	\$ 27.61	\$ 29.99	\$ 49.42
1997	\$ 20.79	\$ 24.52	\$ 52.31
1998	\$ 19.82	\$ 19.74	\$ 52.90
1999	\$ 19.40	\$ 16.90	\$ 48.00
2000	\$ 20.61	\$ 17.49	\$ 46.88
2001	\$ 18.75	\$ 19.15	\$ 43.19
2002	\$ 15.15	\$ 20.59	\$ 40.31
2003	\$ 13.30	\$ 18.27	\$ 33.10
2004 [3]	\$ 11.32	\$ 15.85	\$ 28.30
2005 [3]	\$ 8.15	\$ 11.41	\$ 20.38
2006 [3]	\$ 6.03	\$ 8.44	\$ 15.08

[1] "Logging" here is insurance industry payroll class 2702; "contracting" is a group of 77 insurance codes, mostly in construction.

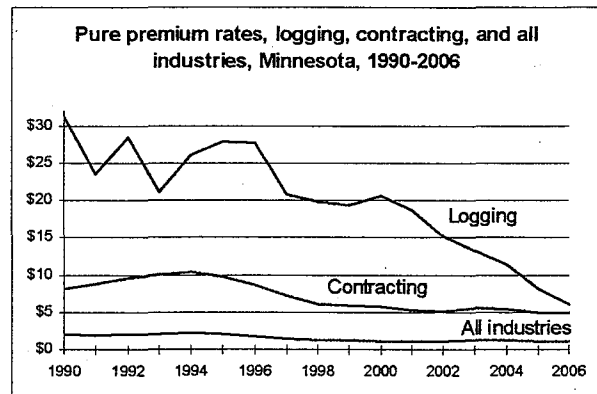
[2] Data from the Minnesota Workers' Compensation Insurers Association (MWCIA).

[3] Figures for 1990 to 1993 are projected backwards from 1994, based on payroll and the trend in standard premium relative to payroll. Voluntary market and ARP figures for

2004 to 2006 are projected forward, based on pure premium rates.

Table 5.4 Pure premium rates in logging, contracting and all industries, Minnesota, 1990-2006 [1] [2]

Policy year	All industries	Contracting	Logging
1990	\$ 2.05	\$ 8.09	\$ 31.18
1991	\$ 2.00	\$ 8.84	\$ 23.49
1992	\$ 2.12	\$ 9.60	\$ 28.46
1993	\$ 2.16	\$ 10.08	\$ 21.06
1994	\$ 2.19	\$ 10.34	\$ 26.14
1995	\$ 2.06	\$ 9.74	\$ 27.82
1996	\$ 1.74	\$ 8.66	\$ 27.61
1997	\$ 1.48	\$ 7.18	\$ 20.79
1998	\$ 1.27	\$ 6.03	\$ 19.82
1999	\$ 1.24	\$ 5.87	\$ 19.40
2000	\$ 1.19	\$ 5.73	\$ 20.61
2001	\$ 1.13	\$ 5.35	\$ 18.75
2002	\$ 1.15	\$ 5.16	\$ 15.15
2003	\$ 1.21	\$ 5.54	\$ 13.30
2004	\$ 1.21	\$ 5.37	\$ 11.32
2005	\$ 1.20	\$ 5.04	\$ 8.15
2006	\$ 1.19	\$ 4.97	\$ 6.03



[1] "Logging" here is insurance industry payroll class 2702; "contracting" is a group of 77 insurance codes, mostly in construction.

[2] Data from the Minnesota Workers' Compensation Insurers Association (MWCIA). See Appendix H.

6

LogSafe 2005

LogSafe was different in 2005 than in other years in several respects. For the first time, some seminars were conducted in conjunction with the Minnesota Logger Education Program (MLEP) conferences in Bemidji and Biwabik, Minn.

Table 6.1 LogSafe 2005 at-a-glance [1]

No. of seminars conducted	17
No. of seminar attendees	1,098
No. of on-site trainings conducted	14
No. of on-site training attendees	49
No. of safety consultations	14
No. of trade shows/annual mtgs. attended	7
No. of public-sector trainings	22
No. of training hours delivered	536
Assessment collected	1,059,711
Amount of rebates granted	934,711
Program cost	\$128,050
No. of loggers in industry	2,400
No. of workers' comp indemnity claims	9
No. of logger fatalities	0

[1] Data from DLI.

LogSafe seminars

The focus of the 2005 LogSafe seminars was OSHA safety and health programs. A major goal was to give loggers an improved understanding of these programs and to foster the attitude that safety and health are aspects of a company's environment that must be cultivated.

Topics

The 2005 LogSafe seminar topics were the MNOSHA AWAIR program, OSHA employee Right-to-Know law, hearing conservation and

fire extinguishing.¹⁴ These topics were chosen by a committee in response to concerns the LogSafe curriculum was no longer effective.¹⁵

On Aug. 30, LogSafe provided a full-day of equipment training in Grand Rapids, Minn. One half of this training was about cut-to-length equipment and the other half was about conventional logging equipment. Ponsse USA, a company that manufactures and sells specialized timber-harvesting equipment, assisted with the cut-to-length training. NorTrax, a John Deere equipment dealer, assisted with the conventional equipment training. This was the first time LogSafe offered a seminar devoted solely to training with logging equipment, at the strong urging of MLEP. Seven loggers attended from a single employer.

LogSafe is currently reviewing this decision in light of its mission to provide cost-effective training that improves workplace safety, reduces workplace injuries and reduces workers' compensation costs.

¹⁴ Training topics at LogSafe seminars from 1992 to the present are provided in Appendix C.

¹⁵ The committee consisted of five of the 11 members of the LogSafe Advisory Committee: Terry Worthman, Boise-Cascade; Dave Amundson, Lumbermen's Underwriting Association; Maureen Talarico, Timber Producer's Association; Scott Dane, Associated Contract Loggers & Truckers; and Rod Hooker, independent logger.

Locations

The 2005 LogSafe seminars were conducted at centrally located facilities in logging areas throughout the state. This year, two were offered on the second day of the annual MLEP conferences (April 13 in Biwabik, Minn., and April 27 in Bemidji, Minn.).

Table 6.2 LogSafe 2005 seminar locations [1]

<i>Date</i>	<i>Location</i>
March 31	Rochester
April 5	Baudette
April 6	Int'l Falls
April 7	Cloquet
April 13 [2]	Biwabik
April 19	Grand Marais
April 20	Castle Danger
April 21	Eveleth
April 27 [2]	Bemidji
May 3	Bemidji
May 4	Brainerd
May 5	Grand Rapids
Aug. 30 [3]	Grand Rapids
Oct. 11	Int'l Falls
Oct. 12	Bemidji
Oct. 13	Cloquet
Dec. 14	Chisholm

[1] Data from DLI.

