Minnesota Workers' Compensation System Report, 1999

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Executive Summary

For much of the past one and a half decades, high workers' compensation costs were a major concern both in Minnesota and in most of the nation. In the early and middle 1990s, through cost-control measures by employers and insurers and law changes in most states, costs fell nationwide. In Minnesota, a combination of employer and insurer efforts and law changes in 1992 and 1995 produced major cost reductions in the first half of the 1990s, followed by a period of stability in the latter part of the decade.

This report, part of an annual series, presents data through 1999 on several aspects of Minnesota's workers' compensation system—claims and costs, vocational rehabilitation, disputes, and dispute resolution. The report is not intended as an analysis of policy changes in statute, rule, or case law. However, it does point out when these policy changes and other factors are possible explanations for observed trends.

Major findings are as follows (see Glossary in Appendix A for definitions of terms):

Overall System Indicators

Chapter 2 presents overall indicators of the status and direction of Minnesota's workers' compensation system. Chapter 2 finds:

- The total cost of workers' compensation was $970 million in 1999, down 30 percent from its peak of $1.38 billion in 1994.

- System cost per $100 of payroll was $1.33 in 1999, down 47 percent from $2.52 in 1994.

- Minnesota had 34,300 paid indemnity claims in injury year 1999.

- There were an estimated 166,000 total paid claims in 1998, consisting of:
  - 133,000 medical-only claims (estimated) and
  - 32,900 indemnity claims.

- The total rate of paid claims was an estimated 8.3 per 100 full-time-equivalent (FTE) workers in 1998, down from 10.3 in 1984.

- The rate of paid indemnity claims was 1.7 per 100 FTE workers in 1999, down from 2.9 in 1984.

- Pure premium rates were 69 percent of their 1984 level in 2001, down from 134 percent in 1994. The 5.0 percent decrease for 2001 is the seventh consecutive annual decrease.

- Workers' compensation insurance arrangements in 1999 were:
  - Voluntary market: 76 percent (of pure premium).
  - Self-insured: 23 percent (of pure premium).
  - Assigned Risk Plan: 1.5 percent (of pure premium).

Claims and Costs: Insurance Data

Chapter 3 presents claims and cost data from the Minnesota Workers' Compensation Insurance Association, Minnesota's workers' compensation data service organization and rating bureau. In the insurance data , "claim type" is defined according to the most severe type of benefit on the claim. In increasing severity, the benefit types are medical, temporary disability, permanent partial disability (PPD), permanent total disability (PTD), and death. Temporary disability includes temporary total disability (TTD) and temporary partial disability (TPD). PPD claims also include (1) claims with temporary disability benefits lasting more than one year and (2) claims with stipulated settlements. Claim types other than medical-only are called indemnity claims (see Appendix A). Chapter 3 finds:

- Benefit costs per $100 of payroll in 1999 were:
  - Indemnity benefits: 55 cents (down from peak of $1.33 in 1989).
  - Medical benefits: 47 cents (down from peak of 74 cents in 1990 and 1991).
  - Total benefits: $1.02 (down from peak of $2.05 in 1989 and 1990).

- The shares of total claims by claim type in 1997 were:
  - Medical-only claims: 80.0 percent.
  - Temporary disability claims: 14.3 percent.
  - PPD claims: 5.6 percent.
  - PTD claims: 0.07 percent.
  - Death claims: 0.04 percent.
  - All indemnity claims (temporary disability, PPD, PTD, and death): 20.0 percent.

- Average costs per claim in 1997 (in 1999 dollars) were:
  - Medical-only claims: $444.
  - Temporary disability claims: $4,870.
  - PPD claims: $41,600.
  - PTD claims: $409,000.
  - Death claims: $180,000.
  - All indemnity claims: $16,900.
  - All claims (indemnity and medical-only): $3,730.

- Contributors to total benefit cost in 1997 were:
  - Medical-only claims: 9.5 percent.
  - Temporary disability claims: 18.6 percent.
  - PPD claims: 62.5 percent.
  - PTD claims: 7.5 percent.
  - Death claims: 1.9 percent.
  - All indemnity claims: 90.5 percent.

- Average benefit costs among indemnity claims in 1997 (in 1999 dollars) were:
  - Indemnity benefits: $9,390 (down from peak of $17,170 in 1990).
  - Medical benefits: $7,500 (down from peak of $9,050 in 1990).
  - Total benefits: $16,890 (down from peak of $26,220 in 1990).

- Average benefit costs among all paid claims in 1997 (in 1999 dollars) were:
  - Indemnity benefits: $1,880 (down from peak of $4,710 in 1990).
  - Medical benefits: $1,850 (down from peak of $2,810 in 1990).
  - Total benefits: $3,730 (down from peak of $7,530 in 1990).

- Indemnity and medical shares of total benefit cost in 1999 were:
  - Indemnity benefits: 54 percent (down from 69 percent in 1984, steady since 1995).
  - Medical benefits: 46 percent (up from 31 percent in 1984, steady since 1995).

  (These percentages are from different data than the claims data above, and are "developed," or projected, to a greater maturity.)

Claims and Costs: Department of Labor and Industry Data

Chapter 4 presents data on indemnity claims and the indemnity costs of those claims from the Department of Labor and Industry (DLI) administrative database. In contrast with the insurance data in Chapter 3, claims in the DLI data are not counted in mutually exclusive categories. For example, "claims with TPD benefits" and "claims with PPD benefits" are overlapping categories because claims that have both types of benefits are counted in both categories. Also in contrast with the insurance data, the department data include self-insured employers but exclude medical-only claims and the medical costs of indemnity claims. Since TTD and PTD benefits are combined in the DLI database, these benefits, and claims with these benefits, are combined in the data presented. Chapter 4 finds, for injury year 1999:

- The total cost of indemnity benefits per $100 of payroll was 47 cents (down from peak of $1.15 in 1989 and from $1.11 in 1984).

- The proportion of paid indemnity claims with—
  - TTD/PTD benefits: 84.2 percent (down from 93.1 percent in 1984).
  - TPD benefits: 29.2 percent (down from peak of 32.2 percent in 1992).
  - PPD benefits: 21.4 percent (down from peak of 25.9 percent in 1992).
  - Stipulated benefits: 16.2 percent (down from peak of 19.3 percent in 1992).

- Number of claims per 1,000 FTE covered workers with—
  - TTD/PTD benefits: 14.1 (down from 26.9 in 1984).

  - › TPD benefits: 4.9 (down from peak of 8.2 in 1991).
  - › PPD benefits: 3.6 (down from peak of 6.7 in 1991).
  - › Stipulated benefits: 2.7 (down from peak of 4.9 in 1991).
  - › Any indemnity benefits: 16.7 (down from peak of 28.9 in 1984).

- Average duration of wage-loss benefits:
  - › TTD/PTD: 9.2 weeks (down from peak of 12.7 in 1990 and steady since 1995).
  - › TPD: 16.8 weeks (down from peak of 26.2 in 1987 and steady since 1995).

- Average weekly wage-loss benefits:
  - › TTD/PTD: $417 (down from $505 in 1984 [in 1999 dollars] and steady since 1993).
  - › TPD: $209 (down from $349 in 1984 and steady since 1993).

- Average pre-injury wage as proportion of state-wide average weekly wage:
  - › 83.5 percent (down from 100.3 in 1984 and steady since 1992).

- Average weekly benefits as proportion of average pre-injury wage:
  - › TTD/PTD: 77.8 percent (compared to 78.5 percent in 1984).
  - › TPD: 39.0 percent (down from 54.2 in 1984).

- Average benefit amounts:
  - › TTD/PTD: $3,800 (down from $5,900 in 1984 [in 1999 dollars] and steady since 1993).
  - › TPD: $3,500 (down from $7,400 in 1984 and steady since 1993).
  - › PPD: $5,400 (down from $11,400 in 1994).
  - › Stipulated: $22,200 (down from $41,100 in 1984 and steady since 1993).

- Average benefits per indemnity claim (these reflect average benefit amounts and the proportions of indemnity claims with each type of benefit):
  - › TTD/PTD: $3,200 (down from $5,500 in 1984 [in 1999 dollars] and steady since 1995).
  - › TPD: $1,000 (down from peak of $2,100 in 1990 and steady since 1993).
  - › PPD: $1,200 (down from peak of $2,100 in 1990 and steady since 1995).
  - › Stipulated: $3,600 (down from peak of $6,000 in 1990 and steady since 1995).
  - › All indemnity benefits: $9,700 (down from peak of $16,200 in 1990 and from $14,100 in 1984, and steady since 1995).

Vocational Rehabilitation

Chapter 5 presents a description and statistical overview of vocational rehabilitation in Minnesota's workers' compensation system. Chapter 5 finds:

- Vocational rehabilitation activity declined sharply between 1992 and 1993, was stable between 1993 and 1996, rebounded in 1997, and remained steady through 1999.

- Rehabilitation plan filings were 5,600 in 1999, up from an average of 2,300 annually between 1993 and 1996 and down from 8,000 in 1991.

- Among paid indemnity claims for 1998 injuries, 15 percent had rehabilitation plans, up from 5-6 percent for 1993-1995 and down from 18 percent for 1991.

- For plans closed in 1999, the average interval from injury to start of services was 12.6 months and the median was 4.6 months.

- For plans closed in 1999, the average duration of services was 10.3 months and the median was 7.3 months.

- Outcomes for participants with plan closures in 1999 were as follows:
  - › Completed service plan: 65 percent (most of the remainder settled their claims or ended participation by mutual agreement).
  - › Returned to pre-injury employer: 46 percent.
  - › Obtained job with different employer: 29 percent.
  - › No job reported: 25 percent.

- The return-to-work wage was 97 percent of the pre-injury wage on average for plans closed in 1999. This was distributed as follows:
  - More than 5 percent higher than pre-injury wage: 22 percent.
  - 5 percent lower to 5 percent higher: 42 percent.
  - 5 to 20 percent lower: 11 percent.
  - More than 20 percent lower: 25 percent.

- The average cost of a rehabilitation plan was $4,100 in 1999, down from $4,800 in 1991 (1999 dollars). The median cost in 1999 was $2,600, down from $3,200 in 1991.

- The total cost of vocational rehabilitation services was $20.0 million in 1999, up from $15.0-$16.5 million annually for 1995-1997 (in 1999 dollars) and down from the 1992 peak of $33.0 million.

- The $20 million cost of vocational rehabilitation in 1999 was about 2 percent of total workers' compensation system cost.

Disputes and Dispute Resolution

Chapter 6 describes disputes and dispute resolution in the workers' compensation system and provides related statistics. Chapter 6 finds:

Numbers and Rates of Disputes

- The numbers of new disputes in 1999 (measured by forms filed with DLI) were as follows:
  - Claim petitions: 5,600 (down from 8,300 in 1993).
  - Discontinuance disputes: 2,900 (down from 4,800 in 1992).
  - Medical Requests: 2,100 (down from 5,800 in 1992).
  - Rehabilitation Requests: 2,000 (down 3,700 in 1992).
  - Total disputes: 12,600 (down from a 22,400 in 1992).

- Among 1995 claims with disputes, one-third had multiple disputes (measured by forms filed with DLI).

- The rates of disputes among 1995 claims were as follows:
  - Claim petitions: 9.3 percent of initial indemnity claims (down from 11.4 percent in 1991).
  - Discontinuance disputes: 6.0 percent of paid wage-loss claims (down from 7.9 percent in 1991).
  - Medical Requests: 3.3 percent of paid indemnity claims (down from 6.6 percent in 1990).
  - Rehabilitation Requests: 2.9 percent of paid indemnity claims (down from 5.0 percent in 1990).
  - Total disputes: 13.6 percent of initial indemnity claims (down from 18.1 percent in 1991).

- The rates of initial denials for injury year 1999 were:
  - 15 percent of initial indemnity claims (up from 8 percent for 1984 and steady since 1994).
  - 8 percent of paid indemnity claims (up from 4 percent for 1984 and steady since 1991).

Dispute Resolution Process

- The DLI Customer Assistance unit in fiscal year 1999:
  - Took 3,600 phone inquiries per month.
  - Served 30-35 walk-in customers per month.
  - Resolved 6,100 "potential disputes" before the disputants approached an attorney.
  - Resolved 490 medical or rehabilitation disputes where an attorney had been approached, with the result that these disputes were not certified and attorney fees could therefore not be charged.

- Customer Assistance issued the following decisions in fiscal year 2000:
  - Mediation awards: 300 (down from 670 in 1996).
  - Administrative conference decision-and-orders: 780 (up from 150 in 1996).
  - Non-conference decision-and-orders: 20 (down from 770 in 1996).

- The Office of Administrative Hearings (OAH) conducted the following proceedings on workers' compensation disputes in fiscal year 2000:
  - Settlement conferences: 7,310 (down from 7,650 in 1997).
  - Administrative conferences: 2,980 (down from 4,300 in 1997).
  - Hearings: 850 (down from 1,240 in 1997).

- The Workers' Compensation Court of Appeals (WCCA) conducted 260 hearings in fiscal year 1999, down from 380 in 1996.

Resolution Procedures for Particular Dispute Types

Prior to 2000, DLI data indicate the resolution proceedings to which individual disputes were referred, as opposed to the proceedings actually held in these cases.[1] Since multiple resolution proceedings may occur for a given dispute, the last referral on record for a given dispute is assumed to indicate the proceeding where the dispute was resolved. Data are unavailable, however, on appeals of OAH decisions to the WCCA.

- Claim petition disputes filed in 1997 were resolved as follows (these figures have been fairly stable since 1989):
  - Settlement conferences: 46 percent.
  - Hearings at OAH: 54 percent (most of these cases had prior unsuccessful resolution attempts at settlement conferences).

- Discontinuance disputes filed from 1992 to the present have been resolved as follows:
  - Of those initiated by a *Request for an Administrative Conference* or phone call to OAH (91 percent of the total):
    Administrative conferences: 96-97 percent.
    Settled, withdrawn, or otherwise disposed of: 3-4 percent.
  - Of those initiated by an *Objection to Discontinuance* or a petition to discontinue benefits (9 percent of the total):
    Hearings at OAH: 100 percent.

- Medical disputes filed on *Medical Requests* in 1998 were resolved as follows (these figures have fluctuated substantially since 1989):
  - Mediation at DLI: 2 percent. (This does not count mediations where a *Medical Request* has not been filed, e.g. mediations requested by phone.)
  - Non-conference decision-and-orders from DLI: 10 percent.
  - Administrative conferences at DLI: 40 percent.
  - Administrative or settlement conferences with settlement judges: 14 percent.
  - Hearings at OAH: 16 percent.
  - Withdrawn or otherwise resolved: 18 percent.

- Rehabilitation disputes filed on *Rehabilitation Requests* in 1998 were resolved as follows (these figures have fluctuated substantially since 1989):
  - Mediation at DLI: 1 percent. (This does not count mediations where a *Rehabilitation Request* has not been filed, e.g. mediations requested by phone.)
  - Non-conference decision-and-orders from DLI: 8 percent.
  - Administrative conferences at DLI: 30 percent.
  - Administrative or settlement conferences with settlement judges: 20 percent.
  - Hearings at OAH: 17 percent.
  - Withdrawn or otherwise resolved: 25 percent.

Attorney Involvement

- The proportion of paid indemnity claims with claimant attorney fees was 15 percent in injury year 1997, down from 17 percent in 1992 but up from 10 percent in 1984.

- For injury years 1993-1998, the average attorney fee for paid indemnity claims with attorney involvement was somewhat under 12 percent of the indemnity benefits of those claims, up from 8-9 percent for 1984-1989.

[1]The department database is being enhanced to indicate proceedings actually held for individual disputes.

- Total claimant attorney fees were about $20 million annually for injury years 1995-1997. This represents roughly 2 percent of total workers' compensation system cost.

- Total reported defense attorney fees averaged $34 million annually over fiscal years 1995-1999, with some decrease over the period. Other insurer legal costs averaged $16 million, for an overall annual average of $49 million in defense legal costs, representing roughly 4-5 percent of total system cost.

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(continued)

Figures

1

Introduction

For much of the past one and a half decades, high workers' compensation costs were a major concern both in Minnesota and in most of the nation. In the early and middle 1990s, through cost-control measures by employers and insurers and law changes in most states, costs fell nationwide. In Minnesota, a combination of employer and insurer efforts and law changes in 1992 and 1995 produced major cost reductions in the first half of the 1990s, followed by a period of stability in the latter part of the decade.

This report, part of an annual series, presents data from 1984 through 1999 on several aspects of Minnesota's workers' compensation system—claims and costs, vocational rehabilitation, and disputes and dispute resolution. Its purpose is to describe statistically the current status and direction of workers' compensation in Minnesota. It is intended to inform policy discussions and to help show whether the system is moving in a desirable direction. The report is not intended as an analysis of policy changes in statute, rule, or case law. However, it does point out when these policy changes, and other factors, are possible or likely explanations for observed trends.

The data in the report come from the Department of Labor and Industry (DLI) administrative database and from the insurance industry. Minnesota is fortunate among states to have good data from both sources. The analysis period begins with 1984 partly because of major law changes enacted in 1983, and partly because the department's database begins with injuries from that time.

While earlier reports were in four volumes, this and future reports are in one volume. This, it is hoped, will make the report easier for readers to use.

Chapter 2 presents some overall indicators of workers' compensation system performance. Chapters 3 and 4 present claims and cost data from the insurance industry and DLI, respectively. Chapter 5 provides a descriptive and statistical overview of vocational rehabilitation in the workers' compensation system. Chapter 6 provides background and statistics on workers' compensation disputes and dispute resolution.

Appendix A contains a glossary of terms. Appendix B summarizes relevant portions of the 1992 and 1995 law changes. Appendix C describes data sources and estimation procedures.

2

Overall System Indicators

This chapter presents some overall indicators of the status and direction of Minnesota's workers' compensation system. It presents trends in (1) the numbers and rates of paid workers' compensation claims, (2) the composition of the workers' compensation insurance market, (3) pure premium rates, and (4) estimated total system cost.

Numbers and Rates of Paid Claims

Figure 2.1 shows the estimated number of paid Minnesota workers' compensation claims for 1984-1999, in total and per 100 full-time-equivalent (FTE) covered workers. Total claims are divided into indemnity and medical-only claims (see Glossary in Appendix A for definitions). The figures are by "injury year," meaning that claims are counted in the year of injury or onset of illness. Indemnity claims are rounded to the nearest hundred; medical-only and total claims are rounded to the nearest thousand.

The indemnity claims numbers are from the Department of Labor and Industry (DLI) claims database. They are "developed," meaning that they are projections of what the final numbers will be after all claims and payments are complete and reported to the department. Since medical-only claims are not reported to DLI, the numbers of medical-only and total claims are estimated using the ratio of medical-only to indemnity claims from insurance data. See Appendix C for data sources and estimation procedures.

As shown in Panel A of Figure 2.1, Minnesota had an estimated total of 166,000 paid workers' compensation claims in 1998, consisting of 32,900 indemnity claims and 133,000 medical-only claims. Total and medical-only claims have increased with employment growth; however, paid indemnity claims fell from 42,600 in 1990 to 34,000 in 1995 and stayed roughly between 33,000 and 34,000 through 1999.

Panel B of the figure shows that relative to employment, total claims and indemnity claims have fallen since 1984. From 1984 to 1998, the estimated rate of total paid claims fell from 10.3 per 100 FTE covered workers to 8.3. From 1984 to 1999, the rate of indemnity claims fell from 2.89 to 1.67. Most of the decline in the indemnity claims rate was after 1991, when it stood at 2.58; the decrease from 1991 to 1999 was 35 percent. The rate of medical-only claims does not show a significant trend.[2]

These figures reflect a change in the proportion of indemnity claims relative to the total. From 1984 through 1991, indemnity claims made up a stable 27-28 percent of total paid claims. After 1991, the relative number of indemnity claims fell steadily, reaching 20 percent for 1996-1998.

The downward trends in the total and indemnity claims rates strongly suggest that workplace safety has improved. However, if there are changes in the propensity of a worker to file a claim if injured or in the propensity of insurers (and self-insured employers) to accept a claim once filed, these will also affect paid claims rates; whether and to what extent such changes have occurred is unknown.

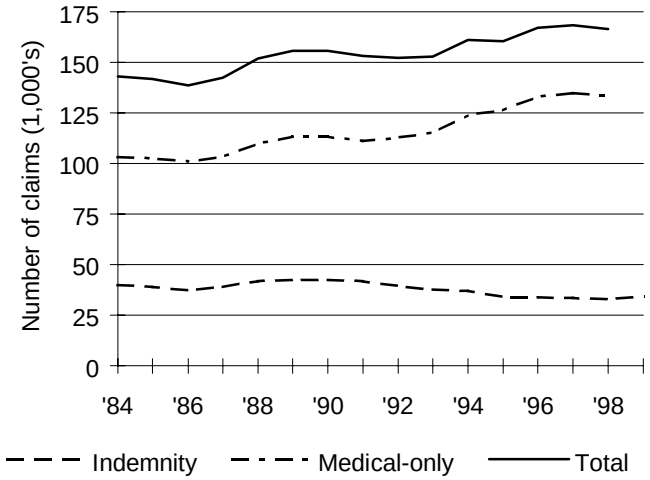
Most paid claims that become indemnity claims do so by reaching the threshold of more than three days of full or partial disability necessary to qualify for wage-loss benefits.[3] Thus, the decline in indemnity claims *relative to the total* since 1991 may reflect such factors as more

[2]In contrast with the indemnity claims rate, the rates of medical-only and total claims are expressed with only one decimal digit because they are less accurate. See Appendix C for details.

[3]Some indemnity claims have permanent impairment benefits but no wage-loss benefits.