[2] MLEP conference

[3] Equipment training

The full-day on-site equipment training Aug. 30 was conducted at two logging equipment dealer sites in Grand Rapids, Minn.

Table 6.3 LogSafe 2005 seminar attendance, by location [1]

<i>Date</i>	<i>Attendance</i>		
	<i>ER</i>	<i>EE</i>	<i>Total</i>
March 31	6	29	35
April 5	30	14	44
April 6	39	71	110
April 7	41	45	86
April 13 [2]	87	54	141
April 19	14	2	16
April 20	34	9	43
April 21	11	41	52
April 27 [2]	122	34	156
May 3	31	52	83
May 4	28	32	60
May 5	41	72	113
Aug. 30 [3]	1	6	7
Oct. 11	6	14	20
Oct. 12	12	8	20
Oct. 13	25	9	34
Dec. 14	14	15	29
Total	542	507	1,049

[1] Data from DLI.

[2] MLEP conference

[3] Equipment training

Satisfaction

Although participants continued to report high levels of satisfaction with the seminars, LogSafe 2005 evaluations were a little lower than in previous years (see Table 7.2). Overall satisfaction with the training fell to 78 percent from 85 percent in the previous year, and agreement that the training was useful in the loggers' day-to-day work fell to 72 percent from 79 percent the year before.

Trainers observed the fire-extinguisher training was well received; participation in the hands-on training segment was low. As always, the loggers appreciated the opportunity to be re-certified in first aid and CPR.

Trainers

The trainers for the 2005 Logsafe seminars were selected because of their expertise in specific disciplines. Some had taught at Logsafe seminars in previous years.

On-site training

In lieu of the scheduled seminars, free on-site training is available at the request of an employer. In 2005, LogSafe provided 14 on-site training sessions to 49 loggers (see Table 1.4). These sessions focused on the specific needs at a logging worksite or business facility. They covered safe work practices, machine operation safety, hazard identification, machine de-energization, chain saw safety and other areas specific to the particular logging operation.

Safety consultation

Safety consultation visits are requested by logging employers to help identify deficiencies in their workplace with respect to safety. The employer may request the consultation to cover a specific area of the workplace or the entire workplace. The typical consultation reviews the company's safety and health programs, machine guarding, safe work practices, employee interviews and other safety-related issues of the worksite.

In 2005, LogSafe provided 11 consultations at logging sites to 39 loggers, and one consultation at a sawmill.

Other activities

In 2005, for the first time, LogSafe co-sponsored the two annual logger conferences previously organized solely by MLEP. Besides offering LogSafe seminars during the second day of each conference, the LogSafe coordinator participated in conference planning and contributed \$12,000 toward conference costs.

The LogSafe coordinator also attended a two-day trade show (the North Star Expo), participated in four logger meetings and attended four timber auction sales in 2005. The North Star Expo, in Grand Rapids, Minn., is an event for loggers, truckers and mill personnel. The LogSafe coordinator staffs a booth at this event each year, answers questions and promotes workplace safety. The coordinator also attended the ACLT annual meeting conducted in Biwabik, Minn., and three ACLT planning sessions about logger training needs.

In addition, the coordinator attended four timber auction sales to talk with loggers and promote the Logsafe program.

For the seventh year in a row, the LogSafe coordinator also provided training sessions for Minnesota public-sector employees involved in tree removal. Seventeen of these fee-for-service sessions were conducted in 2005.

The coordinator also conducted five fee-for-service training sessions at the University of Florida; DLI was reimbursed for personnel, materials and other costs for these training sessions.

7

Seminar participant satisfaction

A customer satisfaction survey was conducted at the end of LogSafe seminars in 2002, 2004 and 2005. Participants were asked about their satisfaction with various aspects of the training, the topics they would like to see in future sessions and where they would like to have future sessions conducted.

Overview

Surveys were distributed at the end of the seminars. In 2004 and 2005, the instructor left the room after handing out surveys. Participants left their surveys in a box by the door and the instructor returned after everyone had left, sealed the box and delivered it to DLI Research and Statistics for analysis.

Response rates in all three years were very high.

Table 7.1 LogSafe seminar survey response rates, 2002-2005 [1]

Calendar year			Response rate %
	Attendees	Surveys	
2002	1,099	1,008	92
2004	1,049	954	88
2005 [2]	939	861	92

[1] Data from DLI.

[2] In 2005, surveys were collected only at the April and May seminars. This was performed early, so seminar quality results could be addressed with constituents.

Attendees were asked to respond that they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with six statements.

- I am satisfied with today's meeting facilities.
- I am satisfied with today's training session.

- I am satisfied with the knowledge of the seminar instructors.
- My questions are satisfactorily answered during the seminars.
- Information from LogSafe training has been useful in my day-to-day work.
- My worksite is safer as a result of attending LogSafe training sessions.

Satisfaction rates were high ("satisfaction" means that participants responded they either agree or strongly agree with the statement) for all three years.

Table 7.2 LogSafe seminar survey satisfaction rates, 2002-2005 [1]

Satisfaction with	Satisfaction %		
	2002	2004	2005
Meeting facilities	81	88	85
Training session	82	85	78
Seminar instructors	88	90	87
Answers to questions	83	86	83
Useful day-to-day	76	79	72
Worksite is safer	76	79	74

[1] Data from DLI.

Participants were fairly consistent throughout the three years in their preferences for LogSafe topics. Top choices in all three years were:

- the safe use of mechanized equipment;
- forest worker diseases;
- equipment repair; and
- global positioning system use.

In 2002 and 2004, fire safety and personal safety were also top choices.

Responses about where participants would like to have LogSafe seminars conducted changed in the three surveys. In the 2002 survey, respondents indicated they preferred one eight-hour training session versus two four-hour days, two four-hour evenings or on-site training. In 2004, “continue to conduct training seminars at same locations around the state” received the highest number of responses (42 percent). About half as many responses were received for “conduct safety training in the woods” and half of that were received for “conduct some safety training at MLEP Conference.” In 2005, “conduct an eight-hour LogSafe training seminar in the current format at the annual MLEP conference” received the highest number of responses (31 percent). About half as many responses were received for “conduct an eight-hour on-site LogSafe training about a specific piece of equipment” and roughly the same number for “a half-day LogSafe seminar and a half-day safety consultation visit.”

Detailed 2005 results

In 2005, LogSafe seminar participants were surveyed following the March, April and May seminars. In each case, surveys were distributed at the end of the day-long seminar. Surveys were turned in by 861 of the 939 seminar participants (a 92 percent response rate).

Satisfaction

Tables 7.3 to 7.8 below show the distribution of responses to the six satisfaction questions on the seminar evaluation form. As in previous years, very few respondents are actively dissatisfied, a small number are “neutral” and a large majority are satisfied.

Table 7.3 Seminar 2005 satisfaction, “I am satisfied with today’s meeting facilities”

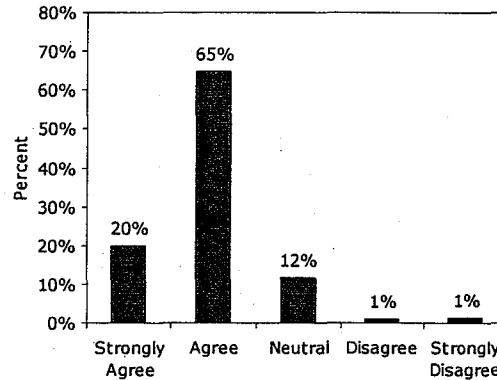


Table 7.4 Seminar 2005 satisfaction, “I am satisfied with today’s training session”

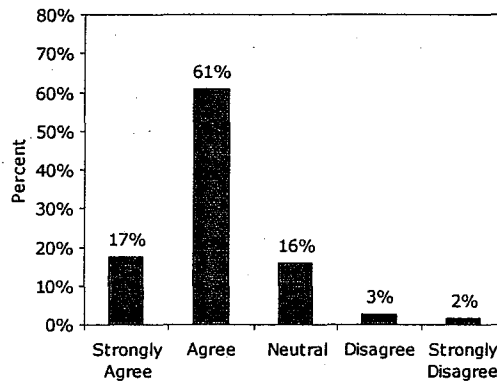


Table 7.5 Seminar 2005 satisfaction, “I am satisfied with the knowledge of the seminar instructors”

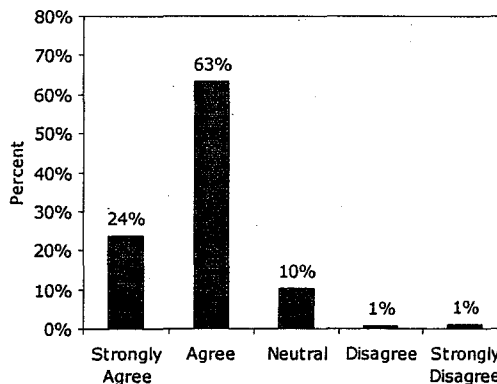


Table 7.6 Seminar 2005 satisfaction, “My questions are satisfactorily answered during the seminars”

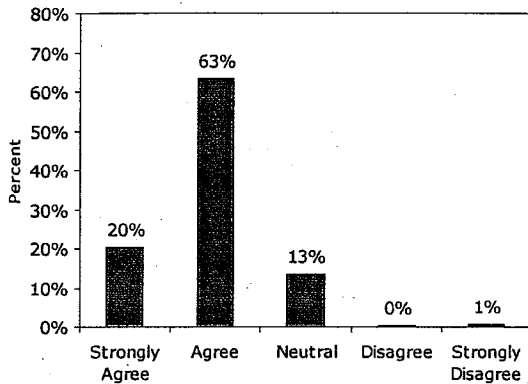


Table 7.7 Seminar 2005 satisfaction, “Information from LogSafe training has been useful in my day-to-day work”

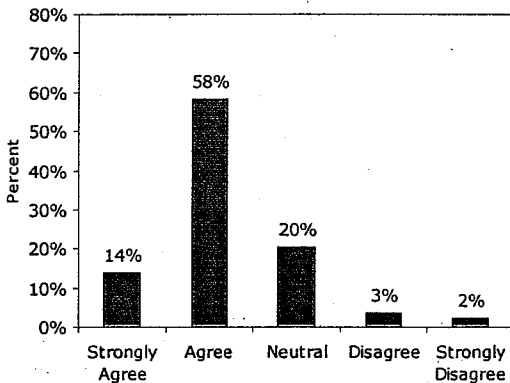
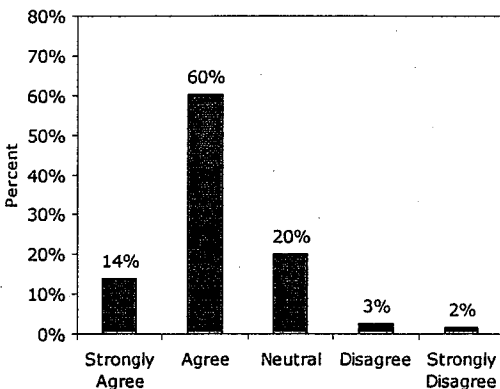


Table 7.8 Seminar 2005 satisfaction, “My worksite is safer as a result of attending LogSafe training sessions”



Differences between employers, employees and sole proprietors were minor. Satisfaction among respondents who had attended 10 or more previous LogSafe seminars also did not differ substantially from other groups.

Table 7.9 Seminar 2005 average survey satisfaction score rates, by type of attendee [1]

Satisfaction with	Type of attendee		
	ER	EE	SP
Meeting facilities	3.0	3.0	3.1
Training session	2.9	2.9	3.0
Seminar instructors	3.1	3.1	3.1
Answers to questions	3.0	3.0	3.1
Useful day-to-day	2.8	2.8	2.8
Worksite is safer	2.8	2.8	2.9
Number in group	154	419	274

[1] Data from DLI.

Table 7.10 Seminar 2005 average survey satisfaction score rates, by previous attendance [1]

Satisfaction with	Number of previous LogSafe seminars				
	0	1-3	4-6	7-9	≥10
Meeting facilities	3.2	3.0	2.9	3.0	3.1
Training session	3.1	2.9	2.8	3.0	2.9
Seminar instructors	3.2	3.1	3.0	3.1	3.1
Answers to questions	3.3	3.1	2.9	3.0	3.0
Useful day-to-day	2.9	2.8	2.7	2.9	2.8
Worksite is safer	3.0	2.8	2.7	2.9	2.9
Number in group	67	135	197	162	295

[1] Data from DLI.

There were 38 participants or respondents (4 percent) who consistently reported very low satisfaction scores. These individuals were not overwhelmingly similar to each other: about half were employees, with the remainder split between employer and sole proprietor, and about 40 percent had attended four to six previous seminars, with the remainder split between one to three years, seven to nine years and more than 10 years. About a quarter indicated “safe use of mechanized equipment” as a preferred seminar topic. Seven indicated preference for an on-site consultation visit and seven indicated preference for LogSafe in combination with the annual MLEP conference. Few comments were offered to provide insight into the reasons for dissatisfaction, though comments such as

“should be more about logging for loggers” were made in several instances.