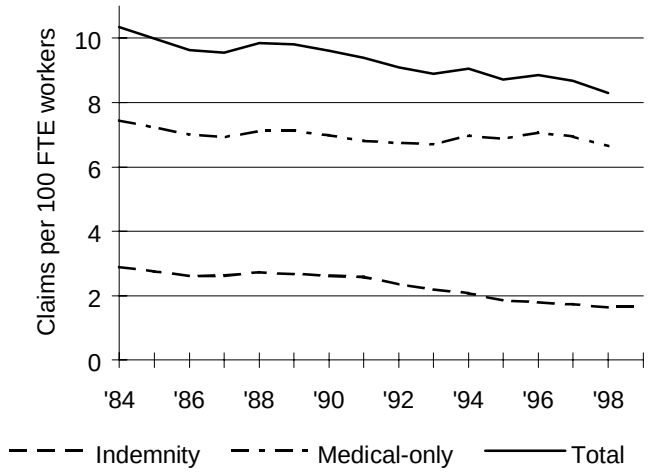
Figure 2.1
Workers' Compensation Paid Claims, Injury Years 1984-1999 [1]

A: Number of Paid Claims (1,000s)



Injury Year	Indemnity Claims	Medical-Only Claims	Total Claims
1984	40.1	103	143
1990	42.6	113	156
1991	42.0	111	153
1992	39.4	113	152
1993	37.7	115	153
1994	37.1	124	161
1995	34.0	126	160
1996	33.9	133	167
1997	33.6	135	168
1998	32.9	133	166
1999	34.3	[2]	[2]

B: Paid Claims per 100 Full-Time-Equivalent Workers



Injury Year	Indemnity Claims	Medical-Only Claims	Total Claims
1984	2.89	7.4	10.3
1990	2.62	7.0	9.6
1991	2.58	6.8	9.4
1992	2.36	6.7	9.1
1993	2.19	6.7	8.9
1994	2.09	7.0	9.1
1995	1.85	6.9	8.7
1996	1.80	7.1	8.9
1997	1.73	6.9	8.7
1998	1.64	6.7	8.3
1999	1.67	[2]	[2]

1. Indemnity claims figures are from the DLI claims database. These numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when claims are mature. Medical-only and total claims are estimated by applying a ratio from insurance data to the indemnity claims figure. Full-time-equivalent (FTE) workers' compensation covered employment is estimated from Unemployment Insurance data and other sources. Details in Appendix C.
2. Not available at time of publication.

active medical treatment, better claims management, more effective return-to-work programs, or declining injury severity.

Some of the decline in indemnity claims relative to the total may have resulted from certain 1992 law changes (see Appendix B). One possibility is the authorization of certified managed care organizations (CMCOs) for work injury treatment, to the extent that managed care returns injured workers to the job more quickly. Another possibility is the substantial reduction of the minimum temporary total disability (TTD) benefit, which most probably reduced the incentive of lower-wage injured workers to claim TTD benefits.[4] However, the relative decrease in the number of indemnity claims was well under way by 1992 when these claims had already fallen to 25.9 percent of the total from 27.4 percent in 1991.

[4]See discussion on p. 25.

Another possible factor in the relative decrease in indemnity claims after 1991 is the federal Americans with Disabilities Act (ADA), whose employment provisions took effect on July 26, 1992 for employers with 25 or more employees and on July 26, 1994 for employers with at least 15 employees. Under ADA, covered employers may not discriminate against qualified individuals with disabilities in any phase of employment and must make reasonable accommodations to assist in employing these persons. This would increase employers' incentives to return injured employees to work.

Still another possible factor is better return-to-work opportunities in an improved economy, although this would probably apply only after 1993: Minnesota's unemployment rate was 4.9-5.2 percent during 1990-1993, 3.7-4.0 percent during 1994-1996, and 2.5-3.3 percent for 1997-1999.[5]

Insurance Arrangements

Employers cover themselves for workers' compensation in one of three ways. The most common is to purchase insurance in the "voluntary market," so named because an insurer may choose whether to insure any particular employer. Employers unable to insure in the voluntary market may do so through the Assigned Risk Plan (ARP), the insurance program of last resort administered by the Department of Commerce. Employers meeting certain financial requirements may self-insure.

Figure 2.2 shows the market shares of the three insurance arrangements from 1984 through 1999, as measured by pure premium and by paid indemnity claims. Pure premium is a measure of risk, or expected losses. It is equal to payroll times the applicable pure premium rate(s) (reflecting expected losses per unit of payroll), adjusted for individual employers' prior loss experience. It is different from (and somewhat lower than) the actual premium charged to employers because actual premium includes other insurance company costs. "Year earned" refers to year paid for the payroll on which the pure premium is based.

As shown in Panel A of the figure, the insured share of total pure premium (voluntary market and ARP) declined from 79 percent to 74 percent from 1984 to 1992, stayed within 73-74 percent through 1996, and returned to 77 percent by 1999. Self-insurance followed an opposite trend, with a 23 percent share in 1999. The paid indemnity claims numbers tell a similar story. The insured share of paid indemnity claims fell from 82 percent in 1984 to 74 percent for 1993 but returned to 78 percent by 1999. The recent shift away from self-insurance is probably a result of reduced insurance rates, described in the next two sections.

The ARP portion of total pure premium rose from 1 percent in 1984 to a range of 10-12 percent for 1987-1994, and fell back to 1.5 percent by 1999. The voluntary market share of pure premium reached a low of 63 percent in 1993 but increased rapidly to 76 percent by 1999. Again, the trends are similar for pure premium and paid indemnity claims. The ARP share of paid indemnity claims stayed between 10 and 13 percent during 1987-1994 but fell to 2 percent by 1999. The voluntary market share reached a low of 61 percent in 1993 but returned to 76 percent by 1999.

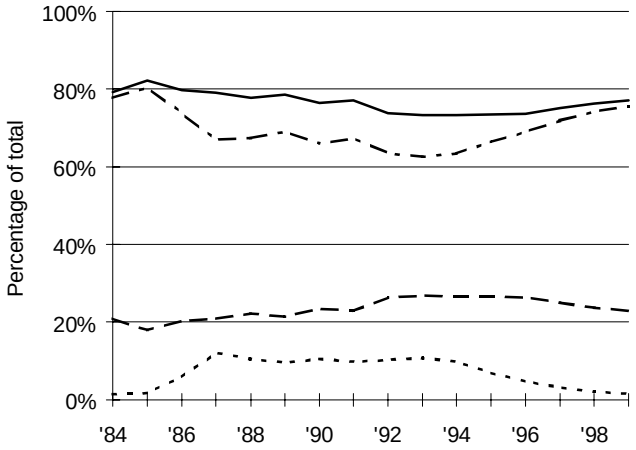
The shift from the ARP to the voluntary market between 1994 and 1999 probably reflects two factors. First, between 1994 and 1999, insurance rates fell by 43 percent in the voluntary market but by only 15 percent in the ARP.[6] As a result, employers previously in the ARP had more incentive than before to find coverage in the voluntary market. Second, as documented in Chapters 3 and 4 of this report, losses have fallen dramatically, which may have made voluntary market insurers more willing to insure employers previously in the ARP to the extent that their losses have fallen along with those of other employers.

[5]U.S. Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS) program. Data are available at the BLS LAUS home page, http://stats.bls.gov/lauhome.htm, and at http://www.mnworkforcecenter.org/lmi/laus/laus1.htm.

[6]Data from the Minnesota Workers' Compensation Insurers Association and the Minnesota Department of Commerce. Voluntary market rates are those filed by insurers with the Department of Commerce. Changes in filed rates may not exactly represent changes in rates actually charged to employers, which generally reflect several adjustments relative to the filed rates.

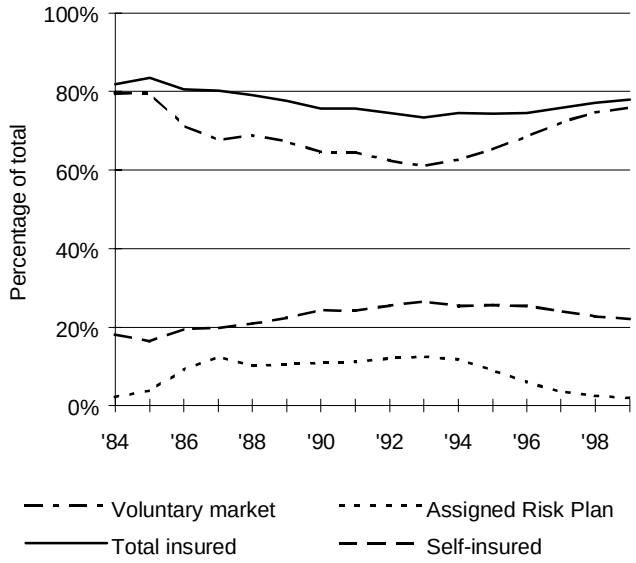
Figure 2.2
Market Shares of Different Insurance Arrangements as Measured by Pure Premium and Paid Indemnity Claims, 1984-1999 [1]

A: Pure Premium [2]



Year Earned	Voluntary Market	Assigned Risk Plan	Total Insured	Self-Insured
1984	77.8%	1.4%	79.2%	20.8%
1990	65.9	10.5	76.5	23.5
1991	67.3	9.8	77.2	22.8
1992	63.5	10.3	73.8	26.2
1993	62.5	10.7	73.3	26.7
1994	63.5	9.8	73.3	26.7
1995	66.4	7.0	73.4	26.6
1996	68.9	4.7	73.6	26.4
1997	71.9	3.2	75.0	25.0
1998	74.2	2.1	76.3	23.7
1999	75.6	1.5	77.1	22.9

B: Paid Indemnity Claims [3]



Injury Year	Voluntary Market	Assigned Risk Plan	Total Insured	Self-Insured
1984	79.6%	2.3%	81.8%	18.2%
1990	64.7	11.0	75.6	24.4
1991	64.6	11.1	75.7	24.3
1992	62.4	12.1	74.5	25.5
1993	61.0	12.5	73.5	26.5
1994	62.7	11.8	74.5	25.5
1995	65.3	9.1	74.4	25.6
1996	68.6	6.0	74.6	25.4
1997	72.2	3.6	75.8	24.2
1998	74.7	2.5	77.2	22.8
1999	76.0	2.0	78.0	22.0

1. See Appendix C for data sources and estimation procedures.
2. From reinsurance data. Equal to payroll times the applicable pure premium rate(s) times the employer's experience modification factor. Changes from last years' report reflect a slight revision in the experience modification factor for self-insured employers.
3. From the DLI claims database. Changes from last year's report reflect coding corrections in the DLI database.

Pure Premium Rates

In 1984, Minnesota changed to a system of competitive, or "open," rating for the voluntary workers' compensation market. Under this system, the Minnesota Workers' Compensation Insurers Association (MWCIA), the state's workers' compensation data service organization and rating bureau, annually determines "pure premium rates," or "loss costs," for approximately 560 insurance classes. These pure premium rates represent expected indemnity and medical losses per year per $100 of payroll. They are based on insurer "experience" and estimated effects of statutory benefit changes. "Experience" is the ratio of actual losses relative to pure premium (payroll times the applicable pure premium rates) for the

most recent report periods. The estimated effects of law changes are projections from data available before the fact, and may thus differ from the actual effects of these changes. Insurance companies determine their own premium rates (per $100 of payroll by insurance class) using the pure premium rates as the starting point but adding (1) certain components of loss costs that are excluded by law from the pure premium rates and (2) company expenses, which include claims adjustment, litigation, insurance brokerage, overhead, assessments (including the Special Compensation Fund [SCF] assessment), and profit. Insurance companies file these rates with the Department of Commerce and use these "filed rates" as the starting point in determining premium for individual insureds.

Figure 2.3 shows the changes in voluntary market pure premium rates from 1984 to 2001. The figures represent *overall* changes, as opposed to changes for individual insurance classes, which may vary widely. From 1985 through 1994, the rate changes (Panel A) were generally positive, ranging from –3 percent to +11 percent. As a result, the rate *level* (Panel B) showed a rising trend, reaching 134 percent of the 1984 level by 1994.

From 1995 through 2001, seven consecutive rate decreases occurred, including three of 14-16 percent each for 1996-1999. Consequently, the rate level fell from 134 percent of the 1984 level in 1994 to 69 percent in 2001. The 2001 level was 48 percent below 1994 and 31 percent below 1984.

Pure premium rate changes attributable to experience are, of necessity, based on *past* experience. Figure 2.4 shows the experience periods used in determining recent rate changes. Each rate change is based on experience during a three-year period whose last year is two years before the effective year of the rate change. These are the most recent years for which experience data are available for each rate change. The 2001 reduction of 5 percent, for example, is based on experience for 1997-1999. When changes are made in the workers' compensation law, the MWCIA estimates the effects of these changes on loss costs and incorporates these estimates into the pure premium rates. The 1993 rate increase of 1.6 percent consisted of a 5 percent decrease attributed to the 1992 law change counteracted by an increase attributed to experience.[7] The 1996 decrease of 15.6 percent included a 6.8 percent decrease attributed to the 1995 law change and an additional decrease based on experience.[8]

Some effects of the 1992 law were impossible to estimate in advance and were therefore excluded from the 5 percent decrease attributed to that law. For example, the 1992 law included provisions for (1) a new, relative-value medical fee schedule with an overall 15 percent reduction in medical payments,[9] (2) medical treatment parameters, and (3) certified managed care organizations. MWCIA's *1993 Ratemaking Report* states, "While it is not possible under these techniques to measure the potential cost savings impact in the future of all of the changes

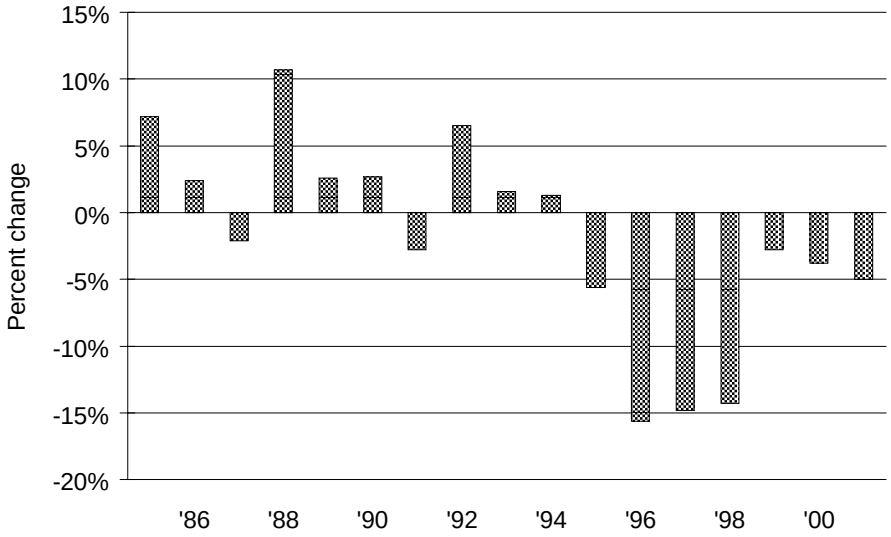
[7]The 1992 law also required a 16 percent reduction on October 1, 1992 in insurance company premium rates filed with the Department of Commerce. The reduction stayed in effect until April 2, 1993, after which insurers were free to file new rates. The mandated reduction did not affect pure premium rates, since they are determined prior to the filed rates.

[8]The 6.8 percent rate decrease attributed to the 1995 law change would have been greater but for the increase in the minimum PTD benefit to 65 percent of the SAWW. Although the 1995 law change also repealed supplementary benefits, which had been available to PTD beneficiaries with a benefit standard at 65 percent of the SAWW, this did not enter into the rate change. The SCF reimburses insurers (and self-insured employers) for supplementary benefit payments, the reimbursement being financed with a portion of the SCF assessment levied on paid indemnity benefits. By insurance industry convention and by law, the pure premium rates exclude assessments and reimbursed benefits, and thus exclude supplementary benefits. By contrast, the pure premium rates include the higher PTD minimum because, like other benefits, it is not reimbursed. The combined effect of the higher PTD minimum and the repeal of supplementary benefits will be to reduce total benefits over time because the 65 percent minimum (like the remainder of the PTD benefit) is subject to the offset for social security benefits while supplementary benefits were not. (This interpretation has been upheld by the Workers' Compensation Court of Appeals [Vezina v. Best Western and Shelton v. National Painting and Sandblasting, July 28, 2000] and was on appeal to the state Supreme Court at time of publication.) This will eventually produce a net negative effect on insurance company rates and employer premiums, as declining supplementary benefit payments (for injuries before October 1, 1995) reduce SCF assessments, enabling insurance companies to lower their own rates *relative to the pure premium rates.*

[9]Relative to those that would have been made under the prior schedule.

Figure 2.3
Voluntary Market Pure Premium Rates, 1984-2001 [1]

A: Rate Changes, 1985-2001



Effective Year	Percent Change from Prior Year
1990	2.7%
1991	-2.8
1992	6.5
1993	1.6
1994	1.3
1995	-5.6
1996	-15.6
1997	-14.8
1998	-14.3
1999	-2.8
2000	-3.8
2001	-5.0

B: Rate Levels, 1984-2001, Relative to 1984

Effective Year	Percentage of 1984
1984	100.0%
1990	125.4
1991	121.8
1992	129.8
1993	131.8
1994	133.6
1995	126.1
1996	106.4
1997	90.7
1998	77.7
1999	75.5
2000	72.7
2001	69.0

1. Pure premium rates represent expected indemnity and medical losses per year per $100 of covered payroll. Data are from the MWCIA, *2001 Minnesota Ratemaking Report.*

permitted by this law, in part because some potentially significant changes such as regulations designed to control medical costs are not yet effective, those cost savings will be measured over time as they materialize."

That is, cost savings resulting from law changes but not *formally* incorporated into the pure premium rates will be reflected in experience—declines in losses relative to pure premium—and will affect the pure premium rates by this means. As shown in Figure 2.4, the rate decreases from the late 1990s through 2001 reflected experience changes during the early and middle 1990s. The 1992 provisions concerning medical services and fees—and not formally included in the 1993 rate change—took effect at various points in 1993. Thus, some of the experience change

Figure 2.4
Experience Periods for Recent Pure Premium Rate Changes [1]

Effective Year of Rate Change	Experience Period [2]
1996	1992-1994
1997	1993-1995
1998	1994-1996
1999	1995-1997
2000	1996-1998
2001	1997-1999

1. From MWCIA, annual *Minnesota Ratemaking Reports.*
2. For technical reasons, most of the weight in the experience calculation is effectively given to accidents occuring and pure premium earned during the last two years of the three-year period.

behind more recent rate reductions is probably a result of these provisions, but how much is uncertain.

It should be noted that pure premium rate changes attributed to law changes reflect *estimated* effects of the law changes on loss costs. If the actual effect of a law change differs from the original estimate, the law change will further affect future rates—in the same manner as the 1992 medical changes—by affecting future experience (actual losses relative to pure premium). If the estimated effect of a law change is too small, future experience changes will bring about a larger overall effect than estimated, and *vice versa.* Any effects of the 1992 and 1995 law changes on experience would first occur in 1993 and 1996, respectively, and thus would first be felt in the rate changes of 1995 and 1998 (see Figure 2.4).

Several factors other than the 1992 and 1995 law changes also contributed to the pure premium rate decreases. It is well-documented in the workers' compensation literature that concern over costs induced many employers and insurers to adopt measures such as safety programs, more active medical treatment, better management of claims and costs, and more effective return-to-work programs during the 1990s. As shown in the next two chapters, major cost decreases had already occurred by 1992, indicating that such efforts had strong effects. In addition, as discussed above, a strong economy may have contributed to reduced claims rates and earlier return to work beginning in 1994. Ultimately, it is unknown to what extent the pure premium rate decreases between 1994 and 2001 reflect the 1992 and 1995 law changes and how much they reflect other factors.

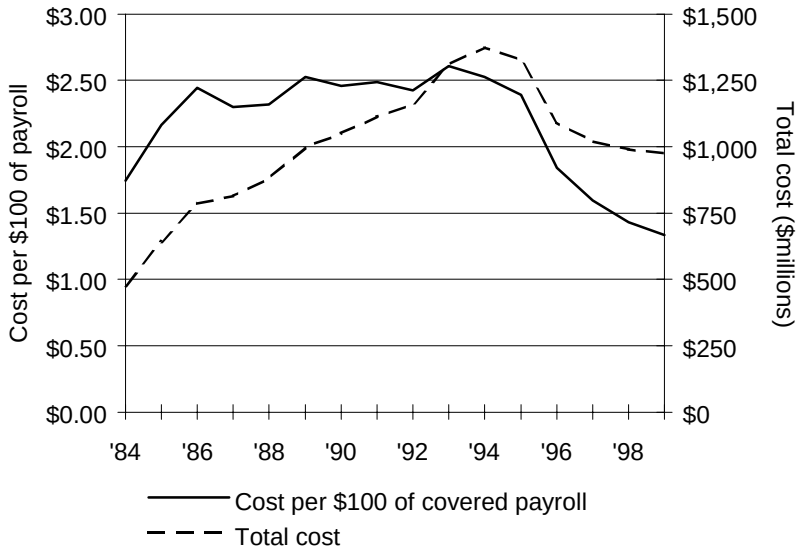
System Cost

Figure 2.5 shows the estimated total cost of Minnesota workers' compensation from 1980 to 1999, in absolute terms and relative to payroll. The numbers include insured and self-insured employers. They are computed primarily from written premium for insured employers and pure premium (with adjustments) for self-insureds (see footnote in figure). Written premium—the "bottom line" premium insurers charge employers for policies written within a period—is based on insurers' filed rates (see p. 6) but is adjusted to reflect employers' individual characteristics, such a safety programs. Fundamentally, total system cost reflects indemnity benefits, medical treatment, rehabilitation, claims adjustment, litigation, insurance brokerage, overhead, assessments and taxes (primarily the SCF assessment), and profit.

Figure 2.5 shows that the total cost of workers' compensation rose from $480 million in 1984 to $1.38 billion in 1994, and fell during the next five years to $970 million in 1999. Cost per $100 of payroll rose from $1.74 in 1984 to $2.53 by 1989, stayed essentially flat during 1989-1994, and fell sharply from $2.52 in 1994 to $1.33 in 1999. The 1999 figure is down 47 percent both from 1994 and from the 1989-1994 average of $2.50.

Total system cost per $100 of payroll does not follow the pure premium rate trend exactly. One reason is that the system cost estimate includes the ARP and self-insured employers along with the voluntary market, while the pure premium rates reflect the voluntary market only. However, as shown in Figure 2.2, the voluntary market has accounted for 62-78 percent of total pure premium since 1984. Thus, any divergence between the trends in total system cost per $100 of payroll and pure premium rates probably reflects voluntary market factors for the most part.

Figure 2.5
Cost of Workers' Compensation
Per $100 of Covered Payroll and In Total, 1984-1999 [1]



Year [2]	Cost per $100 of Covered Payroll	Total Cost ($millions)
1984	$1.74	$480
1989	2.53	1,000
1990	2.46	1,050
1991	2.49	1,110
1992	2.42	1,160
1993	2.60	1,310
1994	2.52	1,380
1995	2.39	1,330
1996	1.84	1,090
1997	1.59	1,020
1998	1.43	990
1999	1.33	970

1. For insured employers, estimated cost consists of written premium plus premium credits for policy deductibles (a proxy for claim costs below deductible limits) less policy dividends. For self-insured employers, estimated cost consists of pure premium (payroll times pure premium rate times experience modification factor) plus administrative cost plus Special Compensation Fund assessment. Payroll is adjusted for the paid-leave exclusion through 1995. Changes from last year's report reflect revisions in insurance company reports and substitution of reported data for earlier projections. Details in Appendix C.
2. Cost data are primarily by year premium is written for insured employers and by year pure premium is earned for self-insured employers.

Where voluntary market factors are concerned, the trend in total system cost per $100 of payroll may diverge from the trend in pure premium rates because of (1) divergence between insurance company filed rates and the pure premium rates and (2) divergence between written premium per $100 of payroll (written premium being the main ingredient of total system cost) and the filed rates. When insurance companies determine their own rates (filed with the Department of Commerce), they add their own expenses, listed above, to the pure premium rates. These "filed rates" may diverge from the pure premium rates over time because (1) changes in pure premium rates do not necessarily imply changes in company expenses of equal proportion, (2) rates of return on invested premiums change, (3) competitive pressures change, and (4) insurers' evaluations of their own expected loss rates may differ from the pure premium rates (which are merely "advisory"), perhaps because they may take account of some factors that by law are excluded from the pure premium rates or because their own data are more current than what is available to the MWCIA. Written premium per $100 of payroll may diverge from the filed rates over time because of changes in the use of pricing devices, such as "schedule credits" for safety practices, that adjust premium for individual insureds.

Ultimately, however, the pure premium rates prevail. The 47 percent decrease in total system cost per $100 of payroll during 1994-1999 was in line with the pure premium rate decrease of 43 percent for the same period. As discussed with respect to the pure premium rates, the cost decreases resulted from a combination of the 1992 and 1995 law changes and other factors, such as falling claims rates, employer and insurer claims-management measures, and the economy.

3

Claims and Costs: Insurance Data

The insurance industry is a valuable source of data on workers' compensation claims and costs. This chapter presents data from the Minnesota Workers' Compensation Insurers Association (MWCIA), Minnesota's workers' compensation data service organization and rating bureau.

The insurance data have an important advantage over DLI claims and cost data (presented in the next chapter). While the DLI data are limited to indemnity claims and indemnity costs, the insurance data include indemnity and medical-only claims, and both indemnity and medical costs.

Some of the insurance data are by accident year, meaning that claims and costs are attributed to the year in which the related accidents or exposures occurred. Other data are by policy year, meaning that claims and costs are attributed to the year in which the applicable insurance policy (the policy under which the accidents or exposures occurred) took effect (see Appendix A). Since claims and costs for a given accident or policy year take time to mature, the data are "developed," meaning that the numbers are projections reflecting the same degree of maturity for each policy or accident year (see Appendix C).

Some of the insurance data are by "claim type," defined according to the most severe type of benefit on the claim. In increasing severity, the benefit types are medical, temporary disability, permanent partial disability (PPD), permanent total disability (PTD), and death. Temporary disability includes temporary total disability (TTD) and temporary partial disability (TPD). For example, a claim with only medical payments is a medical-only claim, while a claim with medical, temporary disability, and PPD payments is a PPD claim. PPD claims also include (1) claims with temporary disability benefits lasting more than one year and (2) claims with stipulated settlements. Claims types other than medical-only are called indemnity claims because the benefit types that define them are called indemnity benefits (see Appendix A).

Costs and Relative Numbers of Different Claim Types

The different types of claims vary greatly in their frequency, average cost, and total cost. This is demonstrated in Figure 3.1, which shows, for insured claims for policy year 1997, the percentage of claims, average benefit cost per claim, and percentage of total benefit cost by claim type. Because of large annual fluctuations for permanent total disability and death claims, data for these claims are averaged over several years (see Appendix C).

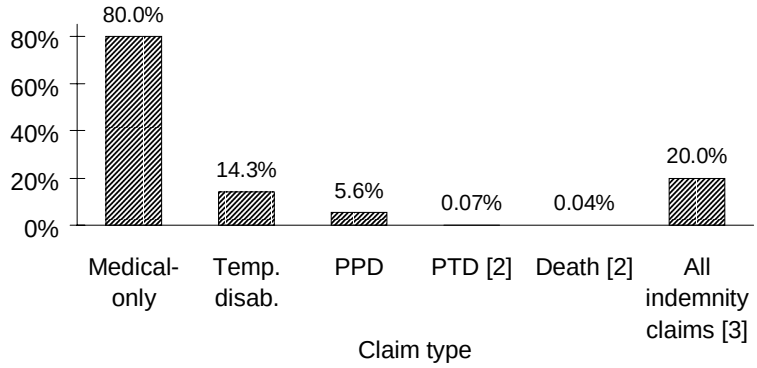
As shown in Panel A, medical-only claims made up 80.0 percent of the total, and indemnity claims the remaining 20.0 percent. Among indemnity claims, temporary disability claims were the most common, 14.3 percent of the total, followed by PPD claims at 5.6 percent. The numbers of PTD and death claims were relatively small, 0.07 percent and 0.04 percent of the total, respectively. About one-fourth of indemnity claims were PPD claims.

Panel B shows the average total benefit cost (indemnity plus medical) for each claim type. Note that the average cost for each claim type includes the type of benefit that defines that claim type *plus other types of benefits* (e.g. medical, temporary disability, and PPD benefits on PPD claims). In this and other figures showing average claim costs, the numbers are adjusted for wage growth so as to represent costs in terms of 1999 wage dollars (see footnote in figure).

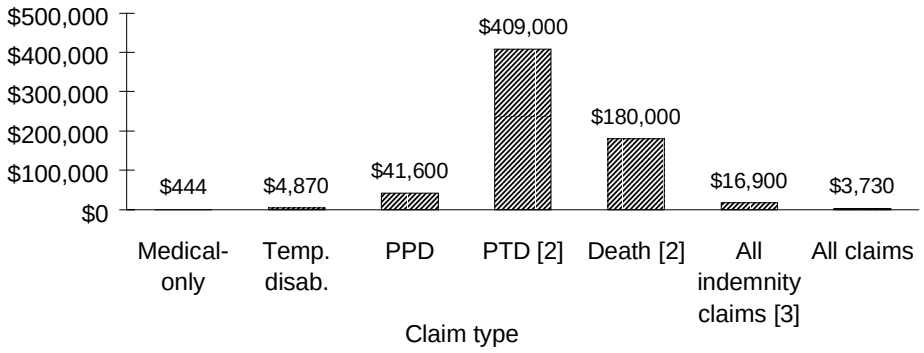
The most expensive claim type was PTD claims with an average cost of $409,000. This figure reflects the payment of PTD benefits and major medical costs over several years or even decades

Figure 3.1
Percentage of Claims, Average Benefit Cost per Claim, and Percentage of Total Benefit Cost by Claim Type for Insured Claims, Policy Year 1997 [1]

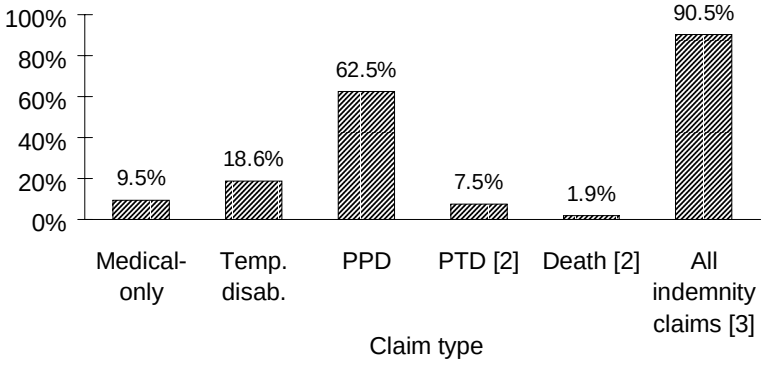
A: Percentage of All Claims



B: Average Benefit Cost (Indemnity and Medical) per Claim, Adjusted to 1999 SAWW [1]



C: Percentage of Total Benefit Cost



1. Data are from the Minnesota Workers' Compensation Insurers Association, *2001 Minnesota Ratemaking Report.* Incurred losses, from insurer reports on policy experience, are developed to a fifth-report basis using the development factors in the *Ratemaking Report.* The figures include the voluntary market and Assigned Risk Plan, and exclude supplementary benefits and second-injury claims. To standardize the cost of benefits to 1999, the numbers in Panel B are adjusted for growth in the statewide average weekly wage (SAWW), from Unemployment Insurance data. Each cost number is multiplied by the ratio of the 1999 SAWW to the 1997 SAWW, using the SAWW reflecting wages paid during the respective year. Details in Appendix C.
2. Because of annual fluctuations, data for PTD and death claims are averaged over several years. Details in Appendix C.
3. Indemnity claims consist of all claim types other than medical-only.

for individual claims. Slightly less than half as expensive as PTD claims were death claims, with an average cost of $180,000. This figure consists mostly of dependents' benefits, which typically extend over many years. Next most expensive were PPD claims at $41,600 and temporary disability claims at $4,870. Medical-only claims were the least expensive at $444; not only do they have no indemnity costs, but their medical costs are lower than for indemnity claims because of lower injury severity. The overall average cost for indemnity claims was $16,900, and for all claims it was $3,730.

The contribution of each claim type to the total cost of all claims depends on the relative frequency and average cost of each claim type; this is shown in Panel C. Far and away the largest contributor to total benefit cost was PPD claims, with 62.5 percent of total cost. This reflects a combination of substantial claim frequency and substantial average cost even though these claims had neither the highest frequency nor the highest average cost. The next-highest contributor to total benefit cost was temporary disability claims (18.6 percent), followed by medical-only claims (9.5 percent), PTD claims (7.5 percent), and death claims (1.9 percent). Indemnity claims as a group accounted for 90.5 percent of total benefit cost. *Bear in mind that the cost for each claim type includes all types of benefits paid for that claim type, e.g. PPD, temporary disability, and medical costs for PPD claims.*

Indemnity and Medical Costs of Different Claim Types

Figure 3.2 shows indemnity and medical cost percentages by claim type for insured claims for policy year 1997. Of all claim types, death claims had the lowest percentage of cost in the medical category, 5 percent, leaving 95 percent in the indemnity category. The indemnity percentage was 66 percent for PTD claims, 58 percent for PPD claims, and 38 percent for temporary disability claims. For all indemnity claims, the indemnity-medical split was 56-44 percent; for all claims, it was roughly 50-50.

Relative Numbers of Different Claim Types Over Time

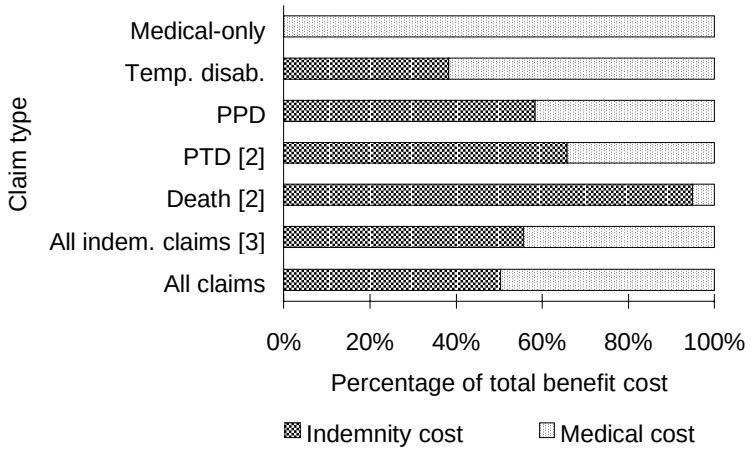
Figure 3.3 shows how the relative numbers of indemnity, PPD, and medical-only claims have changed over time for insured claims. The percentage of indemnity claims relative to the total was steady between 27 and 28 percent from policy year 1984 through 1991, while the medical-only claim percentage stayed within 72-73 percent. After 1991, the relative number of indemnity claims fell steadily, reaching approximately 20 percent in 1996 and 1997, while the percentage of medical-only claims increased to 80 percent. This indicates that since 1991, a declining proportion of injuries has been reaching the typical threshold for indemnity benefits—more than three days of total or partial disability to qualify for wage-loss benefits.

The number of PPD claims rose from 6.6 percent of the total in 1984 to 9.1 percent in 1990, dropped steadily to 5.2 percent for 1995 and 1996, and returned to 5.6 percent in 1997. The 1997 figure represents a 38 percent decrease from 1990. As a proportion of the number of indemnity claims, PPD claims rose from 23.6 percent in 1984 to 33.2 percent in 1990, fell back to about 25 percent for 1994-1995, and returned to 28.1 percent by 1997.

During the period of decline in the percentage of PPD claims, DLI introduced a new impairment rating schedule. Effective for injuries on or after July 1, 1993, the new schedule assigns ratings, to the extent possible, on the basis of functional impairment and clinical test results, rather than on diagnoses and surgeries performed, as under the old schedule. The new schedule contains more zero-rated impairment categories than the old schedule, but also gives positive ratings for some impairment categories not in the old schedule (see Appendix B). The new schedule reduced the number of claims with PPD benefits by an estimated 19 percent relative to what it would have been under the prior schedule.[10] This effect is seen in Figure 3.3, in that the decline in PPD claims as a percentage of indemnity claims was steepest in policy year

[10] *"Analysis of the Effects of the 1993 Permanent Partial Disability Rating Schedule,"* Department of Labor and Industry, Research and Statistics, August 1999.

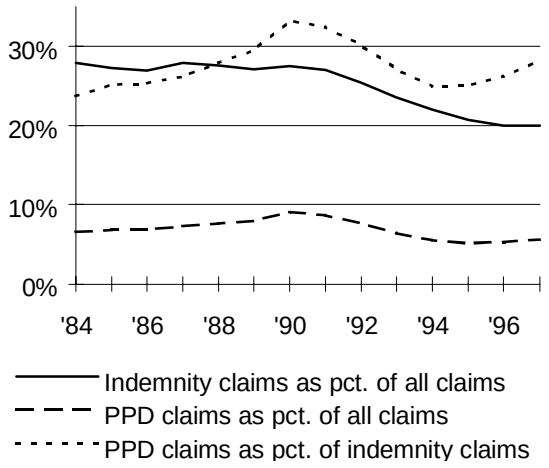
Figure 3.2
Indemnity and Medical Costs as Percentages of Total Cost by Claim Type for Insured Claims, Policy Year 1997 [1]



Claim Type	Indemnity Cost	Medical Cost
Medical-only	0.0%	100.0%
Temporary disability	38.3	61.7
PPD	58.4	41.6
PTD [2]	65.8	34.2
Death [2]	94.9	5.1
All indem. claims [3]	55.6	44.4
All claims	50.3	49.7

1. Data are from the Minnesota Workers' Compensation Insurers Association, *2001 Minnesota Ratemaking Report*. Incurred losses, from insurer reports on policy experience, are developed to a fifth-report basis using the development factors in the *Ratemaking Report*. The figures include the voluntary market and Assigned Risk Plan, and exclude supplementary benefits and second-injury claims. Details in Appendix C.
2. Because of annual fluctuations, data for PTD and death claims are averaged over several years. Details in Appendix C.
3. Indemnity claims consist of all claim types other than medical-only.

Figure 3.3
Claims of Selected Types as Percentage of Total Insured Claims, Policy Years 1984-1997 [1]



Policy Year	Indemnity Claims	PPD Claims: As Pct. of All Claims	PPD Claims: As Pct. of Indemnity Claims	Medical-Only Claims
1984	27.9%	6.6%	23.6%	72.1%
1990	27.4	9.1	33.2	72.6
1991	27.0	8.7	32.4	73.0
1992	25.4	7.7	30.2	74.6
1993	23.5	6.4	27.1	76.5
1994	22.0	5.5	24.9	78.0
1995	20.7	5.2	25.0	79.3
1996	19.9	5.2	26.2	80.1
1997	20.0	5.6	28.1	80.0

1. Data are from the Minnesota Workers' Compensation Insurers Association, *2001 Minnesota Ratemaking Report*. Incurred losses, from insurer reports on policy experience, are developed to a fifth-report basis using the development factors in the *Ratemaking Report*. The figures include the voluntary market and Assigned Risk Plan, and exclude supplementary benefits and second-injury claims. Details in Appendix C.

1993, the year that would most strongly show the effect of the new schedule.

Indemnity and Medical Costs per Claim Over Time

The trends toward fewer indemnity and PPD claims relative to the total can be expected to reduce average indemnity costs per claim. The extent to which this has occurred is shown in Figure 3.4, which presents the average indemnity and medical costs of insured claims for policy years 1984-1997 for indemnity claims, medical-only claims, and both claim types combined. The cost figures for indemnity claims and for all claims combined are rounded to the nearest $10.

The numbers are adjusted for wage growth in order to standardize the cost of benefits over time. If average benefits per claim were to double while average wages also doubled, there would be no change in benefits relative to payroll. Furthermore, wage growth contributes to the growth of indemnity and medical costs, in that most indemnity costs are tied to wages (the exception being PPD benefits), and medical costs to a large degree change with general wages and prices. Since the medical fee schedule revision in 1993, maximum medical fees have been tied to the statewide average weekly wage (SAWW). The average claim costs in Figure 3.4 are expressed in terms of 1999 wage dollars (see footnote in figure).

For indemnity claims (Panel A), adjusted average indemnity and medical costs generally rose from 1984 through 1990, reaching $17,170 and $9,050, respectively, in 1990. The average total cost of indemnity claims, adjusted for wage growth, grew from $20,290 in 1984 to $26,220 in 1990, a 29 percent increase.

Average cost also increased during the earlier period for medical-only claims and for all claims combined. The adjusted average cost of medical-only claims (Panel B) grew from $301 in 1984 to $493 in 1991. For all claims combined (Panel C), adjusted average indemnity cost increased by 17 percent between 1984 and 1990 while average medical cost rose by half. At their 1990 peak, average indemnity cost for all claims was $4,710, average medical cost was $2,810, and average total cost $7,530.

After 1990 and 1991, however, these trends were arrested or reversed. For indemnity claims, between 1990 and 1997, adjusted indemnity cost dropped from $17,170 in 1990 to $9,390 in 1997 (down 45 percent), medical cost dropped from $9,050 to $7,500 (down 17 percent), and total cost fell from $26,220 to $16,890 (down 36 percent). These decreases occurred mostly between 1990 and 1993.

From its peak in 1991, the adjusted average cost of medical-only claims decreased 10 percent to $444 by 1997.

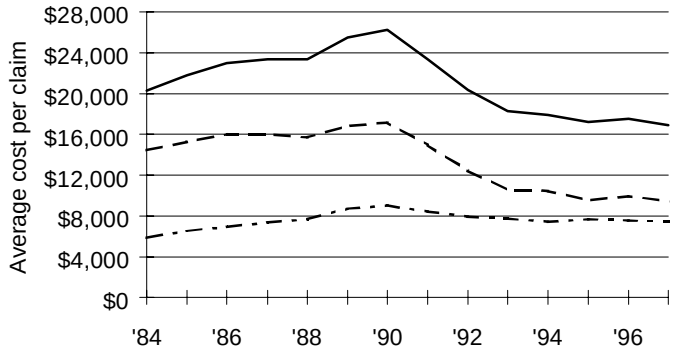
For all claims combined, adjusted average indemnity cost fell from $4,710 to $1,880 between 1990 and 1997, a striking 60 percent decrease. Over the same period, the adjusted average medical cost of all claims fell 34 percent, from $2,810 to $1,850, and the adjusted average total cost of all claims fell by half, from $7,530 to $3,730. *Notably, for all claims combined, the 1997 indemnity and total cost figures were down 53 percent and 37 percent, respectively, from their 1984 levels, while the 1996 medical cost was the same as in 1984, after adjusting for wage growth. Again, most of the decrease occurred between 1990 and 1993.*

The cost trends for all claims combined reflect not only the cost trends for indemnity and medical-only claims, but also changes in the relative numbers of the two types of claims, since indemnity claims are far more expensive. As indicated in Figure 3.3, the proportion of indemnity claims relative to the total fell from 27.4 percent in 1990 to 20.0 percent in 1997. Consequently, over the same period, average costs fell proportionately more for all claims combined than for indemnity or medical-only claims alone.