Future training topics

When asked what topics they would like to see for future seminars (respondents could check as many options as they liked), safe use of mechanized equipment received the greatest number of responses (22 percent) and use of a global positioning system received the second greatest number (19 percent). In 2004, these two topics also ranked first and second.

Respondents also indicated preferences for training about equipment repair and forest worker diseases. Few respondents listed training about workers' compensation or wage-and-hour restrictions as important. There were few differences among employers, employees and sole proprietors on this ranking.

Training options

When asked about future training options (respondents could check as many options as they chose to), “conduct an eight-hour LogSafe training seminar in the current format at the annual MLEP conference” received the highest number of responses (31 percent). About half as many responses were received for “conduct an eight-hour on-site LogSafe training about a specific piece of equipment” and roughly the same number for “a half-day LogSafe seminar and a half-day safety consultation visit.” There were few differences among employers, employees and sole proprietors for this ranking.

Appendix A

Minnesota Statutes 176.130

176.130 Targeted industry fund; loggers.

Subdivision 1. **Definitions.** For purposes of this section, the following terms have the meanings given them, except where the context clearly indicates a different meaning.

(a) "Commissioner" means the commissioner of labor and industry, unless otherwise provided.

(b) "Logger" means the following occupations:

(1) timber fellers: those who employ chain saws or other mechanical devices mounted on logging vehicles to fell or delimb trees;

(2) buckers or chippers: those who cut trees into merchantable lengths with either chain saws or heavier machinery, including slashers, harvesters and processors;

(3) skidders or forwarders: those who either drag logs or trees to roadside landings, or load and transport logs or short wood (fuel wood or pulp wood) to similar destinations; and

(4) timber harvesters or processors: those who combine two or more of the operations listed in clauses (1) to (3).

(c) "Logging industry" means loggers and employers of loggers.

(d) "Wood mill" means the primary processors of wood or wood chips including, but not limited to, hard board manufacturers, wafer board or oriented strand board manufacturers,

pulp and paper manufacturers, sawmills and other primary manufacturers who do the initial processing of wood purchased from loggers.

(e) "Insurer" means an insurance company that provides workers' compensation coverage for loggers, including the Minnesota assigned risk plan.

(f) "Qualified employer" means a self-employed logger, or an employer of a logger, who has paid a premium for workers' compensation insurance coverage for the preceding calendar year and who has attended, or whose logger employees have attended, in the preceding calendar year, at least one safety seminar sponsored by or approved by the commissioner.

(g) "Rebate" means amounts allocated and paid to qualified employers under subdivision 6.

Subd. 2. **Administration.** The commissioner shall administer and enforce this section. Payments and reports required by this section must be made with forms provided by the commissioner. The commissioner shall collect all assessments and allocate the rebate as provided in this section.

Subd. 3. **Proof of insurance; logging industry.** Purchasers of wood from the logging industry shall obtain from the logger a certification of compliance with the mandatory insurance requirements of this chapter, or reason for exemption, on a form prescribed by the commissioner. A purchaser includes, but is not limited to, dealers and jobbers buying from the logging industry to sell to wood mills, and wood

mills that buy directly from the logging industry. Certificates obtained by the purchaser shall be submitted to the commissioner on request. The powers of inspection and enforcement pertaining to employers under section 176.184 shall be available with regard to purchasers under this section.

Subd. 4. Assessment. There is imposed an assessment, at the rate of 30 cents per cord of wood, for every cord or equivalent measurement of wood in excess of 5,000 cords, purchased or acquired in any calendar year, either inside or outside the state, by a wood mill located in Minnesota. This assessment must be paid by the wood mill to the commissioner on or before February 15 for the previous calendar year and may not, in any way, be recovered by the wood mill from the logging industry. All revenue collected from this assessment must be deposited in a separately maintained account in the special compensation fund for the payment of rebates under subdivision 6 and the loggers safety and education program under subdivision 11.

Subd. 5. Annual reports; wood mills; qualified employers. (a) Each wood mill that purchases or acquires more than 5,000 cords or equivalent measurement of wood in a calendar year shall, on or before February 15, make and file with the commissioner a report setting forth the number of cords purchased or acquired in the preceding calendar year, and other information the commissioner may require for the proper administration of this section.

(b) Each qualified employer shall, on or before February 15 each year, make and file with the commissioner a report setting forth the total amount of payroll paid to loggers in the preceding calendar year, together with proof of attendance at an approved safety seminar in the preceding calendar year, and other information the commissioner may require for the proper administration of this section. The commissioner may, for enforcement purposes, share reported payroll data for a particular employer with the

workers' compensation insurer for that employer or with the workers' compensation insurance association.

Subd. 6. Allocation of rebate. Money collected under this section, less an amount as provided in subdivision 11, is appropriated to and, must be paid by the commissioner, on or before June 1 each year, directly to each qualified employer in a proportion equal to the proportion that the qualified employer's reported payroll dollars for loggers in the preceding calendar year is to the total reported payroll dollars for loggers from all qualified employers in the preceding calendar year. Payment under this section shall be made only to those qualified employers reporting within the time limits provided in subdivision 5, paragraph (b).

Subd. 7. Inspection. The commissioner or duly authorized employees may, at all reasonable hours, enter in and upon the premises of a wood mill or a qualified employer and examine books, papers and records to determine whether the assessment has been properly paid or payroll properly reported.

Subd. 8. Penalties; wood mills. If the assessment provided for in this chapter is not paid on or before February 15 of the year when due and payable, the commissioner may impose penalties as provided in section 176.129, subdivision 10, payable to the commissioner for deposit in the assigned risk safety account.

Subd. 9. False reports. Any person or entity that, for the purpose of evading payment of the assessment or avoiding the reimbursement, or any part of it, makes a false report under this section shall pay to the commissioner for deposit in the assigned risk safety account, in addition to the assessment, a penalty of 75 percent of the amount of the assessment. A person who knowingly makes or signs a false report, or who knowingly submits other false information, is guilty of a misdemeanor.

Subd. 10. **Employer-employee relationship.** This section does not create an employer-employee relationship nor can it be used as a factor in determining the existence of an employer-employee relationship.

Subd. 11. **Safety program.** The commissioner shall establish or approve a safety and education program for Minnesota loggers. Funding for the program must be in the amount of \$125,000 each calendar year provided from amounts collected in the previous calendar year

pursuant to subdivision 4. If the amounts collected under subdivision 4 are less than \$125,000 in any calendar year, funding for the safety and education program for the next calendar year must be the actual amount collected.