What explains the sharp decline in indemnity costs and the significant decrease in medical costs after 1990? Those cost changes occurring after 1992 resulted at least in part from the 1992 law changes, which affected indemnity benefits, medical services and costs, and other aspects of workers' compensation (see Appendix B). Similarly, indemnity costs for 1996 and 1997 are affected by the 1995 law changes. However, both indemnity and medical costs began falling (relative to wages) in 1991, prior to the 1992 and 1995 law changes. Both these numbers and current literature suggest that concern about

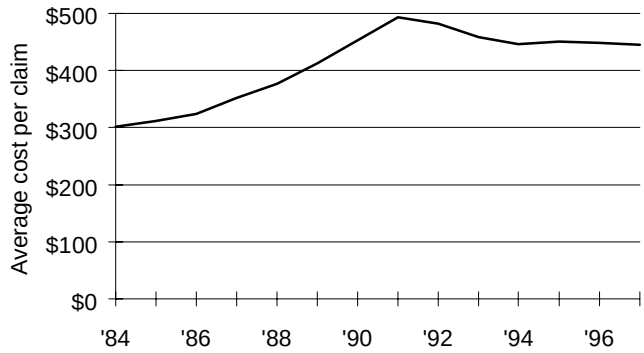
Figure 3.4
Average Indemnity and Medical Costs of Insured Claims, Policy Years 1984-1997, Adjusted for Wage Growth [1]

A: Indemnity Claims



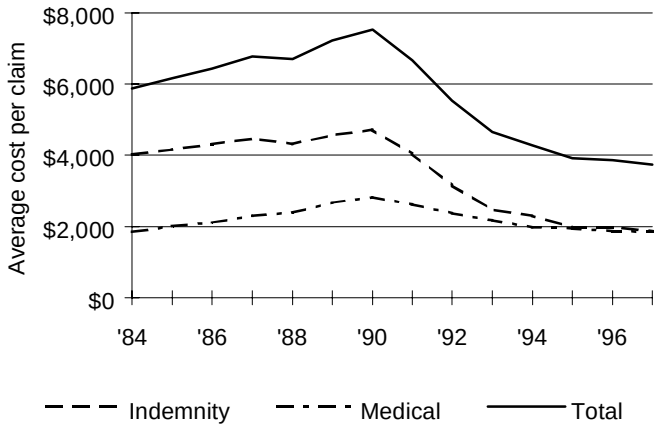
Policy Year	Indemnity Cost	Medical Cost	Total Cost
1984	$14,430	$5,860	$20,290
1990	17,170	9,050	26,220
1991	14,960	8,390	23,340
1992	12,430	7,930	20,370
1993	10,530	7,740	18,260
1994	10,430	7,420	17,850
1995	9,540	7,670	17,210
1996	9,940	7,560	17,500
1997	9,390	7,500	16,890

B: Medical-Only Claims



Policy Year		Medical Cost	Total Cost
1984		$301	$301
1990		452	452
1991		493	493
1992		482	482
1993		459	459
1994		445	445
1995		450	450
1996		448	448
1997		444	444

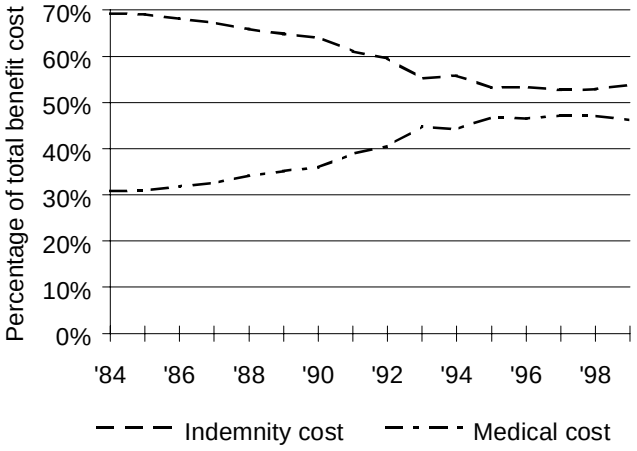
C: All Claims



Policy Year	Indemnity Cost	Medical Cost	Total Cost
1984	$4,030	$1,850	$5,880
1990	4,710	2,810	7,530
1991	4,040	2,630	6,670
1992	3,150	2,370	5,520
1993	2,480	2,170	4,650
1994	2,290	1,980	4,270
1995	1,970	1,940	3,920
1996	1,980	1,870	3,850
1997	1,880	1,850	3,730

1. Data are from the Minnesota Workers' Compensation Insurers Association, *2001 Minnesota Ratemaking Report.* Incurred losses, from insurer reports on policy experience, are developed to a fifth-report basis using the development factors in the *Ratemaking Report.* The figures include the voluntary market and Assigned Risk Plan, and exclude supplementary benefits and second-injury claims. To standardize the cost of benefits over time, the numbers are adjusted for growth in the statewide average weekly wage (SAWW), from Unemployment Insurance data. The number for each year is adjusted to 1999 by multiplying it by the ratio of the 1999 SAWW to the SAWW for that year, using the SAWW reflecting wages paid during the respective year. Details in Appendix C.

Figure 3.5
Indemnity and Medical Costs as Percentages of Total Benefit Cost for Insured Claims in the Voluntary Market, Accident Years 1984-1999 [1]



Accident Year	Indemnity Cost	Medical Cost
1984	69.2%	30.8%
1990	64.1	35.9
1991	61.1	38.9
1992	59.5	40.5
1993	55.2	44.8
1994	55.8	44.2
1995	53.2	46.8
1996	53.4	46.6
1997	52.7	47.3
1998	52.8	47.2
1999	53.9	46.1

1. Data are from the Minnesota Workers' Compensation Insurers Association (MWCIA). The figures represent incurred losses at eighth report. Paid losses, from insurer financial reports, are developed to an eighth-report basis using the development factors in MWCIA's *2001 Minnesota Ratemaking Report,* and then converted to an incurred basis using ratios in the *Ratemaking Reports* for various years. The figures exclude the Assigned Risk Plan and supplementary and second-injury benefits. Details in Appendix C.

workers' compensation costs induced many employers and insurers to adopt measures such as medical cost controls, more active claims management, and more effective return-to-work programs starting before 1992. Since these types of factors have probably continued to operate after 1992, it is difficult to determine how much of the reduction in average claim costs after 1992 can be attributed to the law changes. Clearly, the combined effect of these two sets of forces has been powerful.

Overall Indemnity and Medical Costs Over Time

Besides changing on a per-claim basis, indemnity and medical costs have changed as shares of total benefit cost. Figure 3.5 presents indemnity and medical costs as percentages of total benefit cost for insured claims in the voluntary market, for accident years 1984-1999.

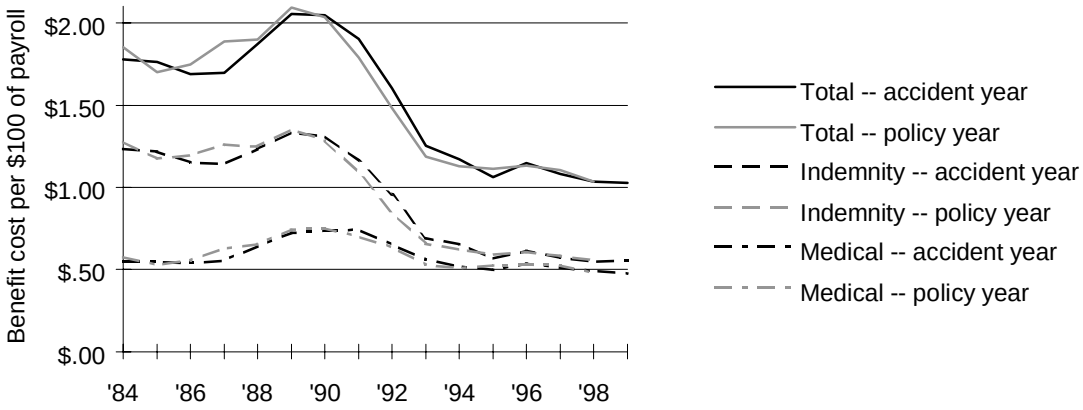
From 1984 to 1995, indemnity costs fell from 69 percent of the total to 53 percent, while medical costs rose from 31 percent to 47 percent. Little change occurred, however, between 1995 and 1999. The shift in the indemnity and medical shares between 1984 and the 1995-1999 period is about 16 percentage points. It reflects medical costs per claim rising faster than indemnity costs through 1990, and indemnity costs per claim falling faster than medical costs (adjusted for wage growth) since that time (Figure 3.4).[11]

Benefit Costs Relative to Payroll Over Time

Although the average claim costs in Figure 3.4 are revealing, they do not reflect trends in claims rates. Average claim costs and claims rates can both be taken into account by relating benefit costs to payroll. Figure 3.6 shows trends in insured benefit costs—indemnity, medical, and total—per $100 of covered payroll in the voluntary market for 1984-1999.

[11]While Figure 3.5 indicates an indemnity-medical split of about 53-47 percent for 1997, Figures 3.2 and 3.4 indicate a roughly 50-50 split for the same year. This is because the data are from different sources. The data in Figures 3.2 and 3.4 are from claim-specific reports and are developed to a five-year maturity. The Figure 3.5 data are from financial reports and are developed to an 8-year maturity. This leads to a higher proportion of cost in the indemnity category in Figure 3.5 because indemnity costs develop more slowly than medical costs. However, indemnity and medical cost shares computed from the claim-specific reports (e.g. Panel C of Figure 3.4) follow closely the trends in Figure 3.5.

Figure 3.6
Benefit Costs per $100 of Covered Payroll for Insured Claims in the Voluntary Market, 1984-1999 [1]



Accident or Policy Year	Accident Year Data: Indemnity Cost	Accident Year Data: Medical Cost	Accident Year Data: Total Benefit Cost	Policy Year Data: Indemnity Cost	Policy Year Data: Medical Cost	Policy Year Data: Total Benefit Cost
1984	$1.23	$.55	$1.78	$1.28	$.57	$1.85
1989	1.33	.72	2.05	1.35	.74	2.09
1990	1.31	.74	2.05	1.29	.75	2.03
1991	1.16	.74	1.90	1.09	.70	1.79
1992	.95	.65	1.60	.85	.63	1.48
1993	.69	.56	1.25	.66	.53	1.19
1994	.65	.52	1.17	.62	.51	1.13
1995	.56	.50	1.06	.59	.52	1.11
1996	.61	.53	1.15	.60	.53	1.13
1997	.57	.51	1.08	.58	.52	1.10
1998	.55	.49	1.04	.55	.48	1.03
1999	.55	.47	1.02	[2]	[2]	[2]

1. Data are from the Minnesota Workers' Compensation Insurers Association (MWCIA). The figures represent incurred losses at eighth report. Paid losses, from insurer financial reports, are developed to an eighth-report basis using the development factors in MWCIA's *2001 Minnesota Ratemaking Report*, and then converted to an incurred basis using ratios in the *Ratemaking Reports* for various years. Payroll, from insurer reports on policy experience, is adjusted for the paid-leave exclusion in effect through 1995. The figures exclude the Assigned Risk Plan and supplementary and second-injury benefits. Details in Appendix C.
2. Not available at time of publication.

The MWCIA uses the loss data behind Figure 3.6 to derive the annual changes in Minnesota's pure premium rates, set forth in the annual *Minnesota Ratemaking Report.* In that process, however, the MWCIA compares losses to pure premium,[12] rather than to payroll, as is done here.

These numbers indicate that indemnity, medical, and total benefit costs rose relative to payroll in the late 1980s, peaked during 1989-1991, fell dramatically in the early 1990s, and stabilized during 1995-1999 at the lowest levels of any during the 15 years shown.

[12]Pure premium is calculated by applying pure premium rates to payroll and is thus a measure of expected losses (rather than actual losses) for the period in question (see Appendix A and prior discussion of pure premium rates).

In the accident year data, indemnity cost per $100 of payroll went from $1.23 in 1984 to $1.33 in 1989 to 55 cents in 1999; medical cost went from 55 cents in 1984 to 74 cents in 1990-1991 to 47 cents in 1999; and total benefit cost went from $1.78 in 1984 to $2.05 in 1989-1990 to $1.02 in 1999. Most of decline occurred between 1991 and 1993. *The 1999 indemnity figure was 59 percent less than the peak in 1989 and 55 percent less than the 1984 amount. The 1999 medical figure was 36 percent lower than the 1990-1991 peak and 14 percent lower than 1984. Total benefit cost per $100 of payroll for 1999 was down 50 percent from its peak in 1989-1990 and 42 percent from 1984.* From 1992 onward, both indemnity and total benefits were lower relative to payroll than at any time since 1984.

The policy year data, though available only through 1998, tell essentially the same story. With the exception of 1986-1988, the two follow each other closely.[13]

These figures reflect trends in both claims rates and average benefit cost per claim. Since 1990, the trends have been downward for the rates of total paid claims and indemnity claims (Figure 2.1), the number of PPD claims as a percentage of total paid claims (Figure 3.3), and average indemnity and medical costs per claim adjusted for wages (Figure 3.4).

[13]In policy year data, the numbers for any given policy year reflect a combination of the same accident year and the following accident year, since policies taking effect after the first of any year extend into the following year. Therefore, it is consistent for policy year data to "lead" the accident year data as happens in the present case, in which the policy year figures fall below their accident year counterparts during the down-swing after 1990.

4

Claims and Costs: Department of Labor and Industry Trend Data

The Department of Labor and Industry (DLI) database provides additional information on workers' compensation claims and costs. A major advantage of the DLI data compared to the insurance data (Chapter 3) is that indemnity costs in the DLI data are divided into different types of indemnity benefits. The insurance data are available for different claim types, but not for different types of indemnity benefits. Also, the DLI data include both insured and self-insured employers. However, the DLI data include only indemnity claims and the indemnity costs of those claims; medical-only claims and the medical costs of indemnity claims are excluded.

This chapter presents the department data by injury year, meaning that claims and costs are tied to the year in which the injury occurred. Injury year is equivalent to accident year in the insurance data. Like the insurance data, the department data in this chapter are "developed," meaning that they are projections of what the numbers will be when claims are mature (see Appendix C).

Claims are categorized differently in the department data than in the insurance data. In the insurance data, each claim falls into one category determined by the most "severe" type of benefit on the claim. In the department data, the number of claims with each type of benefit is counted regardless of other types of benefits on the claims. For example, in the insurance data, a claim with temporary total disability (TTD) and permanent partial (PPD) benefits is counted only as a PPD claim (see benefit definitions in Appendix C). In the department data, the same claim is counted among claims with TTD benefits and among claims with PPD benefits. This feature of the department data allows an analysis of the number of claims with each type of benefit, not possible with the insurance data.

The sequence of figures in this chapter leads toward, and explains, trends in the amounts of indemnity benefits per $100 of covered payroll, presented at the end of the chapter along with comparisons to similar information from the insurance data.

Rates of Indemnity Claims with Different Types of Benefits

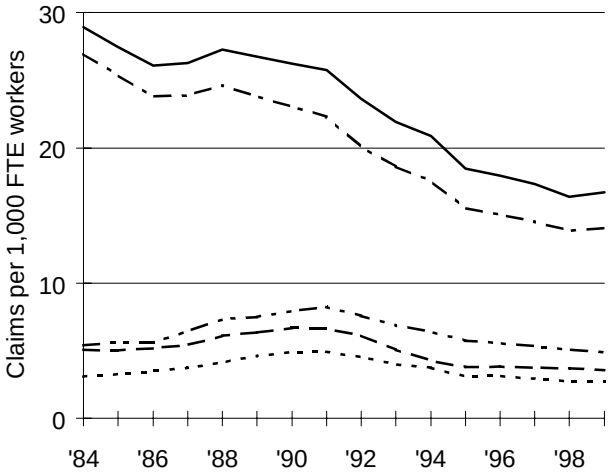
The Numbers

Figure 4.1 shows the numbers of paid indemnity claims with selected types of benefits for injury years 1984-1999, expressed as rates per 1,000 full-time-equivalent (FTE) workers' compensation covered workers. Claims with TTD and/or permanent total disability (PTD) benefits are counted together because the two benefit types are not distinguished in the department database.

The figure shows that the total paid indemnity claims rate fell from 28.9 per 1,000 FTE workers in 1984 to 16.7 in 1999, with most of the decline occurring after 1991. This is the same as the indemnity claims rate trend in Figure 2.1. The rate of claims with TTD/PTD benefits closely follows the indemnity claims rate at a slightly lower level, falling from 26.9 in 1984 to 14.1 in 1999.

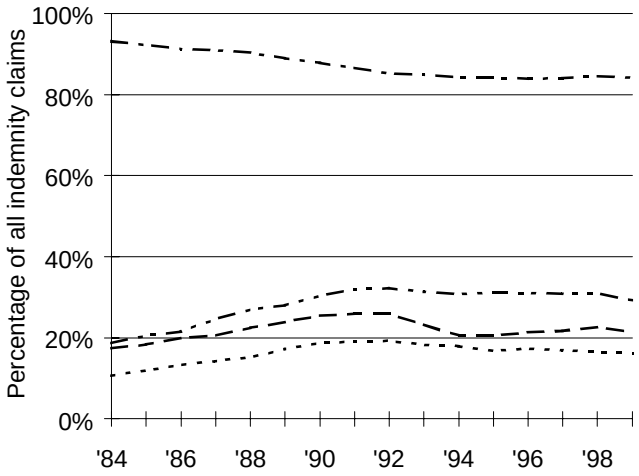
As shown in Figure 4.2, the proportion of indemnity claims with TTD/PTD benefits declined steadily from 93.1 percent in 1984 to 84.2 percent in 1994, and stayed near 84 percent through 1999. This means that the period 1984-1994 saw an increase in the proportion of indemnity claims with benefits other than TTD/PTD—temporary partial disability (TPD), PPD, stipulated, or a combination of these—but no TTD/PTD benefits. This proportion rose

Figure 4.1
Numbers of Paid Indemnity Claims With Selected Types of Benefits per 1,000 Full-Time-Equivalent Covered Workers, Injury Years 1984-1999 [1]

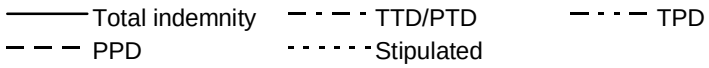


Injury Year	TTD /PTD [2]	TPD	PPD	Stipu-lated [3]	Total Indem. [4]
1984	26.9	5.4	5.1	3.1	28.9
1990	23.0	8.0	6.7	4.9	26.2
1991	22.3	8.2	6.7	4.9	25.8
1992	20.1	7.6	6.1	4.6	23.6
1993	18.6	6.9	5.1	4.0	21.9
1994	17.6	6.4	4.3	3.7	20.9
1995	15.6	5.7	3.8	3.1	18.5
1996	15.1	5.6	3.8	3.1	18.0
1997	14.6	5.3	3.7	2.9	17.3
1998	13.9	5.1	3.7	2.7	16.4
1999	14.1	4.9	3.6	2.7	16.7

Figure 4.2
Percentages of Paid Indemnity Claims With Selected Types of Benefits, Injury Years 1984-1999 [1]



Injury Year	TTD /PTD [2]	TPD	PPD	Stipu-lated [3]	Total Indem. [4]
1984	93.1%	18.8%	17.5%	10.7%	100.0%
1990	87.8	30.3	25.4	18.7	100.0
1991	86.6	32.0	25.8	19.1	100.0
1992	85.2	32.2	25.9	19.3	100.0
1993	85.0	31.3	23.2	18.2	100.0
1994	84.2	30.7	20.6	17.9	100.0
1995	84.2	31.1	20.5	16.7	100.0
1996	83.9	31.0	21.4	17.3	100.0
1997	84.1	30.8	21.6	16.9	100.0
1998	84.6	30.9	22.6	16.6	100.0
1999	84.2	29.2	21.4	16.2	100.0



1. Claims data are from the DLI claims database. Claims numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when claims are mature. Full-time-equivalent (FTE) workers' compensation covered employment (Figure 4.1) is estimated from Unemployment Insurance data and other sources. Details in Appendix C.
2. TTD and PTD benefits are not distinguished in the DLI database.
3. Stipulated benefits include both their indemnity and medical components because the DLI database does not distinguish between them.
4. An indemnity claim may have more than one type of benefit paid. Therefore, the sum of the figures for the different benefit types is greater than the total (or 100%).

from 6.9 percent in 1984 to about 16 percent for 1994-1999.

Figure 4.1 indicates that the rates of claims with TPD, PPD, and stipulated benefits followed remarkably similar trends to each other. All three rates rose from 1984 through 1990 or 1991 and declined thereafter. For claims with TPD benefits, the rate per 1,000 FTE workers rose from 5.4 to 8.2 and then fell back to 4.9; for claims with PPD benefits, the rate went from 5.1 to 6.7 to 3.6; for claims with stipulated benefits, it went from 3.1 to 4.9 to 2.7. These were major changes. The increase from 1984 to 1991 was 52 percent for claims with TPD benefits, 31 percent for claims with PPD benefits, and 59 percent for claims with stipulated benefits. By 1999, however, the rates for all three benefit types had fallen below their 1984 levels.

As shown in Figure 4.2, the percentages of indemnity claims with TPD, PPD, and stipulated benefits increased pronouncedly through 1992. *From 1984 to 1992, the proportion of indemnity claims with TPD benefits rose by almost three quarters, from 18.8 percent to 32.2 percent; the proportion with PPD benefits rose by nearly half, from 17.5 to 25.9 percent; and the proportion with stipulated benefits rose by 80 percent, from 10.7 to 19.3 percent. This was a major reason for the increase in workers' compensation system cost over this period.*

These trends changed after 1992. The proportions of indemnity claims with TPD and stipulated benefits fell slightly for two or three years after 1992 and were stable afterwards. The proportion with PPD benefits fell markedly between 1992 and 1994 and then rebounded slightly. This is consistent with the trend—in Figure 3.3—in the proportion of insured indemnity claims designated as PPD.[14]

[14]The percentages for the PPD category are lower in Figure 4.2 than in Figure 3.3 for two reasons. First, in the insurance data, claims with temporary disability benefits lasting more than one year or with stipulated settlements are counted as PPD claims. Second, in the department data, many claims with PPD benefits included in stipulated settlements do not have their PPD benefits recorded separately and thus are not counted as having PPD benefits.

Possible Explanations

What explains these trends? The following discussion points out several possible explanatory factors in the workers' compensation environment:

- injury frequency and severity,
- claims management practices,
- statute and rule changes,
- the Americans with Disabilities Act,
- employment conditions,
- court decisions,
- dispute rates, and
- DLI administrative practices.

The nature of the data, however, does not allow conclusive statements about the influence of these factors.

Since most indemnity claims receive TTD/PTD benefits and only a minority receive other types of benefits, the total indemnity claims rate is driven primarily by the rate of claims with TTD/PTD benefits. Thus, the factors that affect the total indemnity claims rate are primarily those that affect the rate of claims with TTD/PTD benefits, by affecting the rate of claims that reach the eligibility threshold (more than three days of disability) for TTD benefits (as shown in Figure 3.1 [Chapter 3], less than one percent of claims receive PTD benefits).