HIST: 1990 c 521 s 1,4; 1992 c 510 art 3 s 13,14; 1995 c 224 s 126; 1995 c 231 art 1 s 36; art 2 s 60; 2002 c 262 s 12,13

Appendix B

Minnesota Rules 5222.3000 through 5222.3007

5222.3000 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of parts 5222.3000 to 5222.3007, the following terms have the meanings given them.

Subp. 2. **Full-time logger.** "Full-time logger" means a logger who is employed for at least 100 hours in each of three different months during a calendar year.

Subp. 3. **Logger.** "Logger" has the meaning given it in Minnesota Statutes, section 176.130, subdivision 1, paragraph (b).

Subp. 4. **Purchaser.** "Purchaser" has the meaning given it in Minnesota Statutes, section 176.130, subdivision 3.

Subp. 5. **Qualified employer.** "Qualified employer" has the meaning given it in Minnesota Statutes, section 176.130, subdivision 1, paragraph (f).

Subp. 6. **Woodmill.** "Woodmill" has the meaning given it in Minnesota Statutes, section 176.130, subdivision 1, paragraph (d).

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

5222.3001 AUTHORITY AND PURPOSE.

Parts 5222.3000 to 5222.3007 are adopted pursuant to the authority granted to the commissioner by Minnesota Statutes, sections 175.17, 176.83, and 176.130. The purpose of parts 5222.3000 to 5222.3007 is to specify the procedures by which woodmills and qualified employers report to the commissioner for the purpose of administering and implementing the provisions of Minnesota Statutes, section 176.130.

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

5222.3002 ANNUAL REPORTING BY WOODMILL.

Subpart 1. **Content of report.** Each woodmill shall make an annual report, as provided in Minnesota Statutes, section 176.130, subdivision 5, paragraph (a), on a form prescribed by the commissioner, including the following:

A. name and address of woodmill;

B. federal and state employer identification numbers of woodmill;

C. reporting period dates;

D. total number of cords purchased or acquired in the preceding calendar year per species of wood;

E. supporting documentation or other information requested by the commissioner; and

F. payment of assessment as provided in Minnesota Statutes, section 176.130, subdivision 4.

Subp. 2. **Conversion formulas.** For purposes of reporting under subpart 1, item E, where the woodmill uses a measurement other than by cord, the following conversion formulas shall apply:

A. 4,500 pounds of cut logs or tree-length timber equals one cord;

B. 500 board feet of saw logs or bolts equals one cord; and

C. 6,000 pounds of whole tree chips equals one cord.

Subp. 3. **Incomplete reports.** Reports not in compliance with this part will not be accepted for filing and do not satisfy reporting or payment requirements.

Subp. 4. **Extensions.** Requests by woodmills for extension of the time for reporting and making payment will be granted within seven

days of receipt by the commissioner, only in rare cases where:

- A. the request is made in writing;
- B. the request is received by the commissioner before the reporting due date;
- C. the request is based on circumstances beyond the control of the woodmill; and
- D. the commissioner determines the extension period is reasonable.

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

5222.3003 FAILURE TO MAKE PAYMENT OF ASSESSMENT; PENALTY.

Subpart 1. **Due date.** The due date for payment of the annual assessment by a woodmill is February 15 for the previous calendar year.

Subp. 2. **Basis.** A penalty will be assessed under Minnesota Statutes, section 176.129, subdivision 10, where, on or before the due date, either:

A. the payment of the assessment is not received by the commissioner; or

B. a request for extension is not approved.

Subp. 3. **Amount.** Within 60 days of the due date, the commissioner will give notice of penalty to woodmills who have not made, without an approved extension, timely and full payment of the assessment. The amount of the penalty shall be either:

A. (1) five percent of the assessment payments due, if received by the commissioner late but not more than ten days after the due date;

(2) ten percent of the assessment payments due, if received by the commissioner within 11 to 29 days after the due date; or

(3) 15 percent of the assessment payments due, if payment is not made within 30 days of the due date; or

B. \$500, whichever is greater.

Subp. 4. **Payment to.** Both the assessment payment and any penalty due under this part and part 5222.3004 are payable to the special compensation fund.

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

5222.3004 FALSE REPORTING BY WOODMILL.

Pursuant to Minnesota Statutes, section 176.130, subdivision 9, any woodmill that makes a false report for the purposes of evading payment of the assessment, or any part of it, shall be penalized in an amount equal to 50 percent of the assessment due. For purposes of this penalty "false report" includes, but is not limited to, a failure to file the report by the due date. If a woodmill fails to file within 30 days of a request by the department, the failure to file will be presumed to be for the purpose of evading payment of the assessment.

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

5222.3005 PROOF OF COVERAGE.

Subpart 1. **Generally.** Purchasers of wood from the logging industry must, pursuant to Minnesota Statutes, section 176.130, subdivision 3, obtain from the logger, and submit to the special compensation fund, within 14 days of receipt of the information by the purchaser, certification of compliance with the mandatory insurance requirement of Minnesota Statutes, chapter 176.

Subp. 2. **Obtaining proof.** Certification of coverage shall be obtained by the purchaser, on a form prescribed by the commissioner, when the purchaser and the logger enter into a contract for the purchase of wood.

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

5222.3006 ANNUAL REPORTING BY QUALIFIED EMPLOYER.

Subpart 1. **Content of report.** Each qualified employer shall make an annual report, as provided in Minnesota Statutes, section 176.130, subdivision 5, paragraph (b), on a form prescribed by the commissioner containing the following information:

- A. name and address of qualified employer;
- B. Social Security number and federal and state employer identification numbers of qualified employer;
- C. reporting period dates;
- D. total amount of payroll dollars paid to loggers;
- E. name and address or workers' compensation insurer;
- F. proof of premium dollars paid for loggers, which may include copies of canceled checks or receipts from insurers;
- G. certification of attendance, for each full-time logger, at a safety seminar established or approved by the commissioner; and
- H. supporting documentation or other information requested by the commissioner.

Subp. 2. **No extensions.** An employer must satisfy the requirements of Minnesota Statutes, section 176.130, subdivision 1, paragraph (f), in order to be categorized as a qualified employer. A qualified employer must report timely and fully under this part and Minnesota Statutes, section 176.130, subdivision 5, paragraph (b), to be eligible for any rebate. No extensions are allowed pursuant to Minnesota Statutes, section 176.130, subdivision 6.

Subp. 3. **Incomplete reports.** Reports not in compliance with this part will not be accepted

for filing and do not satisfy reporting requirements.

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

5222.3007 ESTABLISHMENT OR APPROVAL OF SAFETY PROGRAM.

Subpart 1. **Safety program required.** The commissioner shall establish or approve a safety program under subpart 2 or 3.