The discussion surrounding Figure 2.1 (Chapter 2) suggested several possible factors that might contribute in this manner to the downward indemnity claims rate since 1991. These included a declining frequency or severity of injuries, more active medical treatment and claims management, and more effective return-to-work programs. Other possible explanatory factors for the latter part of the 1991-1999 period were (1) certain 1992 law changes such as the authorization of certified managed care (which could return injured employees to work more quickly) and the substantial reduction of the minimum TTD benefit (which most likely reduced the incentive of lower-wage injured workers to claim TTD benefits);[15] (2) the Americans with Disabilities Act (ADA), whose employment provisions took effect between July 1992 and July 1994; and (3) a significant

[15]See discussion on p. 25.

reduction in the state unemployment rate after 1993, signifying improved return-to-work opportunities.

The trends in claims with the various types of benefits are most readily analyzed by examining their proportions in the total number of indemnity claims as expressed in Figure 4.2.

The falling proportion of indemnity claims with TTD/PTD benefits occurred mostly from 1984 through 1992, the same period that saw large increases in the proportions of indemnity claims receiving TPD, PPD, and stipulated benefits. This suggests that the falling proportion of claims with TTD/PTD benefits may have been caused in part by the increasing occurrence of the other benefit types. However, this is not certain. Since many claims receive more than one type of benefit, the proportion receiving any one benefit type can change while the proportions receiving other benefit types remain steady or even change in the same direction. For example, the proportion of indemnity claims with PPD benefits dropped sharply between 1992 and 1994 while the proportions with other benefit types decreased slightly.

The decline through 1992 in the proportion of indemnity claims with TTD/PTD benefits and the increase through 1992 in the proportion with TPD benefits are partly consistent with data from the annual Bureau of Labor Statistics (BLS) survey of occupational injuries and illnesses.[16] Strong and steady trends in Minnesota's survey data suggest that between 1984 and 1999, either injuries were becoming less severe or more active efforts were being made to treat them and return employees to light- or modified-duty work.[17] However, while these trends continued through 1999, the decreasing proportion of indemnity claims with TTD/PTD benefits and the increasing proportion with TPD benefits essentially occurred only through 1992. Thus, the claims trends must be at least partly driven by factors other than those behind the injury and illness rates from the BLS survey.

Another possible set of factors behind the claims rate trends is changes in benefit provisions in statute and rule, case law developments, dispute rates, and DLI administrative initiatives.

Where claims with TPD benefits are concerned, the Workers' Compensation Court of Appeals (WCCA) ruled in 1987, and the Minnesota Supreme Court affirmed in 1988, that under the 1983 workers' compensation law, an injured worker was entitled to TPD benefits on the basis of lower earnings than in the pre-injury job,[18] regardless of whether the post-injury job met the statutory definition of a "suitable" or "light duty" job, no matter when that job began, and whether or not the individual was 90 days past maximum medical improvement.[19] Some employers and insurers at the time had argued for a narrower interpretation of TPD eligibility, and had presumably applied such an interpretation before the court decisions. Thus, these rulings may have contributed to the rising proportion of indemnity claims with TPD benefits between 1984 and 1988.

As previously noted, the proportion of indemnity claims with PPD benefits rose by nearly half from 1984 to 1992 (from 17.5 to 25.9 percent). A possible contributing factor is an increase in the proportion of injuries resulting in permanent impairments. It seems unlikely, however, that this proportion could have grown by the amount concerned. DLI claims data (not presented here) show little change in the nature of injuries over this period. The other possibility is that claims with permanent impairments became increasingly likely to receive PPD benefits. This could have occurred because of increasing knowledge about what impairments were

[16]This survey is conducted jointly by the BLS and state labor departments. Currently, about 4,800 Minnesota establishments are sampled every year. The information reported by sampled employers comes primarily from the OSHA (Occupational Safety and Health Administration) 200 log, on which employers are required to record workplace injuries and illnesses.

[17]The data indicate a declining share of cases with days away from work in the total of cases with days away from work and/or restricted work activity. Between 1984 and 1999, cases with any days away from work declined steadily from 94 percent of this total to 56 percent, while cases with only restricted work activity (no days away) rose from 6 percent to 44 percent.

[18]Provided that he or she had reduced earnings capacity.

[19]Patton v. Thompson Electric Co., 420 N.W. 2d 596 (March 18, 1988), Gasper v. Northern Star Co., 422 N.W. 2d 727 (May 6, 1988).

eligible for positive ratings under the 1984 rating schedule, possibly through clarifications in case law.

The increasing proportion of indemnity claims with stipulated benefits between 1984 and 1992 is probably related to trends in dispute rates and attorney involvement. As shown in Chapter 6 (pp. 51 and 63), the rates of disputes and of attorney involvement both increased over this period.

Another possible explanation for the increasing relative number of stipulations during 1984-1992 is that DLI was adding mediators and settlement judges to encourage settlement of disputed claims. As a result, some claims that would otherwise have been finalized by a findings and order from the Office of Administrative Hearings were probably settled instead by a stipulation or mediation agreement, with their benefits being recorded in the department database as stipulated benefits rather than as separate benefit types.

The sharp down-turn from 1992 to 1994 in the proportion of indemnity claims with PPD benefits coincides with the introduction of the new impairment rating schedule, which took effect for injuries on or after July 1, 1993. As discussed in relation to Figure 3.3 (p. 12), the new schedule restricted eligibility for positive ratings for some impairment categories but expanded it for others. The new rating schedule reduced the number of claims with PPD benefits by an estimated 19 percent, from about 26 percent of paid indemnity claims just prior to the effective date of the new schedule to about 21 percent just afterwards.[20] As shown in Figure 4.2, the percentage of indemnity claims with PPD benefits fell from 25.9 percent in injury year 1992 to 23.2 percent in 1993 and 20.6 percent in 1994. About half of the total decrease is apparent in injury year 1993 because the new schedule took effect half-way through that year.

The new impairment schedule may also have contributed to the post-1992 decline in the proportion of indemnity claims with stipulated benefits. By assigning ratings on the basis of objective findings of functional impairment and clinical test results, and by adding categories for some types of impairments not covered under the old schedule, the new rating schedule probably reduced the latitude for disputes over PPD ratings.

The post-1992 decrease in the proportion of indemnity claims with stipulated benefits may be partly attributable to certain 1992 law changes (Appendix B). The time limits on TPD benefits are likely to have reduced the motivation of insurers and claimants to settle, by removing the uncertainty and administrative costs associated with an unlimited benefit stream. The medical treatment parameters reduced the latitude for disputes over medical treatment by identifying accepted medical standards for treatment of common work injuries. Certified managed care organizations (CMCOs) are likely to have reduced medical disputes by providing case management services and procedures for resolving medical treatment disputes, which injured employees must exhaust before carrying these disputes to the department. As shown in Chapter 6 (p. 49), the number of medical disputes filed with the department declined from a peak of 5,750 in 1992 to 4,740 in 1993 and 2,070 in 1999.

Duration of Wage-Replacement Benefits

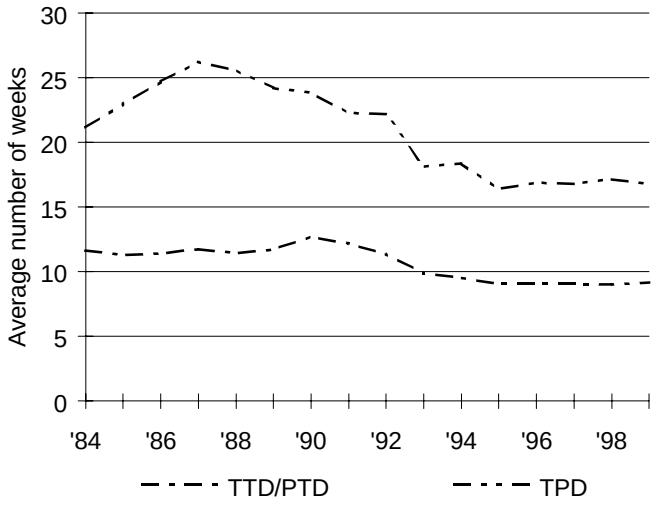
The numbers and percentages of indemnity claims with different types of benefits, presented in the previous section, are important because they contribute to the overall cost of workers' compensation. Another factor underlying overall system cost is the average duration of wage-replacement benefits, specifically TTD/PTD and TPD benefits.

Figure 4.3 shows the average duration of TTD/PTD and TPD benefits for injury years 1984-1999. (As previously indicated, these numbers are developed, meaning that they are estimates of what the final numbers will be when all claims are complete.)

The average duration of TTD/PTD benefits was stable near 11.5 weeks during 1984-1989. It turned upward to 12.7 in 1990, declined to 9.1 by 1995, and stayed near that level through 1999. The duration of TPD benefits has

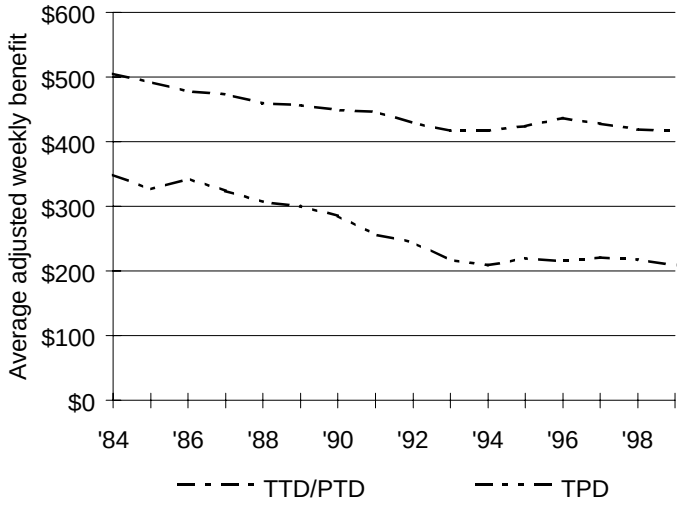
[20] *"Analysis of the Effects of the 1993 Permanent Partial Disability Rating Schedule,"* Department of Labor and Industry, Research and Statistics, August 1999.

Figure 4.3
Average Duration of Wage-Replacement Benefits in Weeks, Injury Years 1984-1999 [1]



Injury Year	TTD /PTD [2]	TPD
1984	11.7	21.2
1987	11.8	26.2
1990	12.7	23.8
1991	12.2	22.3
1992	11.3	22.2
1993	9.9	18.1
1994	9.5	18.4
1995	9.1	16.4
1996	9.1	16.9
1997	9.1	16.8
1998	9.0	17.2
1999	9.2	16.8

Figure 4.4
Average Weekly Wage-Replacement Benefits, Injury Years 1984-1999, Adjusted for Wage Growth [1]



Injury Year	TTD /PTD [2]	TPD
1984	$505	$349
1987	474	324
1990	449	286
1991	447	256
1992	429	244
1993	417	217
1994	417	209
1995	424	220
1996	437	215
1997	428	221
1998	419	218
1999	417	209

1. Data are from the DLI claims database. The numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when claims are mature. To standardize the cost of benefits over time, the numbers in Figure 4.4 are adjusted for growth in the statewide average weekly wage (SAWW), from Unemployment Insurance data. The number for each year is adjusted to 1999 by multiplying it by the ratio of the 1999 SAWW to the SAWW for that year, using the SAWW reflecting wages paid during the respective year. Details in Appendix C.
2. TTD and PTD benefits are not distinguished in the DLI database.

averaged about twice that of TTD/PTD benefits. It rose steeply from an average of 21.2 weeks for injury year 1984 to 26.2 weeks in 1987, declined to 16.4 by 1995, and remained fairly steady through 1999.

What lies behind these trends? The changes in TPD duration over the earlier part of the period may be related in part to decisions by the WCCA and Minnesota Supreme Court. The WCCA ruled in 1987, and the Supreme Court affirmed in 1988, that TPD duration was unlimited under the 1983 workers' compensation law, so long as the claimant was working at reduced wages attributable to the injury.[21] Before these decisions, some employers and insurers had argued that the 1983 law prohibited payment of TPD benefits beyond 90 days after maximum medical improvement. Thus, these decisions may have contributed to the increase in TPD duration over injury years 1984-1987.

In 1987, the WCCA also said that the 1983 law allowed claimants to receive TPD if they were not working, provided that they had performed a reasonably diligent job search;[22] the Supreme Court overruled this in 1988.[23] These decisions may have contributed to the increase in TPD duration through 1987 and the reversal in this trend in 1988 if, as seems likely, duration was relatively long for those TPD recipients who were not working.

The decreasing duration of TPD benefits after 1987 suggests that injured workers who have returned to work at a lower wage are returning to their pre-injury wage more quickly. The decreasing duration of TTD/PTD benefits after 1990 suggests that injured workers are returning to work more quickly in the first place. These trends may partly reflect more active medical treatment, better claims management, or more effective return-to-work programs.

Certain provisions of the 1992 workers' compensation law (see Appendix B) may also have contributed to decreasing benefit duration. One of these was a reduction of the minimum weekly TTD benefit, including the elimination of its upper tier. This change reduced weekly benefits for all TTD recipients earning up to 75 percent of the SAWW. For many, benefits fell by as much as a third (roughly $70 to $110 per week in current dollars),[24] often from an amount exceeding pre-injury take-home pay to an amount below it.[25] This undoubtedly increased return-to-work incentives.[26] Whether it contributed measurably to the decrease in TTD/PTD duration is uncertain, but the relatively large duration decrease between 1992 and 1993 suggests that it did.[27]

The 1992 law also limited TPD benefits to 225 weeks of total duration and to the first 450 weeks after the injury. A separate analysis of DLI claims data (not shown here) indicates that the 225-week limit is beginning to have a constraining effect for injuries through 1995.[28]

[21] Patton v. Thompson Electric Co., 420 N.W. 2d 596 (March 18, 1988), Gasper v. Northern Star Co., 422 N.W. 2d 727 (May 6, 1988).

[22] Yates v. Eitel Hospital, 39 W.C.D. 373 (November 13, 1986). The WCCA made this statement in *dicta*—those portions of the opinion that are not essential to the outcome of the case at hand.

[23] Parson v. Holman Erection Co., 428 N.W. 2d 72 (August 5, 1988).

[24] For workers earning less than 20 percent of the SAWW, the reduction in weekly TTD benefits ranged from zero to just under 100 percent, but these workers make up only about 3 percent of all claimants.

[25] Workers' compensation benefits are not taxed.

[26] The 1992 law also raised the maximum weekly benefit from 100% to 105% of the SAWW. This increase (about $33 per week in current dollars) presumably reduced return-to-work incentives for claimants receiving the maximum (those earning more than 150 percent of the SAWW). In all likelihood, this effect was substantially smaller than that of the minimum benefit reduction, because (1) the maximum changed by a smaller amount than the minimum (both absolutely and relative to the pre-injury wage), (2) weekly benefits for most workers receiving the maximum were less than pre-injury take-home pay both before and after the change, and (3) far fewer workers were affected by the change in the maximum.

[27] Since the law took effect for injuries on or after October 1, 1992, one-quarter of the law's effect is included in the 0.9-week duration decrease from 1991 to 1992.

[28] Injury years 1993-1995 are five to seven years before the time of data analysis for this report (fall 2000), which is a greater interval than the 225-week component of the duration limit (four and one-third years). However, the constraining effect of the limit is so far only partly apparent

It is uncertain how much this contributes to the 4.1-week decrease in average TPD duration between injury years 1992 and 1993.[29]

The advent of CMCOs in 1993, under authority of the 1992 law, may also have reduced TTD and TPD duration through more active medical treatment and enhanced coordination with employers and insurers.

The 1995 law limited TTD benefits to a maximum of 104 weeks of total duration. It is estimated that 250-310 new TTD recipients per year will eventually be affected by this limit, and that for injury years 1996 and 1997, more than 100 per year have been affected so far.[30] However, this limit is not having a noticeable effect on average TTD/PTD duration as shown in Figure 4.3, in that the numbers for 1996 and 1997 are the same as for 1995.

Finally, a gradual tightening of the labor market might have contributed to declining TTD and TPD duration by making it easier for injured workers to return to work and rise to their pre-injury wages. Minnesota's unemployment rate was 4.9-5.2 percent during 1990-1993, 3.7-4.0 percent during 1994-1996, and 2.5-3.3 percent for 1997-1999.[31]

Weekly Amounts of Wage-Replacement Benefits

Average weekly wage-replacement benefits also contribute to total system cost. Figure 4.4 shows the average weekly amounts of TTD/PTD and TPD benefits for injury years 1984-1999. As in Figure 3.4, benefits are adjusted for growth in the statewide average weekly wage (SAWW).

The adjusted average weekly TTD/PTD benefit fell from $505 in injury year 1984 to $417 in 1993. It showed a slight increase to $437 by 1996 and returned to $417 by 1999. Adjusted average weekly TPD benefits declined from $349 in 1984 to $209 in 1994, and stayed at or slightly above that level through 1999.

Since the weekly benefit values in Figure 4.4 are adjusted for growth in the SAWW, they reflect trends other than general wage growth. Specifically, they reflect trends in (1) the average pre-injury wage (APIW) of injured workers relative to the SAWW and (2) average weekly benefits relative to the APIW. These are presented in the next two figures, which show that the decreases in adjusted average weekly benefits between 1984 and 1993 were primarily attributable to a decrease in the APIW relative to the SAWW and, in the case of TPD benefits, a decrease in average weekly benefits relative to the APIW.

Figure 4.5 shows the SAWW, the APIW, and the ratio of the APIW to the SAWW for 1984-1999. The SAWW and the APIW were almost equal in 1984. From 1984 to 1999, the SAWW grew from $342 to $642 while the APIW grew from $343 to only $536. As a result, in proportion to the SAWW, the APIW fell from about 100 percent in 1984 to about 84 percent in 1992 and remained fairly steady thereafter. The reasons for this are uncertain. Three possibilities are that (1) wages may have grown more slowly in industries with higher-than-average injury rates than in the economy as a whole; (2) injury rates may have risen in lower-wage jobs relative to the overall average injury rate; and (3) the job mix may have shifted toward jobs with relatively low wages and high injury rates. Since pre-injury wages directly affect weekly benefit amounts (for those not receiving minimum and maximum benefits), the decrease in the APIW relative to the SAWW through 1992 directly contributed to the falling adjusted average weekly benefit amounts in Figure 4.4.

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for those years because most TPD beneficiaries receive TTD before TPD, many have intermittent spells of TPD, and there is a lag in reporting to DLI.

[29]The 225-week limit might *indirectly* have reduced TPD duration for 1993 and later injuries by inducing some TPD beneficiaries to seek employment providing greater earnings well before 225 weeks, knowing that they could not receive TPD benefits indefinitely.

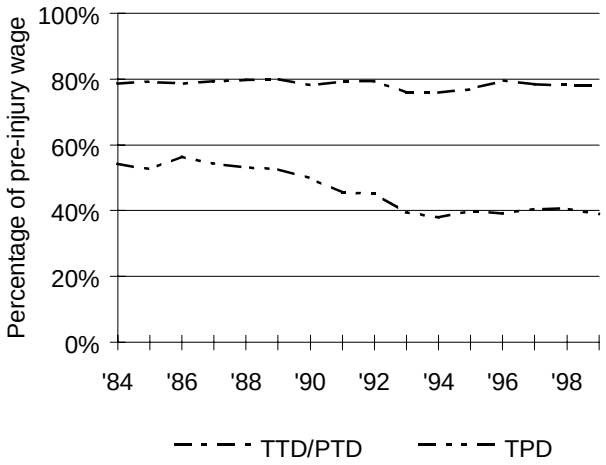
[30]*"The 104-Week Duration Limit for Workers' Compensation Temporary Total Disability Benefits,"* Department of Labor and Industry, Research and Statistics, October 2000.

[31]U.S. Bureau of Labor Statistics (BLS), in cooperation with state agencies, Local Area Unemployment Statistics (LAUS) program. Data are available at the BLS LAUS home page, http://stats.bls.gov/lauhome.htm.

Figure 4.5
Average Pre-Injury Wage of Paid Indemnity Claims Relative to Statewide Average Weekly Wage, 1984-1999 [1]

Year	SAWW (By Year Paid)	Average Pre-Injury Wage (By Injury Year)	Ratio: Average Pre-Injury Wage to SAWW
1984	$342	$343	100.3%
1990	443	396	89.5
1991	459	403	87.8
1992	484	408	84.3
1993	492	421	85.5
1994	505	433	85.7
1995	524	450	85.9
1996	553	473	85.6
1997	579	492	84.9
1998	615	514	83.7
1999	642	536	83.5

Figure 4.6
Average Weekly Wage-Replacement Benefits as Percentage of Average Pre-Injury Wage, Injury Years 1984-1999 [2]



Injury Year	TTD /PTD [3]	TPD
1984	78.5%	54.2%
1990	78.1	49.8
1991	79.2	45.5
1992	79.4	45.2
1993	75.9	39.5
1994	75.9	38.0
1995	76.9	39.8
1996	79.5	39.2
1997	78.5	40.5
1998	78.1	40.6
1999	77.8	39.0

1. The average pre-injury wage of paid indemnity claims is from the DLI claims database. The statewide average weekly wage (SAWW) is from Unemployment Insurance data.
2. Data are from the DLI claims database. Average weekly TTD/PTD and TPD benefits are based on reported total benefits and weeks of payment for each benefit type. These numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when claims are mature. Details in Appendix C.
3. TTD and PTD benefits are not distinguished in the DLI database.

The other factor behind changes in adjusted average weekly benefits is changes in weekly benefit amounts relative to pre-injury wages. Figure 4.6 shows average weekly TTD/PTD and TPD benefits as a percentage of the APIW for injury years 1984-1999. Average weekly TTD/TPD benefits were at or just under 80 percent of the APIW for the entire period, with the exception of a drop to about 76 percent in 1993 and a recovery in 1996. The drop in 1993 is probably explained by the reduction of the minimum weekly TTD benefit in the 1992 law change (see above discussion and Appendix B). Similarly, the increase in 1996 is probably due at least in part to the increase in the maximum weekly benefit in the 1995 law change (see Appendix B).[32] Notably, the average weekly TTD/PTD benefit is about 10 percentage points greater relative to the APIW than the 2/3 ratio (roughly 67 percent) in the benefit formula (see Appendix A). To some degree, this is expected because the average benefit is computed over the life of the claims concerned and thus includes cost-of-living adjustments; however, it is uncertain whether these adjustments would produce the magnitude of difference at hand.[33]

As a proportion of the APIW, average weekly TPD benefits averaged 53-56 percent during the late 1980s, fell to just under 40 percent by 1994, and stayed near that level for the remainder of the period. The available data do not provide an explanation for this trend.[34]

To summarize, the trends in average weekly TTD/PTD and TPD benefits adjusted for growth in the SAWW (Figure 4.4) reflect trends in (1) the APIW relative to the SAWW (Figure 4.5) and (2) average weekly benefit amounts relative to the APIW (Figure 4.6). Adjusted weekly TTD/PTD and TPD benefits fell through 1993 (Figure 4.4) because the APIW fell relative to the SAWW (Figure 4.5) and, in the case of weekly TPD benefits, because these benefits fell relative to the APIW (Figure 4.6).

Indemnity Benefits per Claim

As previously indicated, the figures in this chapter lead toward a presentation of trends in the average cost of different types of indemnity benefits per $100 of covered payroll. The next step is to consider trends in the average amounts of different types of indemnity benefits per claim. These are presented in Figures 4.7 and 4.8.

Average Benefits of Different Types for Claims with Those Types of Benefits

Figure 4.7 shows, for injury years 1984-1999, average indemnity benefits of different types *per claim with the given type of benefit.* This means that for each type of benefit, the average is taken over those claims with that type of benefit. As in previous figures showing average benefits per claim, the numbers are adjusted for growth in the average wages and expressed in 1999 wage dollars. The adjusted trends signify changes in average benefits per claim attributable to factors other than general wage growth. Stipulated benefits are measured along the right axis; other benefit types are measured along the left axis.

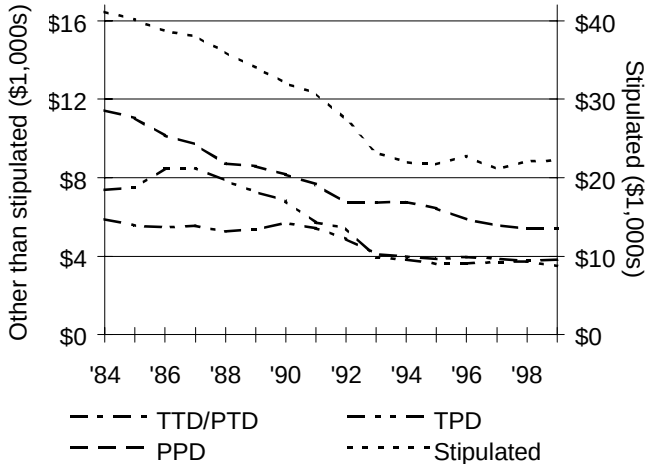
Figure 4.7 shows that stipulated benefits are by far the highest on average. The average stipulated benefit amount fell from $41,100 in 1984 to $21,900 in 1994 (in 1999 wage dollars) and was fairly stable through 1999. Much of this trend probably reflects trends in the expected amounts of benefits incorporated into settlements, which are suggested by the trends in TTD/PTD, TPD, and PPD benefits shown in the same figure. Since stipulated benefits in the DLI database include both indemnity and medical benefits, any decreasing expectations regarding medical benefits would also affect the stipulated amounts. Thus, the stipulated benefits trend

[32] The minimum weekly benefit also increased under the 1995 law (see Appendix B), but calculations by DLI (not shown here) indicate that this had a negligible effect on affect *average* weekly benefit levels.

[33] Another possible explanation is that the average benefit is computed from total benefits and weeks of payment. If weeks of payment are under-reported relative to total benefits, computed benefits per week will be over-stated.

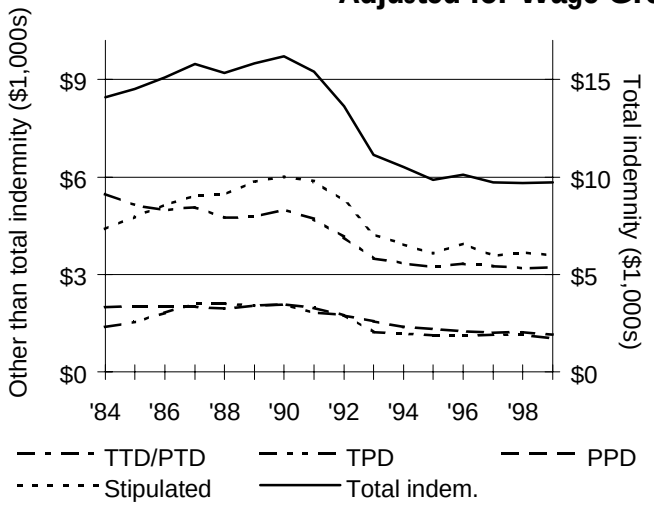
[34] A possible explanation for the falling trend from 1989 to 1994 is that if employers were making greater efforts to return injured employees to work, those who returned to work would be more likely to return to their pre-injury employer, and would therefore, on average, have a higher return-to-work wage than otherwise. Another possibility relates to the increasing use of stipulated settlements through 1992 (Figure 4.2). If the use of settlements in cases with TPD benefits increased primarily for claims where these benefits were relatively high (as seems likely), these claims would have been removed from the computation of the average TPD benefit.

Figure 4.7
Average Amounts of Selected Types of Indemnity Benefits per Claim with Specified Benefit Type, Injury Years 1984-1999, Adjusted for Wage Growth ($1,000s) [1]



Injury Year	TTD /PTD [2]	TPD	PPD	Stipu-lated [3]
1984	$5.9	$7.4	$11.4	$41.1
1990	5.7	6.8	8.2	32.1
1991	5.4	5.7	7.7	30.8
1992	4.9	5.4	6.7	27.4
1993	4.1	3.9	6.7	23.2
1994	4.0	3.8	6.8	21.9
1995	3.8	3.6	6.4	21.8
1996	4.0	3.6	5.9	22.7
1997	3.9	3.7	5.6	21.1
1998	3.8	3.7	5.4	22.1
1999	3.8	3.5	5.4	22.2

Figure 4.8
Average Amounts of Selected Types of Indemnity Benefits per Paid Indemnity Claim, Injury Years 1984-1999, Adjusted for Wage Growth ($1,000s) [1]



Injury Year	TTD /PTD [2]	TPD	PPD	Stipu-lated [3]	Total Indem. [4]
1984	$5.5	$1.4	$2.0	$4.4	$14.1
1990	5.0	2.1	2.1	6.0	16.2
1991	4.7	1.8	2.0	5.9	15.4
1992	4.2	1.7	1.7	5.3	13.6
1993	3.5	1.2	1.6	4.2	11.1
1994	3.4	1.2	1.4	3.9	10.5
1995	3.2	1.1	1.3	3.6	9.9
1996	3.3	1.1	1.3	3.9	10.1
1997	3.3	1.1	1.2	3.6	9.7
1998	3.2	1.2	1.2	3.7	9.7
1999	3.2	1.0	1.2	3.6	9.7

1. Data are from the DLI claims database. The numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when claims are mature. To standardize the cost of benefits over time, the numbers are adjusted for growth in the statewide average weekly wage (SAWW), from Unemployment Insurance data. The number for each year is adjusted to 1999 by multiplying it by the ratio of the 1999 SAWW to the SAWW for that year, using the SAWW reflecting wages paid during the respective year. Details in Appendix C.
2. TTD and PTD benefits are not distinguished in the DLI database.
3. Stipulated benefits include both their indemnity and medical components because the DLI database does not distinguish between them.
4. Because some types of benefits (such as supplementary benefits and death benefits) are not shown separately, total indemnity benefits are greater than the sum of the benefit types shown.

may partly reflect 1992 law changes in the medical area, particularly the medical treatment parameters; the relative-value fee schedule, which imposed an overall 15 percent payment reduction; and the authorization of certified managed care.

The next largest benefit type for the period shown was PPD benefits. Adjusted average PPD benefits fell from $11,400 for injury year 1984 to $5,400 for 1999. This occurred primarily because most PPD benefits were paid under a benefit schedule that remained fixed over the entire period while the SAWW increased. In particular, for injuries through September 1995, 93 percent of PPD cases and 85 percent of PPD benefits were paid under the "impairment compensation" schedule, which was not adjusted for inflation or wage growth.[35] This schedule continued as the sole PPD benefit schedule for injuries from October 1995 onward.[36]

Also contributing to the decrease in adjusted average PPD benefits between injury years 1994 and 1996 was the elimination of the higher PPD benefit tier, "economic recovery compensation," in the 1995 workers' compensation law, effective for injuries in October 1995 and later. Between the periods just before and after the effective date, *unadjusted* average PPD benefits *per rating point* dropped 7 percent.[37]

Another factor in the trend in adjusted average PPD benefits is the average impairment rating, which fell gradually from 7.3 percent to 6.2 percent between 1984 and 1992, and returned to 6.5 percent by 1994 and 6.8 percent by 1999.[38] The increase from 6.2 to 6.5 percent between 1992 and 1994 is largely attributable to the new PPD rating schedule introduced in 1993.[39]

The adjusted average amounts of TTD/PTD and TPD benefits in Figure 4.7 are a direct product of the average duration of these benefits in Figure 4.3 and the adjusted average weekly benefit amounts in Figure 4.4. Adjusted average TPD benefits rose from $7,400 in 1984 to $8,500 in 1986-1987, fell to $3,600 in 1995, and were fairly steady for the remainder of the period. Average adjusted TTD/PTD benefits were stable near $5,000 through 1991, fell to $3,800 by 1995, and remained steady for the rest of the period. The explanations are the same as for the trends in duration and adjusted weekly benefit amounts in Figures 4.3 and 4.4.

Although the 1995 law made several changes in indemnity benefits (see Appendix B), these are not reflected in the data shown here, except for the changes in PPD benefits and minimum and maximum weekly wage-loss benefits. The reason is that the other 1995 benefit changes will generally affect claims at a greater degree of maturity than reflected in the current data.[40]

Average Benefits of Different Types per Indemnity Claim

As previously indicated, the sequence of figures in this chapter leads toward, and explains, the trends in indemnity benefits relative to payroll presented at the end of the chapter. The last remaining step is to consider the benefits paid on an average indemnity claim. When an indemnity claim occurs, the expected total amount of benefits for the claim depends on the likelihood with which different types of benefits will be paid and their expected amounts if they are paid. These two factors have already been

[35]Computed from the department's claims database. These figures only pertain to those claims whose PPD benefits were not included in stipulated settlements.

[36]PPD benefits were raised in the 2000 workers' compensation law.

[37]Tabulated from the DLI claims database. The comparison is between injury years 1992-1994 and injury years 1996-1998.

[38]Computed from the department's claims database and developed in the same manner as the other data in this chapter.

[39]"*Analysis of the Effects of the 1993 Permanent Partial Disability Rating Schedule,*" Department of Labor and Industry, Research and Statistics, August 1999.

[40]Although the figures here are developed to represent costs at maturity, the starting-point numbers are paid benefits recorded as of October 1, 2000 in the DLI database. The developed figures are produced using observed *historical* rates of cost development, which may differ from the actual development yet to be shown by newer claims. Hence, long-term cost reductions—the bulk of the 1995 benefit changes—are not yet captured.

considered, in Figures 4.2 and 4.7. Their combined effects are shown in Figure 4.8.

Figure 4.8 shows, for injury years 1984-1999, the average amounts of different types of indemnity benefits *per indemnity claim*, adjusted for wage growth. In contrast with Figure 4.7, the average for each benefit type is taken over all indemnity claims, including those with no benefits of the particular type. Thus, Figure 4.8 reflects both the average benefit of each type for claims with that benefit type (Figure 4.7) and the percentage of indemnity claims with that benefit type (Figure 4.2). Total indemnity benefits (per claim) are measured along the right axis, and specific benefit types along the left axis.

Among the specific benefit types, stipulated benefits have had the highest average per indemnity claim since 1986. Adjusted average stipulated benefits per indemnity claim increased from $4,400 in 1984 to $6,000 in 1990, fell to $3,600 by 1995, and remained near that level through 1999. The rising trend through 1990 reflects an increase in the percentage of indemnity claims with stipulated benefits (Figure 4.2) outweighing a decrease in adjusted average stipulated benefit amounts (Figure 4.7). The fall in adjusted average stipulated benefits per indemnity claim after 1990 reflects decreasing trends in both factors.

Next largest were adjusted TTD/PTD benefits per indemnity claim, which were $4,700-$5,100 for 1985-1990, fell to $3,200 by 1995, and were stable thereafter. The decline between 1990 and 1993 primarily reflects the decline in adjusted average TTD/PTD benefit amounts during the same period (Figure 4.7).

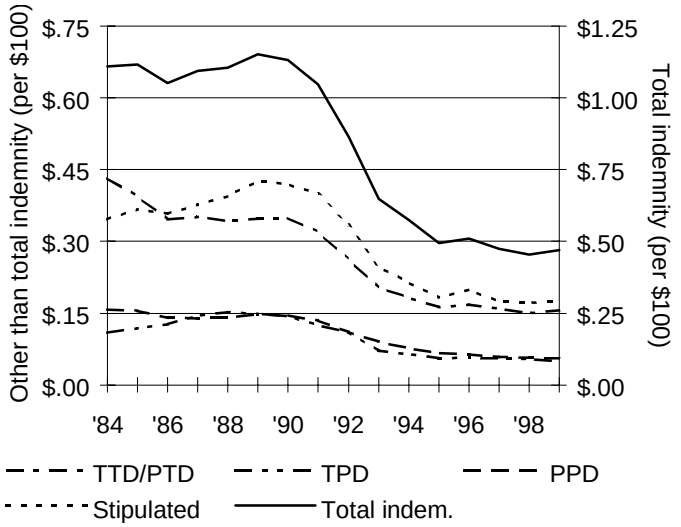
Adjusted average PPD benefits per indemnity claim were stable through 1991 near $2,000, decreasing between 1992 and 1996, and then stable around $1,200-$1,300 for 1995-1999. Through 1991, the increasing percentage of indemnity claims with PPD benefits (Figure 4.2) was balanced by decreasing adjusted average PPD benefit amounts (Figure 4.7). After 1991, the percentage of indemnity claims with PPD benefits fell or was steady while adjusted average PPD benefit amounts continued to fall.

Adjusted average TPD benefits per indemnity claim rose sharply from $1,400 in 1984 to about $2,100 for the period 1987-1990, but then fell to $1,000-$1,200 for 1993-1999. The increase through 1987 was largely from rapid growth in the percentage of indemnity claims with TPD benefits (Figure 4.2), aided by an increase in adjusted average TPD benefit amounts (Figure 4.7). The leveling off and decrease between 1987 and 1993 (Figure 4.8) occurred because of decreasing adjusted average TPD benefit amounts (Figure 4.7) while the percentage of indemnity claims with TPD benefits continued to rise and then leveled off (Figure 4.2).

The combined effect of the trends for the individual benefit types is the trend in total indemnity benefits per indemnity claim. (This must be qualified slightly because total indemnity benefits include some additional benefit types such as supplementary and death benefits.) Adjusted average total indemnity benefits per indemnity claim (right axis of Figure 4.8) rose from $14,100 in injury year 1984 to $16,200 in 1990 and then fell to $9,700-$10,100 for 1995-1999. *In 1999, average total indemnity benefits per indemnity claim were $9,700—40 percent less, adjusted for wage growth, than in 1990 and 31 percent less than in 1984.*

It is important to recognize the reasons for the trend in adjusted average indemnity benefits per indemnity claim (Figure 4.8). The increase through 1990 was primarily attributable to rapidly increasing proportions of indemnity claims receiving TPD, PPD, and stipulated benefits (Figure 4.2), since average benefit amounts adjusted for wage growth (Figure 4.7) were generally falling or stable over that period (although TPD benefit amounts rose through 1986 because of increasing TPD duration). The decrease after 1990 in adjusted average indemnity benefits per indemnity claim occurred because the proportions of indemnity claims receiving TPD, PPD, and stipulated benefits stabilized and then decreased (Figure 4.2) while average benefit amounts adjusted for wage growth (Figure 4.7) continued or began decreasing. Some of the post-1990 decrease in adjusted average indemnity benefits per indemnity claim is attributable to the 1992 and 1995 law changes, but other factors are also responsible.

Figure 4.9
Cost of Indemnity Benefits of Selected Types per $100 of Covered Payroll, Injury Years 1984-1999 [1]



Injury Year	TTD /PTD [2]	TPD	PPD	Stipu-lated [3]	Total Indem. [4]
1984	$.43	$.11	$.16	$.35	$1.11
1989	.35	.15	.15	.43	1.15
1990	.35	.14	.14	.42	1.13
1991	.32	.12	.13	.40	1.05
1992	.26	.11	.11	.33	.86
1993	.20	.07	.09	.25	.65
1994	.18	.06	.08	.21	.57
1995	.16	.06	.07	.18	.49
1996	.17	.06	.06	.20	.51
1997	.16	.06	.06	.17	.47
1998	.15	.05	.06	.17	.45
1999	.16	.05	.06	.17	.47

1. Cost data are from the DLI claims database. The numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when claims are mature. Workers' compensation covered payroll is estimated from insurance data, reinsurance data, and Unemployment Insurance covered payroll. Details in Appendix C.
2. TTD and PTD benefits are not distinguished in the DLI database.
3. Stipulated benefits include both their indemnity and medical components because the DLI database does not distinguish between them.
4. Because some types of benefits (such as supplementary benefits and death benefits) are not shown separately, total indemnity benefits are greater than the sum of the benefit types shown.

Indemnity Benefits Relative to Payroll

The primary overall indicator of the cost of workers' compensation is total system cost per $100 of covered payroll (Figure 2.5). Over the years, indemnity and medical benefits combined have accounted for about 70 percent of total system cost on average,[41] with indemnity benefits a slightly larger share than medical benefits in recent years (Figure 3.5). Thus indemnity benefits are a major contributor to total system cost.

Figure 4.9 presents the cost of indemnity benefits, by type and in total, per $100 of workers' compensation covered payroll for injury years 1984-1999. The trends in Figure 4.9 reflect the trends in adjusted average indemnity benefits per indemnity claim (Figure 4.8) and in indemnity claims incidence (Figure 4.1). Total indemnity benefits per $100 of payroll are measured along the right axis, with other benefit types measured along the left axis.

The total cost of indemnity benefits per $100 of payroll rose slightly from the late 1980s to a peak of $1.13-$1.15 for 1989-1990, fell dramatically to about 50 cents by 1995, and has remained fairly stable since. The greatest declines were in 1992 and 1993. The 1999 value of 47 cents is down 58 percent from both 1990 and 1984. Similar decreases occurred for all benefit types, which have all fallen by 55 percent or more relative to payroll since 1990.[42]

[41]Calculated by the DLI Research and Statistics. Other components of total system cost include claims adjustment, litigation, insurance brokerage, overhead, assessments and taxes (primarily the Special Compensation Fund assessment), and profit.

[42]The figures for 1995-1997 are higher than in last year's report because of revisions in payroll data, as described in Appendix C.

The generally downward trend in indemnity claims incidence (Figure 4.1) causes these trends to differ from the trends in adjusted average indemnity benefits per indemnity claim (Figure 4.8). In particular, indemnity costs per $100 of payroll rise less rapidly through 1990 than do adjusted average indemnity benefits per indemnity claim, and fall more steeply thereafter.

As with the insurance data, some portion of the cost decline in the 1990s is probably a result of the 1992 and 1995 law changes, especially the 1992 change. However, again, indemnity costs were already falling in 1992 (Figures 4.8 and 4.9) before the 1992 changes became effective (for injuries occurring in October 1992 and later), which indicates that other factors were also operating. As previously suggested, these probably include efforts on the part of employers and insurers such as safety programs, medical cost controls, more active claims management, and more effective return-to-work programs. The relative importance of these other factors and the law changes is unknown.

Comparison of Insurance Data and Department Data

To what extent do the cost figures from the insurance data (Chapter 3) and the department data (current chapter) agree? Figure 4.10 presents two comparisons of insurance data and DLI data for 1984-1999. Panel A shows the adjusted average indemnity cost of indemnity claims from the insurance and DLI data, from Figures 3.4 and 4.8. Panel B shows average indemnity cost per $100 of covered payroll from the two sources, from Figures 3.6 and 4.9. In viewing these trends, it is important to recognize certain differences between their sources. Perhaps most important is that the DLI data include self-insured employers while the insurance data do not. In addition, in contrast with the insurance data, the department indemnity cost data include supplementary benefits, second-injury claims, and any medical costs included in stipulated settlements, but exclude vocational rehabilitation costs. Finally, the department data are by injury year while the insurance data are by policy year. In the insurance data, the numbers for any given policy year reflect a combination of the same injury year and the following injury year, since policies taking effect after the first of any year extend into the following year (see definitions in Appendix A).

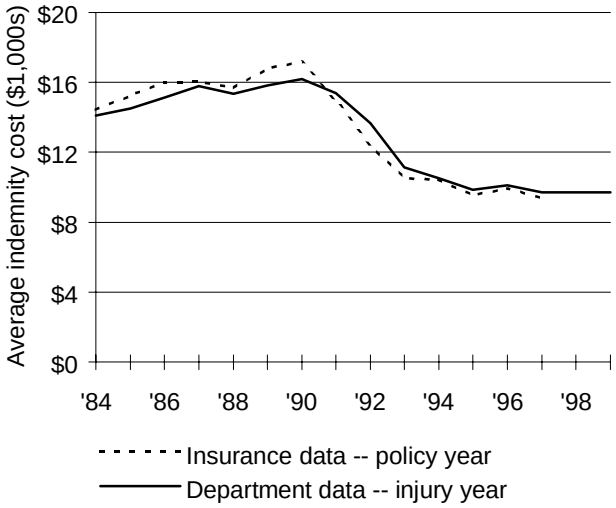
Figure 4.10 shows strong agreement between the insurance and DLI data. The average indemnity cost of indemnity claims (Panel A) differs between the sources by no more than 6 percent for the period shown (excepting 10 percent for 1992), using the insurance figures as the base. Since the insurance data are by policy year while the department data are by accident year, it is consistent for the insurance data to "lead" the department data—to be higher during a period of increase and lower during a period of decrease—as happens here.