Subp. 2. **Establishment.** The commissioner may establish a mandatory safety program including any of the following:

- A. safety seminars;
- B. educational publications or video presentations;
- C. on-site consultations; or
- D. testing of safety equipment.

Subp. 3. **Approval.** The commissioner may approve privately sponsored safety programs or seminars based on the following criteria:

- A. cost of program;
- B. specificity of subject matter to industry concerns;
- C. availability of program in terms of locations and number of seminars;
- D. expertise of program sponsor; and
- E. recommendations of Minnesota Occupational Safety and Health Administration consultation unit.

STAT AUTH: MS s 175.17; 176.83

HIST: 15 SR 1847

Current as of 05/12/97

Appendix C

LogSafe training topics, 1992 through 2005

1992	Chain saw maintenance Personal protective equipment Chain saw video Mechanized equipment video Workers' compensation laws First aid	
1993	Personal protective equipment Chain saw maintenance Tree harvesting video Productivity training Back injury prevention CPR	Dave Stadler Center Therapy of Duluth Red Cross
1994	Best management practices Mechanical logging safety Chain saw safety Logging equipment at seminars	Gordy Peterson (LogSafe) Bill Calder (Ontario) Dave Stadler North Country John Deere
1995		
1996	Lockout/tagout Chain saw safety CPR/first aid	WSC Alex Bildeaux (Tilton Equipment) Red Cross
1997	Mechanized equipment safety AWAIR Chain saw safety CPR/first aid	Don Runberg (LogSafe) WSC Ken Laamonte (FISTA) Red Cross
1998	Chain saw safety Right-to-know Claims management OSHA Compliance inspection processes Mechanized equipment safety Lyme disease AWAIR session for employers CPR/first aid	Omar Hieniman and Dave Stadler WSC WSC WSC Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) WSC Hibbing Community College
1999	Repair shop safety Equipment transporting Load securement Overhead utility line safety Chain saw safety Hazard recognition training CPR/first aid	WSC Ed LaFavor (LogSafe) Minnesota State Patrol; Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) WSC WSC Hibbing Community College

2000	Workers' compensation system Liquid petroleum gas safety Wildfire prevention Personal protective equipment Chain saw safety CPR/first aid	DLI Bill Kellner DNR Ed LaFavor (LogSafe) WSC Hibbing Community College
2001	OSHA logging operation standard Slips and falls prevention Hydraulic system safety Chain saw safety Proper felling techniques CPR/first aid	Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) WSC WSC Hibbing Community College
2002	Severe weather training High-speed disc saw safety Near-miss accidents Mechanized equipment safety Chain saw safety CPR/first aid	National Weather Service Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) WSC Mesabi Community College
2003	911 emergency calling Insurance loss control Fire extinguisher principals Right-to-know Directional tree felling CPR/first aid	Local sheriff; Ed LaFavor (LogSafe) John Shega Ed LaFavor (LogSafe) WSC Ed LaFavor (LogSafe) Mesabi Community College
2004	Electrical equipment grounding Meth lab awareness Hazardous waste clean-up safety Transporting equipment safety Tire maintenance safety Chain saw personal protective equipment CPR/first aid	WSC Bureau of Criminal Apprehension Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) Ed LaFavor (LogSafe) Hibbing Community College
2005	AWAIR Lockout/tagout Right-to-know Noise Fire extinguisher training CPR/first aid	Todd Haglin, WSC Todd Haglin, WSC Jeff Wasvick, WSC John O'Brien, WSC Ed LaFavor (LogSafe) Mesabi Community College

Appendix D

The LogSafe Advisory Committee

The LogSafe Advisory Committee reviews and discusses the strengths and weaknesses of completed training and recommends training topics for future seminars. Committee members, because of their experience and relationships with the logging industry, help keep the training focused on areas of current need.

Although the department values the input of the LogSafe Advisory Committee and has responded to its advice, there is no statutory authority vested in this body. Recommendations forwarded to the commissioner are nonbinding.

Meetings

The LogSafe Advisory Committee meets twice a year. It is made up of independent loggers, mill representatives, insurance representatives and logging association members, and discusses program activities, seminar curricula, finances and ideas for future training. Meetings are open to the public.

Membership

The committee is made up of 12 members:

- two from the workers' compensation insurance industry whose companies write a significant amount of workers' compensation liability for the logging industry;
- two from the wood-consuming mills;

- one from the Timber Producers Association;
- one from the Association of Contract Loggers and Truckers;
- one from Minnesota Logger Education Program;
- four who are independent loggers; and
- one (nonvoting) from DLI (the LogSafe coordinator).

Table D.1 Current LogSafe Advisory Committee members

<i>Name</i>	<i>Employer</i>	<i>Year of Appt</i>
Independent logger		
Rod Hooker	Rod Hooker Logging	1996
Bill Jokela	Jokela Logging	1991
Dan Lundberg	Lundberg Forest Products	1996
Marcus Edin	Edin Logging	1998
Associated Contract Loggers and Truckers		
Scott Dane	(chairman)	2004
Minnesota Timber Producers Association		
Open		
Minnesota Logger Education Program		
Dave Chura		2003
Wood-consuming mills		
Terry Worthman	Boise Cascade	2003
Doug Anderson	Stora-Enso Paper	2000
Insurance industry		
Rowan McDonnell	North Woods	1999
Dave Amundson	Lumbermen's	1992
Minnesota Department of Labor and Industry		
Ed LaFavor		1997

Appendix E

Form: Certificate of Compliance

CERTIFICATION OF COMPLIANCE WITH THE MINNESOTA WORKERS' COMPENSATION LAW

Name _____ Doing business as _____
 Print last name, first name, middle name _____ Print full business name, if different than your name _____

Social Security No. _____ Federal Employer ID No. _____ State ID No. _____

Address _____
 Print Street address or route number _____ Print city or town name _____ Print State Name _____ Zip Code _____

Business Telephone No. (____) _____ Home Telephone No. (____) _____

Type of Business _____
 Print description (For Example: Bldg. Construction; or Logging; or manufacturing)

Workers' Compensation
 Insurance Company Name _____ Policy No. _____
 Print full name of insurance company (NOT insurance Agent) _____ Print full number from insurance policy _____

Dates of Coverage _____ Through _____
 Print starting date _____ OR _____ Print ending date _____

I certify that I am not required to carry workers' compensation insurance because:
 (Check one)

I am a sole proprietor and I have no employees.

I have no employees who are covered by the workers' compensation law.
 (Only employees who are specifically exempted by statute are not covered by the workers' compensation law. These include: Spouse, Parents, Children, regardless of age; and farm labor employees of a family farm that spent less than \$8,000 for farm labor in the previous calendar year. All other workers whose work activity is controllable by the employer must be covered.)

I understand that the information provided above will be verified by the Minnesota Department of Labor and Industry. I understand that I am subject to a \$1,000 penalty if the information is false.

I certify that the information provided above is accurate and complete.

Signed by _____ Date _____

(No local licensing agency, general contractor, timber buyer or other person or organization acting as an intermediary to deliver this card to the Department of Labor and Industry shall be responsible for accuracy of the information provided by the person signing the card.)

Appendix F

Estimating the number of Minnesota loggers

Estimating the total number of loggers in Minnesota is complicated by the fact that there are a lot of very small logging employers and many loggers are self-employed.

Employer-establishments and employees

An employer-establishment is an economic unit, such as a farm, mine, factory or store, that produces goods or provides services.¹⁶ It is typically at a *single physical location* and engaged in *predominantly one type of economic activity* for which a single industrial classification may be applied. An employer can have one or more establishments. If a large logging company has several permanent shops, each one would be considered a separate establishment. The *Quarterly Census of Employment and Wages* (QCEW) provides an estimate of the number of employer-establishments and employees covered under unemployment insurance law.¹⁷ It is these establishments and employees that are the target of the LogSafe program.

Data from the QCEW for the logging industry shows the number of covered employees in logging increased steadily until 1998 and has declined slightly since then. The number of

establishments with covered employees also increased steadily through 1998, but has declined significantly since then. Table F.1 below estimates the number of loggers as 60 percent of all logging employees. This assumption is supported by occupational staffing data for Minnesota for 1998, 2000, 2002 and 2004 from the Occupational Employment Statistics program of the Minnesota Department of Employment and Economic Development, Labor Market Information office.

Table F.1 Number of employer-establishments and employees in Minnesota logging, 1990-2004 [1]

Year	Employer establishments [2]	Employees [2]	Loggers [3]
1990	174	622	373
1991	185	593	356
1992	193	673	404
1993	188	672	403
1994	199	719	431
1995	203	708	425
1996	212	753	452
1997	216	791	475
1998	222	844	506
1999	222	827	496
2000	214	838	503
2001	211	804	482
2002	198	785	471
2003	197	805	483
2004	188	815	489

¹⁶ These establishments generally have one or more paid employee. Occasionally, establishments with no employees exist temporarily when a site is preparing to open or after all employees have been laid off.

¹⁷ In logging, employees exempted under unemployment insurance law are the same as those exempted under workers' compensation law. The only loggers exempted are the self-employed (including independent contractors) and employees who are the spouses, parents or children of a sole proprietor. All other employees whose work activity is controlled by the employer are covered.

[1] "Logging" here refers to the logging industry, Standard Industrial Code (SIC) 2411 for 1990 to 1999 and North American Industrial Classification System (NAICS) 113310 for 2000 to 2004.

[2] Data from the *Quarterly Census of Employment and Wages*, Minnesota Department of Employment and Economic Development, Labor Market Information office.

[3] Estimate of the number of fallers (SOC 45-4021), logging equipment operators (SOC 45-4022), and first-line supervisors and managers (SOC 45-1011) assuming a fixed 60 percent of total logging employment.

Non-employer establishments

Data from the U.S. Census Bureau's Non-employer Statistics program are used to estimate the number of uncovered Minnesota loggers — the self-employed (including independent contractors) and family members of sole-proprietors. The Census Bureau annually estimates the number of "non-employer establishments" by industry and state by compiling information from annual income tax returns filed with the IRS. A business with no paid employees and at least \$1,000 in receipts is a non-employer establishment.¹⁸ These numbers suggest the number of non-employer establishments in logging in Minnesota is currently about 1,500, having declined from about 1,775 in 1997.¹⁹ In Table F.2, it is assumed that 20 percent of non-employer establishments are two-party partnerships.

Table F.2 Number of loggers in non-employer establishments, Minnesota, 1997-2003

<i>Year</i>	<i>Establishments[1]</i>	<i>Loggers[2]</i>
1997	1,782	2,138
1998	1,569	1,883
1999	1,673	2,008
2000	1,647	1,976
2001	1,568	1,882
2002	1,546	1,855
2003	1,508	1,810

[1] Data from the U.S. Census Bureau, Non-employer Statistics program. Representative data for Minnesota forestry and logging, 2003, can be found at www.census.gov/epcd/nonemployer/2003/mn/MN000_11.HTM. Although these statistics cover "forestry and logging" (NAICS 113), the proportion due to forestry is thought to be trivial.

[2] Estimate of the number of loggers assuming 20 percent of establishments are two-party partnerships.

¹⁸ According to the Census Bureau Web site, "Most non-employers are self-employed, although some partnerships and small corporations are included as well. Only partnerships and corporations with no paid employees are included in the non-employer statistics. Non-employers do **not** include about a million self-employed business owners that have paid employees and, therefore, are classified as employer businesses. Many non-employer businesses are part-time ventures and an individual might operate more than one."

¹⁹ Another source of data about this topic is the "public use micro-sample" (PUMS) of the decennial census that provides more-detailed information but is less reliable because of the small sample. PUMS data estimates 1,546 self-employed loggers in Minnesota in 1990 and 1,241 in 2000.

Appendix G

Estimating Minnesota workers' compensation injury rates

This appendix describes sources and estimation techniques for data in Chapter 4, table 4.2.

Table 4.2: Paid indemnity and medical-only claims

The number of paid indemnity claims for logging by year of injury was calculated from the DLI claims database.²⁰ This number includes insured and self-insured employers. Some injuries develop into paid indemnity claims only after some months or even a few years after the injury. Because of this and reporting lags, the tabulated number of paid claims for recent injury years is not yet mature, meaning it is less than it will eventually be. Therefore, the number of paid indemnity claims for each injury year is "developed" to a uniform maturity so the statistics are comparable over time. The technique uses "development factors" (projection factors) calculated from data at different levels of maturity for older claims.

The DLI database does not include medical-only claims, so these were estimated with data from the annual *Minnesota Ratemaking Report* of the Minnesota Workers' Compensation Insurers Association, Inc. (MWCIA), the state's workers' compensation data service organization and rating bureau. The ratio of medical-only to indemnity claims was calculated for each year for insurance class 2702 (logging) and this ratio was then applied to the developed number of indemnity claims from the DLI data to estimate the annual number of medical-only claims for insurers and self-insurers combined.

²⁰ Logging claims were selected using Standard Industrial Classification code 2411 (old coding system) and North American Industrial Classification System code 113310 (new coding system).