Where indemnity cost per $100 of payroll is concerned, the DLI figures average 11 percent less than the policy-year insurance data and 12 percent less than the accident-year insurance data. This may result from definitional differences, reporting differences, or both. For example, the DLI data include self-insureds, which tend to have lower benefit costs relative to payroll than do insured employers. While suggesting somewhat different cost levels, the insurance and DLI data follow each other closely. Both show indemnity cost per $100 of payroll rising in the late 1980s, peaking in 1989, falling sharply during 1990-1995, and leveling off during 1995-1999. The two data sources also agree in showing indemnity costs relative to payroll to be lower from 1992 onward than at any other time since 1984.

The close agreement between the insurance and DLI data is remarkable, and it lends credibility to both.

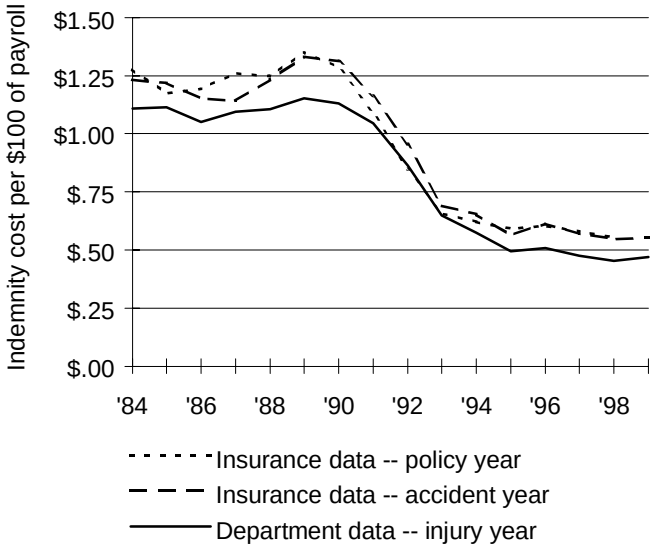
Figure 4.10
Indemnity Costs, 1984-1999:
Insurance Data vs. Department of Labor and Industry Data

A: Average Indemnity Cost of Indemnity Claims Adjusted for Wage Growth ($1,000s)



	Ins. Data (Policy Year) [1]	Dept. Data (Injury Year) [2]
1984	$14.4	$14.1
1989	16.8	15.8
1990	17.2	16.2
1991	15.0	15.4
1992	12.4	13.6
1993	10.5	11.1
1994	10.4	10.5
1995	9.5	9.9
1996	9.9	10.1
1997	9.4	9.7
1998	[3]	9.7
1999	[3]	9.7

B: Indemnity Cost per $100 of Covered Payroll



	Insurance Data [1]		Dept. Data (Injury Year) [2]
	Policy Year	Accident Year	
1984	$1.28	$1.23	$1.11
1989	1.35	1.33	1.15
1990	1.29	1.31	1.13
1991	1.09	1.16	1.05
1992	.85	.95	.86
1993	.66	.69	.65
1994	.62	.65	.57
1995	.59	.56	.49
1996	.60	.61	.51
1997	.58	.57	.47
1998	.55	.55	.45
1999	[3]	.55	.47

1. The insurance data in the upper and lower panels are from Figures 3.4 and 3.6, respectively. They exclude supplementary benefits, second-injury claims, and self-insured employers. The insurance data include the Assigned Risk Plan in the upper panel but not in the lower panel.
2. The department data in the upper and lower panels are from Figures 4.8 and 4.9, respectively. They differ from the insurance data in that they exclude vocational rehabilitation costs but include supplementary and second-injury benefits, those medical costs that are part of stipulated settlements, and both insured and self-insured employers.
3. Not available at time of publication.

5

Vocational Rehabilitation

Vocational rehabilitation is the third type of workers' compensation benefit, supplementing indemnity and medical benefits. Vocational rehabilitation services are provided to injured workers who need help in returning to work because of the effects of their injuries and whose employers are unable to offer them suitable employment.

This chapter presents a description and statistical overview of the vocational rehabilitation benefit in Minnesota's workers' compensation system. The statistics describe levels of vocational rehabilitation activity, vocational rehabilitation eligibility determination and service utilization, timing and duration of services, training and placement services, cost of services, and employment and other outcomes. The data show that, in contrast with the pre-1997 period, the vocational rehabilitation system has been stable on all these measures from 1997 through 1999.

Vocational Rehabilitation Process

Types of Services

Vocational rehabilitation services include:
- vocational evaluation,
- counseling,
- job analysis,
- job modification,
- job development,
- job placement,
- vocational testing,
- transferable skills analysis,
- job-seeking skills training,
- on-the-job training, and
- retraining.

Service Providers

Vocational rehabilitation services are provided by "qualified rehabilitation consultants" (QRCs), who are registered by DLI and must meet qualifying criteria specified in rule. By rule, a QRC must be a certified rehabilitation counselor, certified disability management specialist, certified rehabilitation registered nurses, or registered occupational therapist. QRCs may be self-employed or employed by a private QRC firm, an insurance company, a self-insured employer, or the Vocational Rehabilitation Unit of DLI.

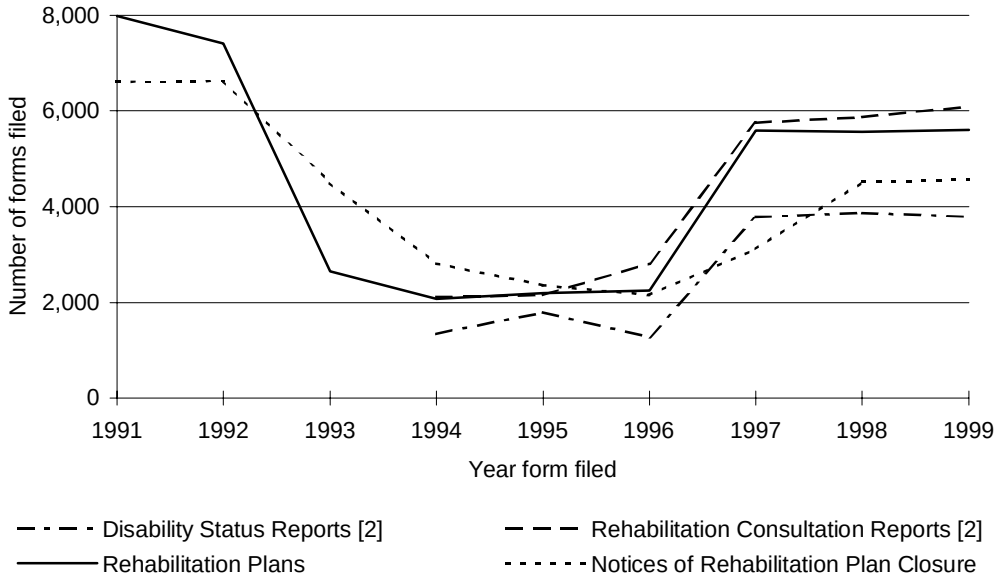
QRCs determine whether injured workers are eligible for vocational rehabilitation services, develop vocational rehabilitation plans for those determined eligible, and coordinate service delivery under these plans. QRCs may provide services directly or select service vendors as needed.

Eligibility Determination and Plan Development

Currently, eligibility for vocational rehabilitation services is determined by a QRC in a vocational rehabilitation consultation. A consultation must be provided if requested by the employee or employer unless waived by DLI, or if ordered by DLI.

The process of determining whether a consultation must occur involves the *Disability Status Report*. The insurer must file a *Disability Status Report* with DLI if the employee has not returned to work and either (1) the employee or employer requests a consultation, (2) it can be determined that the worker will have more than 13 weeks of temporary total disability, or (3) 90 days have passed since the injury. On the *Disability Status Report*, the insurer either refers the worker for a consultation with a QRC or requests a waiver of the consultation. Under the rehabilitation rules, DLI will grant a waiver if the insurer documents that the worker will return to "suitable gainful employment" within 180 days of the injury. If DLI denies a waiver request, it orders a consultation.

Figure 5.1
Number of Vocational Rehabilitation Forms Filed at the Department of Labor and Industry, 1991-1999 [1]



Year Form Filed	Disability Status Reports [2]	Rehabilitation Consultation Reports [2]	Rehabilitation Plans	Notices of Plan Closure
1991			7,990	6,610
1992			7,410	6,630
1993			2,650	4,500
1994	1,340	2,110	2,070	2,810
1995	1,790	2,150	2,190	2,360
1996	1,270	2,810	2,240	2,150
1997	3,780	5,760	5,590	3,120
1998	3,870	5,870	5,570	4,520
1999	3,790	6,100	5,600	4,570

1. Data are from the DLI claims database. In cases with more than one form of a given type, only the first form filed is counted.
2. The *Disability Status Report* and *Rehabilitation Consultation Report* forms came into use late in 1993.

After the consultation, the QRC files a *Rehabilitation Consultation Report* with DLI, indicating whether the employee has been determined eligible for rehabilitation services. If the worker is eligible, the QRC develops a rehabilitation plan in consultation with the worker and insurer and files the plan with DLI.

Levels of Vocational Rehabilitation Activity

Figure 5.1 shows the numbers of *Disability Status Reports, Rehabilitation Consultation Reports, Rehabilitation Plans,* and *Notices of Plan Closure* received by DLI for 1991-1999. *Disability Status Reports* and *Rehabilitation Consultation Reports* were first used part-way through 1993.

From about 7,400 *Rehabilitation Plans* filed in 1992, the number plummeted to a range of 2,100-2,700 for 1993-1996 and then jumped to about 5,600 for 1997-1999. The number of plan closures follows the number of plans, although with a smoother trend because of variation in the amount of time between plan initiation and plan closure. As expected, the number of plan filings

closely follows the number of *Rehabilitation Consultation Reports.* Although the trends in *Disability Status Reports* and *Consultation Reports* are similar, there are substantially more *Consultation Reports* than *Disability Status Reports;* this is discussed in connection with Figure 5.2.

The decrease in plan filings in 1993 and the related decreases in plan closures through 1995 are largely attributable to a change in the vocational rehabilitation system in the 1992 law. Prior to 1992, the employer or insurer was required to refer the injured worker into the vocational rehabilitation system after 30 days of lost work time for back injuries and after 60 days of lost work time for all other injuries. The 1992 law replaced this largely automatic system with the current one, in which eligibility for services is determined through a consultation with a QRC as described above.

The sharp increase in vocational rehabilitation activity in 1997 is probably due in large part to a combination of a court decision and DLI administrative initiatives. In 1995, the Workers' Compensation Court of Appeals clarified in the Wagner case[43] that eligibility for vocational rehabilitation services must be determined by a QRC in a vocational rehabilitation consultation. This meant that employers and insurers could not claim that an injured worker was not eligible for vocational rehabilitation as a reason for not providing a consultation.

Also in 1995, DLI changed the timing of the letter it sends to insurers in individual cases to remind them of the need to file a *Disability Status Report.* DLI began sending this letter 90 days after the injury rather than 180 days after as it had done previously. In addition, DLI in 1995 began assessing penalties for failure to file *Disability Status Reports* as required.

In the fall of 1996, DLI introduced a new *Disability Status Report* form which, among other things, required greater documentation of consultation waiver requests, to support the claim that the employee would return to work soon and thus would not need rehabilitation services. Along with this, DLI began reviewing waiver requests more closely.

Also in the fall of 1996, DLI conducted training seminars on the vocational rehabilitation system for insurance claims adjusters and QRCs. The training introduced the new *Disability Status Report* form and focused on the eligibility determination process, including the requirements that (1) a *Disability Status Report* must be filed at certain points, (2) the *Disability Status Report* must provide adequate documentation for a waiver request, and (3) the consultation must occur unless DLI approves the waiver request. The training also emphasized the ruling in the Wagner case (see above) and reiterated that the statutory vocational rehabilitation requirements apply regardless of any return-to-work activities initiated by the employer or insurer outside of the statutory system.

Eligibility Determination and Service Utilization

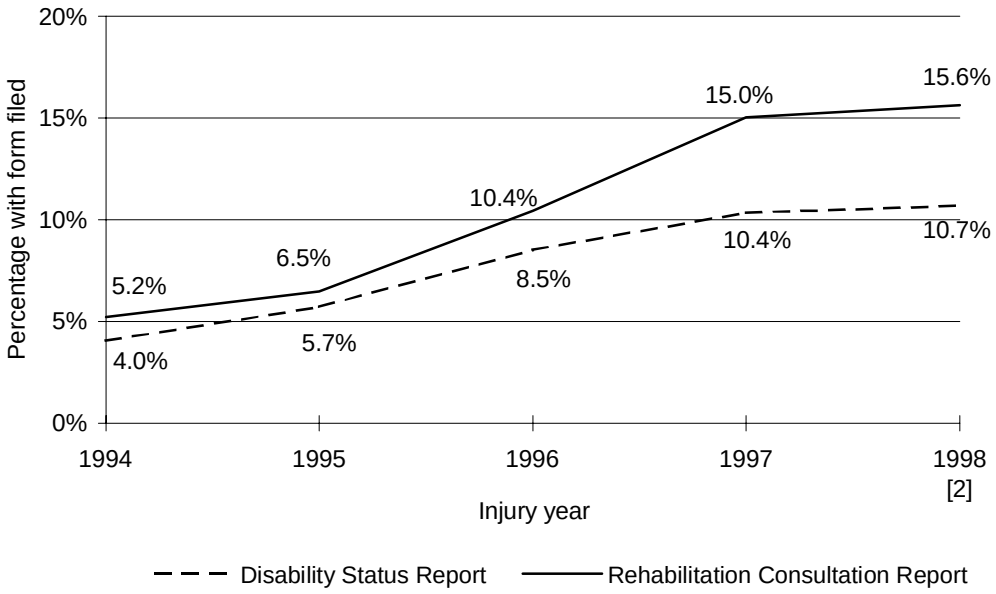
Figure 5.2 shows the percentages of paid indemnity claims with *Disability Status Reports* and *Rehabilitation Consultation Reports* for injury years 1994-1998. (These forms were first used part-way through 1993.) In order to produce a consistent trend, only forms received within 32 months of injury are counted. The 1999 data are not sufficiently mature and are therefore not included.

The figure shows that between 1994 and 1998, the percentage of paid indemnity claims with *Disability Status Reports* increased from 4.0 percent to 10.7 percent, while the percentage with *Rehabilitation Consultation Reports* rose from 5.2 percent to 15.6 percent. These trends reflect the sharp increase in the filings of these forms in 1997 (Figure 5.1); however, the percentages in Figure 5.2 increase more gradually because they are by injury year and the filings in any one year (Figure 5.1) are related to injuries from several years.

Curiously, the percentage of claims with a *Rehabilitation Consultation Report* is greater than the percentage with a *Disability Status Report,* even though a *Disability Status Report* is supposed to be filed before a *Consultation Report* and not every *Disability Status Report*

[43] Wagner v. Bethesda, 1995 WL 44707 (WCCA 1/5/95).

Figure 5.2
Percentages of Paid Indemnity Claims with Disability Status Report and Rehabilitation Consultation Report Forms Filed, Injury Years 1994-1998 [1]



1. Data are from the DLI claims database. 1994 is the earliest year available. 1999 is not included because data for that year are not sufficiently mature. In order to produce a consistent trend, only forms received within 32 months of injury are counted. In addition, the number of paid indemnity claims (in the denominators) is a "developed" number, that is, a projection of what the number will be at full claim maturity. Details in Appendix C.
2. Data for 1998 are preliminary because less than 32 months has elapsed for injuries in that year.

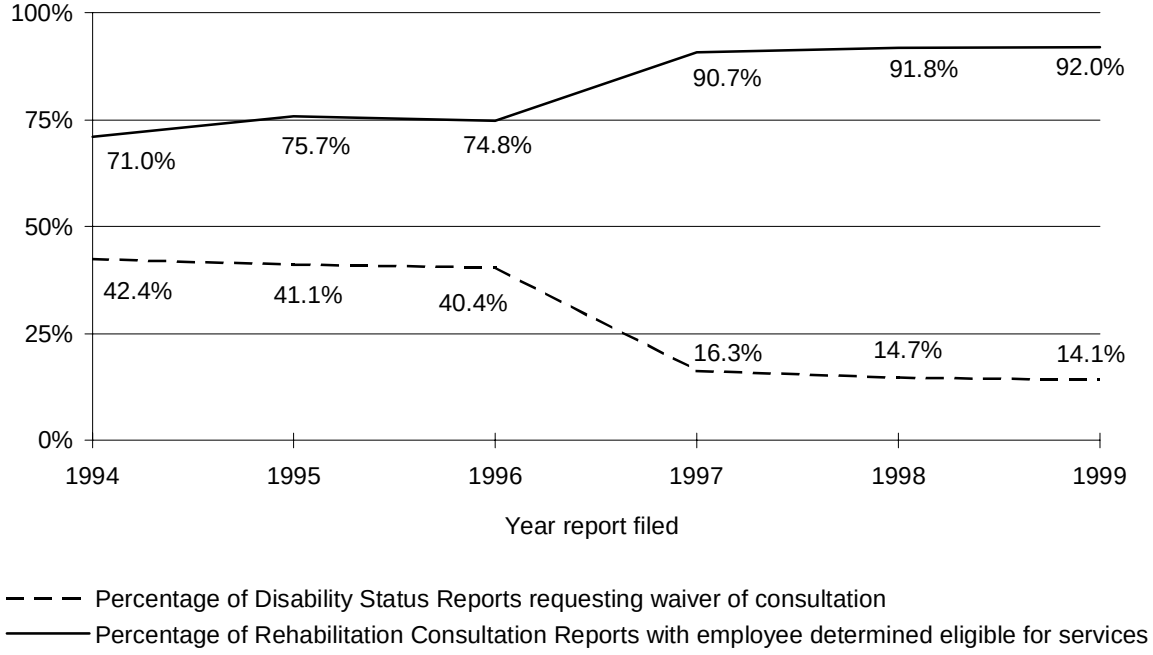
results in a *Consultation Report.* These numbers indicate that insurers sometimes refer injured workers for vocational rehabilitation consultations without filing a *Disability Status Report.* Furthermore, DLI data not shown here indicate that in some other cases a *Rehabilitation Plan* is filed without a *Disability Status Report* or a *Consultation Report.* DLI is currently working to clarify forms and procedures to alleviate this situation.

Figure 5.3 shows, for 1994-1999, the percentage of *Disability Status Reports* requesting a waiver of a consultation and the percentage of *Rehabilitation Consultation Reports* finding the injured worker to be eligible for vocational rehabilitation services. Between 1996 and 1997, the percentage of *Disability Status Reports* with a waiver request fell from 40 percent to 16 percent, while the percentage of *Rehabilitation Consultation Reports* with a finding of eligibility increased from 75 percent to 91 percent. For the remainder of the period shown, both percentages were fairly stable.

The changes in these percentages coincide with the sharp increases between 1996 and 1997 in filings of *Disability Status Reports, Rehabilitation Consultation Reports,* and *Rehabilitation Plans* (Figure 5.1). The data in Figure 5.3 strongly suggest that the increased volume of activity between 1996 and 1997 (Figure 5.1) predominantly involved cases without waiver requests and with positive eligibility determinations.

Another possible reason for the reduction in the percentage of *Disability Status Reports* with waiver requests is that, as indicated above, DLI in 1997 began requiring insurers to provide greater documentation for these requests and began reviewing these requests more closely than before.

Figure 5.3
Disability Status Report and Rehabilitation Consultation Report Indicators for Forms Filed 1994-1999 [1]



1. Data are from the DLI claims database.

Figure 5.4 shows the percentage of paid indemnity claims with *Rehabilitation Plans* for injury years 1991-1998. 1999 is not shown because the data for that year are not sufficiently mature. After 1991, when nearly 18 percent of paid indemnity claimants had *Rehabilitation Plans,* the rate fell to nearly 5-6 percent for 1993-1995 and then increased to about 10 percent in 1996 and 15 percent in 1997. These shifts reflect the law changes, court decisions, and DLI initiatives previously discussed.

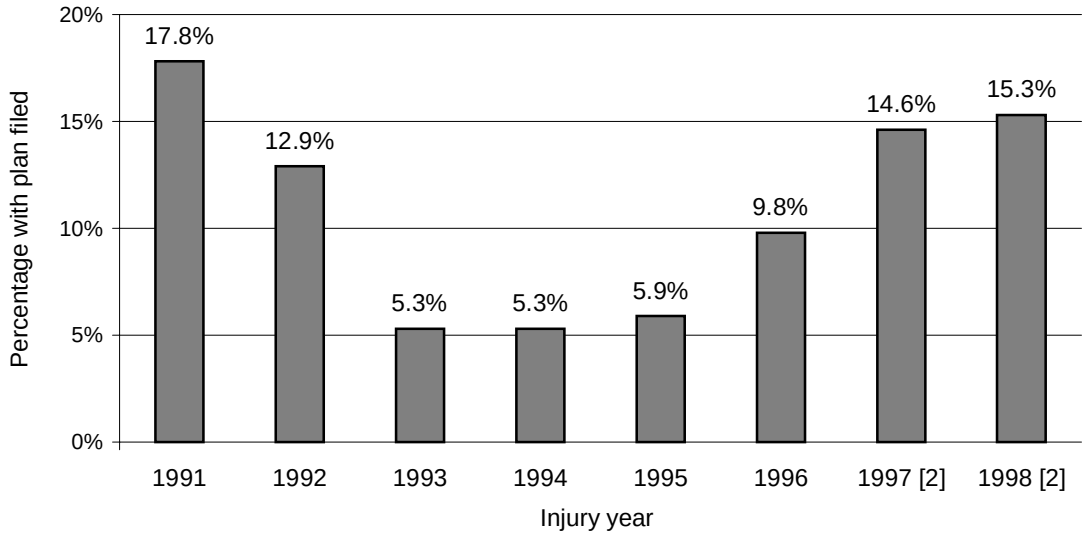
Timing and Duration of Services

One of the most important aspects of vocational rehabilitation is timing of services. Providing services at the right time can reduce benefit duration and improve return-to-work outcomes. If vocational rehabilitation is initiated too early in the claims process, services will be delivered to some workers who would return to work almost as promptly without them. If services are initiated too late, those workers who would have benefitted from services at an earlier point may take longer to return to work and may need more intensive services when services are finally provided, because of a longer isolation from the labor market. Thus, providing services either sooner or later than needed will add to system cost.