Appendix H

Estimating insurance rates in Minnesota logging

Workers' compensation rates in logging were estimated using "unit statistical data" from the Minnesota Workers' Compensation Insurers Association, Inc. (MWCIA).²¹

All rates—including those for the ARP—are generated by calculating the ratio of premium paid (after credits and experience modifications and adjusting for deductibles) to payroll. *They are thus different from quoted rates.* The estimation used data *on all policies with any logging payroll* (payroll class 2702) during the period covered.

The unit statistical data pertain to individual insurance policies. Insurers report data on each policy to the MWCIA after policy expiration. The data included the following:

- Insured payroll by class.
- The insurer's filed rate for each payroll class.²²
- "Manual premium" for each payroll class (equal to payroll times the filed rate for that class).
- "Modified premium" for each payroll class (equal to manual premium times the employer's experience modification factor).²³
- Premium credits and debits (not specific to individual payroll classes).

²¹ The MWCIA is Minnesota's workers' compensation data service organization and rating bureau.

²² Each insurer files rates with the Department of Commerce that it will use to determine premium for each payroll class.

²³ Each employer has an experience modification factor indicating the ratio of its own workers' compensation losses to expected losses for all employers in the same payroll class over the last three years. The "e-mod" is calculated by the MWCIA.

The starting point for the calculation was to divide modified premium for class 2702 by total class-2702 payroll, combining all insurance policies for each year. The result was an experience-modified premium rate for logging. To adjust for other premium credits and debits, the sum of these credits and debits was expressed as a ratio to total premium for all classes for the policies concerned. (Class-2702 payroll averaged 29 percent of the total for these policies over the period of analysis.) This ratio was then applied to the experience-modified premium rate for logging. The resulting premium rate was then an estimate of the logging rate reflecting both experience modification and other premium credits and debits.²⁴

"Calendarizing" insurance rates

For Table 2.2, data in Table 5.4 was made comparable to the rebate data by converting from a policy-year basis to a calendar-year basis. In policy-year data, data are classified according to the year in which the associated insurance policy took effect. In calendar-data, data are classified according to when the payroll associated with the premium was earned. Since an insurance policy generally includes more than one calendar year (unless it begins on January 1), policy-year data are converted to calendar-year data by taking averages of adjacent calendar years.

²⁴ Credits for deductibles were ignored in this adjustment because, in contrast with other credits and debits, they are associated with a reduction in coverage for the employer. In other words, an employer's election of deductibles does not lower expected cost even though it reduces premium.

Figure 2.2: Percentage reduction in premium

The initial rate in this table is the same as the “bottom-line” rate for the voluntary market and ARP combined in Figure 5.3, with one exception. To make the figures in Table 2.2 comparable with the rebate data, they are converted from a policy-year basis to a calendar-year basis (see above, under “calendarizing insurance rates”). The “final rate” (the rate that results after applying the premium rebate) was computed by subtracting the total rebate from total premium (the numerator of the “initial rate”) and then dividing by total payroll (denominator of initial rate).

The numbers for 2004 and 2005 in Table 2.2 are *projected* assuming:

- the market insurance rate is 1.4 times the pure premium rate (this is roughly the average relationship between the market insurance rate and the pure premium rate for 2001 – 2003),
- the rebate will be \$10.50 per \$100 claimant payroll in 2005 (it has been close to this since 2001), and
- the all-market percentage reduction (Table 2.2) is 7.75 points lower than the per-claimant percentage reduction in Table 2.3 (the actual difference has been trending steadily and slowly toward this level since 1991).

Table 2.3: Percentage reduction in premium for an average claimant

This table is different from Table 2.2 in just one respect. In Table 2.2, the rate reduction shows, in relative terms, how much rebate is available to the whole logging industry, and so it is figured by applying it to the whole industry. Table 2.3, by contrast, recognizes that the rebate only goes to those who claim it, so the rate reduction is figured by applying the total rebate to claimants only.

The “initial rate” is the same as in Table 2.2. The “rate reduction” is figured as total rebate per \$100 of total claimant payroll. The final rate is equal to the initial rate minus the “rate reduction.” The percentage reduction is the rate reduction relative to the initial rate.

Table 5.1: Number of insurers, policies and percentage of payroll held by top one and top three claimant insurers

This table is calculated from reports by employers claiming a workers’ compensation rebate from the LogSafe fund. The table shows the number of different insurers identified in those reports, the number of claims made (and thus the number of policies), and the concentration of payroll in the top one and top three insurers.

Table 5.2: Claim costs per \$100 payroll

This table pertains to insured employers only. Payroll and claim costs were taken from the MWCIA’s annual *Minnesota Ratemaking Report*. Claim costs were developed to a five-year maturity (see discussion of Table 4.2 in Appendix G).

Table 5.3: Pure premium rates and bottom-line rates in the voluntary market and Assigned Risk Plan

The pure premium rates were taken from MWCIA’s annual *Minnesota Ratemaking Report*. The rates for 1990-1995 were adjusted for the exclusion of paid vacation and sick leave from workers’ compensation payroll during that period. The MWCIA has used a ten-percent adjustment factor for this purpose for all industries combined. However, since the industry in question is logging, which is likely to

have less paid leave than other industries on average, a five-percent adjustment factor was used (effectively assuming that five percent of payroll is paid leave in logging, as opposed ten percent in all industries combined).

The bottom-line rates for the voluntary market, ARP, and "total" (voluntary and ARP combined) were computed from "unit statistical data" supplied by the MWCIA in response to a special request. These policy-specific data include, among other things, payroll and premium by insurance class plus the various credits and debits that affect bottom-line premium. Deductible credits were ignored in this calculation (i.e. they were not subtracted from premium) because they are accompanied by an assumption of partial responsibility for claim costs by the employer.

The figures for 1990-1993 were projected backwards from 1994 using the trend in standard premium relative to payroll from the *Ratemaking Report*. The voluntary market and the ARP are combined in the *Ratemaking Report* data, and so the projection factors were the same for these two market segments.

For 2004, 2005 and 2006, voluntary market and ARP rates are projected. They are assumed to

be 1.4 and 2.5 times pure premium, respectively. This corresponds roughly with the average relationship between these rates and pure premium rates for 2001 - 2003.

Table 5.4: Pure premium rates

The pure premium rates for logging were taken from MWCIA's annual *Minnesota Ratemaking Report*. The average rates for contracting and all industries combined were computed in a two-step process. First, a rate was computed for 2001 as a weighted average over all classes in the overall group, using payroll as the weight. Second, the averages for other years were extrapolated from the 2001 average using the overall percent rate change determined by the MWCIA for each year for contracting and all industries, respectively.