A large proportion of injured workers have periods of intermittent work following their injury, making it difficult to determine whether or not vocational rehabilitation is needed. In some cases, vocational rehabilitation is not initiated until after the injured worker has tried to return to work a few times.

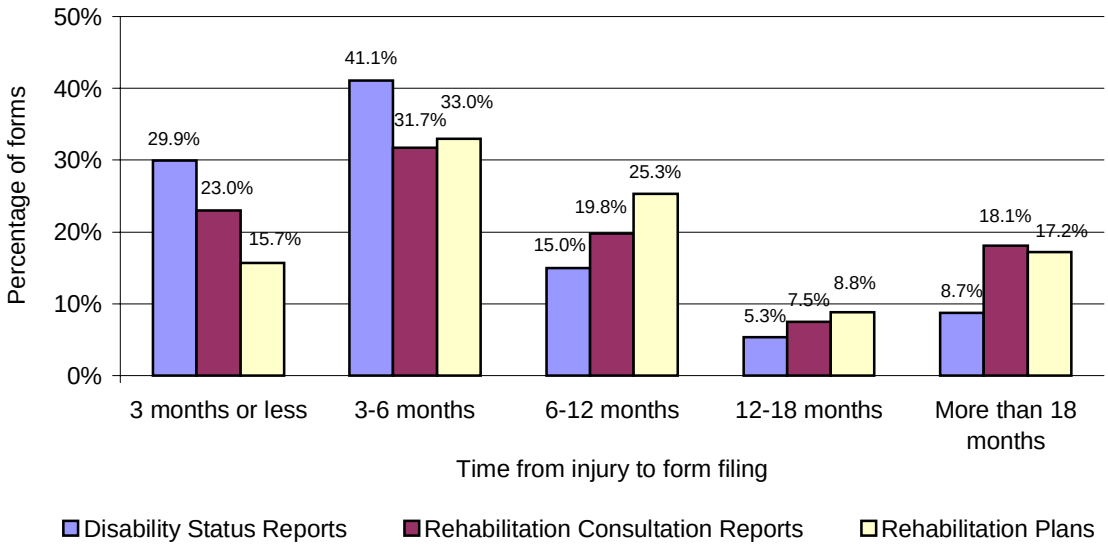
Figure 5.5 presents data on the timing of the *Disability Status Report, Rehabilitation Consultation Report,* and *Rehabilitation Plan* relative to the date of injury. The data are for forms filed with DLI in 1999. The figure shows that these forms are most commonly filed three to six months after injury. The figure shows that 70 percent of *Disability Status Reports* are filed within six months of injury, as are 55 percent of *Rehabilitation Consultation Reports* and 49 percent of plans. The median time intervals for these forms are, respectively, 3.8, 5.4, and 6.2 months from injury (not shown in the figure). These figures show that the majority of injured

Figure 5.4
Percentage of Paid Indemnity Claims with a Vocational Rehabilitation Plan Filed, Injury Years 1991-1998 [1]



1. Data are from the DLI claims database. 1999 is excluded because data for that year are not sufficiently mature.
2. Data for 1997 and 1998 are preliminary.

Figure 5.5
Time from Injury to Filing of Form at the Department of Labor and Industry for Forms Filed in 1999 [1]



1. Data are from the DLI claims database.

Figure 5.6
Time from Injury to Start of Vocational Rehabilitation Services, 1997-1999 [1]

Service Start Year	6 Months or Less	6-12 Months	12-18 Months	Over 18 Months	Average Months	Median Months
1997	49.7%	19.7%	9.7%	20.9%	14.9	6.1
1998	56.9%	18.2%	7.3%	17.6%	13.4	4.9
1999	60.7%	18.0%	6.7%	14.6%	12.6	4.6

1. Data are from the DLI claims database.

Figure 5.7
Vocational Rehabilitation Plan Duration, Plan-Closure Years 1997-1999 [1]

Plan-Closure Year	6 Months or Less	6-12 Months	12-18 Months	Over 18 Months	Average Months	Median Months
1997	51.1%	27.3%	9.1%	12.5%	9.7	5.9
1998	42.6%	31.4%	14.3%	11.7%	9.9	7.1
1999	41.4%	29.9%	14.3%	14.5%	10.3	7.3

1. Data are from the DLI claims database.

workers receiving vocational rehabilitation services are formally involved in the process within six months of injury.

Another measure of the timing of vocational rehabilitation activity is the interval from injury to the start of services. Figure 5.6 shows this information for cases with services begun during 1997-1999. Data are not available before 1997. The figure shows that over this period, the average interval from injury to start of services decreased from 14.9 months to 12.6 months, the median interval dropped from 6.1 months to 4.6 months, and the proportion of cases beginning services within six months increased from 50 percent to 61 percent.

Once vocational rehabilitation services begin, services are provided over several months. Figure 5.7 shows service duration (start of services to plan closure) for plans closed during 1997-1999. In 1999, services lasted an average of 10.3 months, with a median of 7.3 months. Between 1997 and 1999, longer-duration plans became a larger share of the total, and both average and median duration increased.

Training and Placement Services

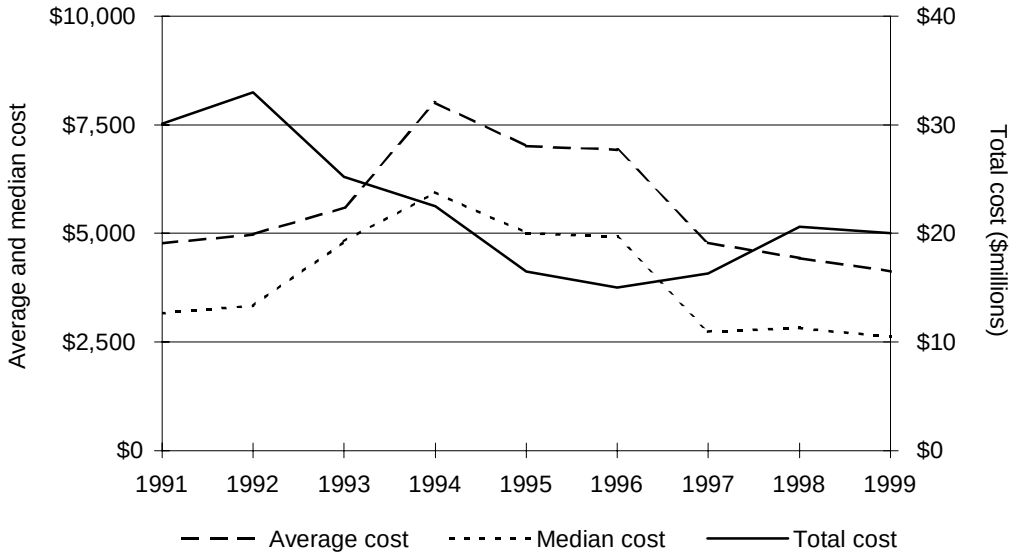
As previously indicated, vocational rehabilitation provides an array of services. Only three of these—on-the-job training, retraining, and job placement—are reported separately. Figure 5.8 shows the use of these services for injured workers with plans closed during 1997-1999. For cases closed in 1999, on-the-job training was used in only 15 cases, or 0.3 percent of the total, and retraining—a formal academic program providing skills for a new occupation—was used in only 1.3 percent of all cases. By contrast, nearly one-third of all cases closed in 1999 received placement services. The use of all three services declined over the period shown.

Figure 5.8
Provision of Specific Services, Plan-Closure Years 1997-1999 [1]

Plan Closur Yea	Number and Percentage of Rehabilitation Plans Indicating Service		
	On-the-Job Training	Retraining	Placement Services
1997	23	57	1,620
	0.7%	*1.7%*	*47.4%*
1998	30	76	1,618
	0.6%	*1.6%*	*34.6%*
1999	15	62	1,524
	0.3%	*1.3%*	*31.1%*

1. Data are from the DLI claims database.

Figure 5.9
Vocational Rehabilitation Plan Costs in Constant Dollars, Plan-Closure Years 1991-1999 [1]



Plan-Closure Year [2]	Average Cost	Median Cost	Total Cost ($millions)
1991	$4,770	$3,160	$30.1
1992	$4,970	$3,330	$33.0
1993	$5,600	$4,820	$25.2
1994	$8,010	$5,940	$22.5
1995	$7,010	$5,010	$16.5
1996	$6,920	$4,910	$15.0
1997	$4,780	$2,740	$16.3
1998	$4,440	$2,820	$20.6
1999	$4,120	$2,620	$20.0

1. Data are from the DLI claims database. Costs for plans closed in years prior to 1999 are adjusted to 1999 wage levels in order to provide a constant-dollar comparison of vocational rehabilitation costs. Plan costs are multiplied by the ratio of the statewide average weekly wage (SAWW) earned by workers in 1999 to the SAWW earned by workers in the plan-closure year.
2. Costs for plans closed prior to 1997 may not include all vocational rehabilitation services because of changes in the report form.

Cost of Services

Figure 5.9 shows vocational rehabilitation costs for plans closed from 1991 through 1999, expressed in 1999 dollars.[44] For plans closed in 1999, average and median cost were $4,120 and $2,620, respectively, while total cost was about $20 million, or about 2 percent of total workers' compensation system cost (see Figure 2.5). Note that these figures exclude the costs of return-to-work services provided under disability case management.

The trends in average, median, and total plan costs can best be understood in relation to the trend in plan closures shown in Figure 5.1. The

[44]Costs for plans closed in years prior to 1999 are multiplied by the ratio of the statewide average weekly wage (SAWW) earned by workers in 1999 to the SAWW earned by workers in the plan-closure year.

increases in average and median plan costs between 1992 and 1994 coincide with the decrease in plan closures over the same period. As indicated previously, the decrease in vocational rehabilitation activity over that period was caused primarily by a provision in the 1992 law that replaced the system of automatic service provision (after specified lengths of disability) with a system of serving only those determined eligible through a consultation. The increases in average and median costs between 1992 and 1994 suggest that this change caused services to be focused on those workers needing relatively extensive services.

The post-1994 decreases in average and median plan costs occurred mostly between 1996 and 1997. As shown in Figure 5.1, vocational rehabilitation utilization increased sharply after 1996, indicated in part by an increase in plan closures between 1996 and 1998. As previously discussed, this probably resulted to a large degree from certain court decisions and DLI initiatives. The Figure 5.9 data suggest that this increase in utilization tended to involve injured workers with relatively low-cost plans.Since the total cost of vocational rehabilitation services is presented by plan-closure year, it roughly follows the trend in plan closures in Figure 5.1, decreasing between 1992 and 1996 and rising between 1996 and 1998.

Employment and Other Outcomes

Figure 5.10 shows return-to-work outcomes for plans closed from 1991 through 1999. For plans closed in 1999, about 46 percent of vocational rehabilitation participants returned to work with their pre-injury employer, 29 percent found a job with a different employer, and 25 percent had no job at plan closure. These proportions were roughly the same in 1991, 1992, and 1998, but were reversed in 1994 and 1995 (data are unavailable for 1996). The relatively low percentages of injured workers returning to their pre-injury jobs in 1994 and 1995 (16-17 percent) indicate that the relatively low numbers of workers served during this period were those with greater difficulties in returning to work and probably greater need for services. Given the relatively large plan costs for those who return to work with a different employer (Figure 5.13), this helps explain the relatively high average and median plan costs overall for 1994-1996 (Figure 5.9).

Figure 5.11 indicates reasons for plan closure for 1997-1999. For these three years, about 60-65 percent of plans were closed because they were completed with the worker returning to "suitable gainful employment." Another 21-24 percent of plans were closed by settlement, 10 percent by agreement among the parties, and 2-6 percent by a decision and order from a dispute resolution specialist or workers' compensation judge. For most of the roughly one quarter of participants with no recorded job at plan closure (Figure 5.10), the plans were closed by settlement or decision and order (data not shown in figure).

Figure 5.12 gives information on return-to-work wages for vocational rehabilitation participants with jobs at plan closure, for 1997-1999 combined. Nearly two-thirds of workers returned to work at a wage at least 95 percent of their pre-injury wage. About 11 percent received between 80-95 percent of their pre-injury wage, and 25 percent received less than 80 percent.

Figure 5.13 presents data on return-to-work wages, plan duration, and plan cost for vocational rehabilitation plans closed during 1997-1999, by job status at closure. In general, the return-to-work wage is higher, plan duration is shorter, and plan cost is lower for plans resulting in a job with the pre-injury employer. Workers who return to the same job with the same employer have the most favorable values on these measures, while workers who either return to a different job with a different employer or do not return to work at the end of the vocational rehabilitation plan have the least favorable values. Compared to workers who return to the same job with the same employer, workers who return to a different job with a different employer have vocational rehabilitation plans with nearly three times the cost and about twice the duration, but lower return-to-work wages relative to their pre-injury wage.

Figure 5.10
Return-to-Work Outcomes of Vocational Rehabilitation Plans, Plan-Closure Years 1991-1999 [1]

Plan-Closure Year	Percentage of Plan Closures								
	With Job at Plan Closure								
	Same Employer				Different Employer				
	Same Job	Modified Job	Different Job	Total	Same Job	Modified Job	Different Job	Total	No Job at Closure
1991	24.0%	10.2%	10.4%	44.6%	3.9%	[4]	26.3%	30.1%	25.2%
1992	23.3	11.1	9.9	44.4	3.5	[4]	26.9	30.4	25.2
1993	24.8	[4]	9.2	34.0	3.4	[4]	33.5	36.9	29.1
1994 [2]	15.8	[4]	1.2	17.0	4.2	[4]	47.1	51.4	29.7
1995 [2]	15.6	[4]	0.0	15.6	4.5	[4]	47.3	51.8	28.6
1996 [3]									
1997	22.5	7.5	6.5	36.6	1.7	1.3%	32.2	35.2	28.2
1998	28.6	9.4	7.3	45.3	1.5	1.0	27.5	30.1	24.6
1999	29.3	9.6	7.3	46.1	1.7	0.9	26.0	28.6	25.3

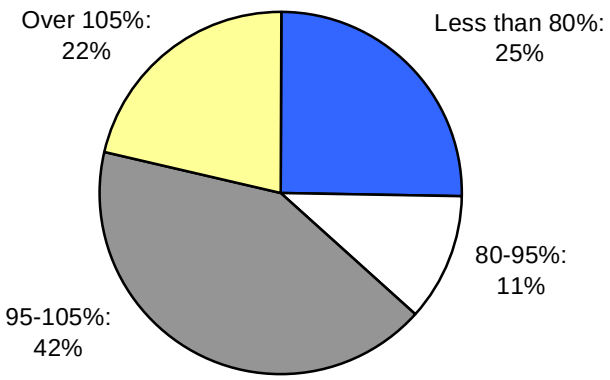
1. Data are from the DLI claims database.
2. Data for 1994 and 1995 are based on a 10-percent sample of closure reports.
3. Data are not available for 1996.
4. Modified jobs counted under "same job" in these instances.

Figure 5.11
Reason for Plan Closure, Plan-Closure Years 1997-1999 [1]

Plan-Closure Year	Plan Completed	Settlement	Decision and Order	Agreement of Parties
1997	60.2%	24.2%	5.9%	9.7%
1998	64.7	20.5	5.2	9.7
1999	65.2	22.3	2.2	10.3

1. Data are from the DLI claims database.

Figure 5.12
Return-to-work Wage as Percentage of Pre-Injury Wage for Workers with Plans Closed During 1997-1999 [1]



1. Data are from the DLI claims database.

Figure 5.13
Vocational Rehabilitation Plan Measures by Job Outcome, Plans Closed During 1997-1999 Combined [1]

	With Job at Plan Closure							
	Same Employer			Different Employer				
	Same Job	Modified Job	Different Job	Same Job	Modified Job	Different Job	No Job at Closure	Total
Return-to-work wage								
Average	104.0%	104.0%	98.9%	106.0%	93.4%	87.2%		97.0%
Median	100.0%	100.0%	99.9%	100.0%	96.3%	80.0%		99.9%
Plan duration (months)								
Average	5.6	8.3	9.5	7.5	10.6	12.4	12.7	9.9
Median	4.4	6.5	7.4	6.0	8.2	9.0	9.0	6.8
Plan cost [3]								
Average	$2,100	$2,900	$3,660	$3,600	$5,160	$6,210	$5,610	$4,410
Median	$1,610	$2,230	$2,900	$2,540	$4,180	$4,480	$3,690	$2,680

1. Data are from the DLI claims database.
2. Ratio of return-to-work wage to pre-injury wage.
3. Costs for plans closed in years prior to 1999 are expressed in 1999 dollars. Costs are multiplied by the ratio of the statewide average weekly wage (SAWW) earned by workers in 1999 to the SAWW earned by workers in the plan-closure year.

6

Disputes and Dispute Resolution

When workers' compensation programs replaced tort law as the means of compensating workplace injuries, it was expected that eliminating the need to prove employer fault to establish a claim would remove contention from the claims process. In reality, while compensation for workplace injuries is more predictable and uniform under workers' compensation, disputes and associated legal and administrative expenses continue to occur.

This chapter presents information on disputes and dispute resolution in Minnesota's workers' compensation system. It first describes the main types of disputes and gives data on the numbers and rates of the different dispute types. It then describes the dispute resolution process and presents data on its operation. Finally, it provides statistics on attorney involvement and associated costs.

Types of Disputes

Disputes in Minnesota's workers' compensation system generally occur over five major types of issues:[45]

- denial of primary liability,
- eligibility for and amount of monetary benefits,
- discontinuance of wage-loss benefits,
- medical issues, and
- vocational rehabilitation issues.

Denial of primary liability. Primary liability is the overall liability of the insurer for any costs associated with a claim once the injury is determined to be compensable. An insurer may deny primary liability (deny that the injury occurred or that it is compensable) if it has reason to believe the injury is not work-related. Other legal reasons for denial of primary liability are that the injury was intentionally self-inflicted, resulted from intoxication, or happened during participation in a non-required recreational program. A dispute over primary liability typically occurs when the injured worker contests a denial. This may involve filing a claim petition with DLI or contacting the department's Customer Assistance unit to pursue informal dispute resolution such as mediation.

Eligibility for and amount of monetary benefits. All monetary benefits in Minnesota's workers' compensation system have their own eligibility conditions and criteria for determining benefit amounts. Disputes may occur over whether eligibility conditions or the criteria for a given benefit amount have been met. With temporary total disability (TTD), for example, the parties may disagree over whether the waiting period has been met or over the amount of the pre-injury wage. With temporary partial disability (TPD), either the pre-injury wage or the employee's current earnings or earning capacity may be at issue. With permanent partial disability (PPD), the employee and insurer may disagree over the employee's physical impairment or the application of the impairment rating schedule to that impairment. As with primary liability disputes, a claim petition is the usual vehicle for disputes over eligibility for and amount of monetary benefits, unless the parties decide (at least at first) to proceed informally through Customer Assistance.

Discontinuance of wage-loss benefits. Disputes over discontinuance of wage-loss benefits occur because of disagreements over whether one of the legal conditions for discontinuance have been met (see definitions of TTD and TPD benefits in Appendix A). With TTD, for example, discontinuance disputes may hinge on whether the employee is able to work without

[45]Disputes also occur over miscellaneous other types of issues, such as attorney fees, but these are not discussed here.

physical restrictions from the injury; whether a refused offer of employment is an "appropriate" offer (i.e. consistent with a vocational rehabilitation plan or compatible with the employee's physical condition); or whether the employee has reached maximum medical improvement, failed to cooperate with a vocational rehabilitation plan, or failed to diligently search for appropriate employment. With TPD benefits, a discontinuance dispute is often over whether the employee, apart from actual current earnings, is able to earn as much as his or her pre-injury wage. Discontinuance disputes are usually initiated when the employee, in response to the insurer's declared intention to discontinue benefits, requests an administrative conference, either by phone or by filing a *Request for Administrative Conference* form. These disputes are also initiated when the employee files an *Objection to Discontinuance* form or when the insurer files a petition to discontinue benefits, both of which lead to a formal hearing.

Medical issues. Medical disputes may involve disagreements about choice of medical providers, the nature and timing of medical treatments, or appropriate payments to providers. For example, the employee or treating doctor may believe that certain treatments are appropriate while the insurer may disagree and refuse to pay for these treatments. Medical disputes are initiated most often by filing a *Medical Request* form, but sometimes in other ways such as contacting Customer Assistance by phone or filing a claim petition.

Vocational rehabilitation issues. Vocational rehabilitation disputes may arise over whether the employee should be evaluated for eligibility for vocational rehabilitation services, whether the employee is in fact eligible, whether certain vocational rehabilitation plan provisions are appropriate, or whether the employee is cooperating with the plan. These disputes are most often initiated by filing a *Rehabilitation Request* form, but sometimes in other ways such as contacting Customer Assistance by phone or filing a claim petition.

Numbers and Rates of Different Dispute Types

Numbers of Disputes Filed

Figure 6.1 shows the numbers of disputes filed with DLI by type for 1984-1999. As previously indicated, claim petitions primarily involve disputes over primary liability and monetary benefits (eligibility and amount), but also involve relatively small numbers of medical and rehabilitation disputes. The claim petition data cannot be separated by dispute type. Only the claim petition data are available before 1989.

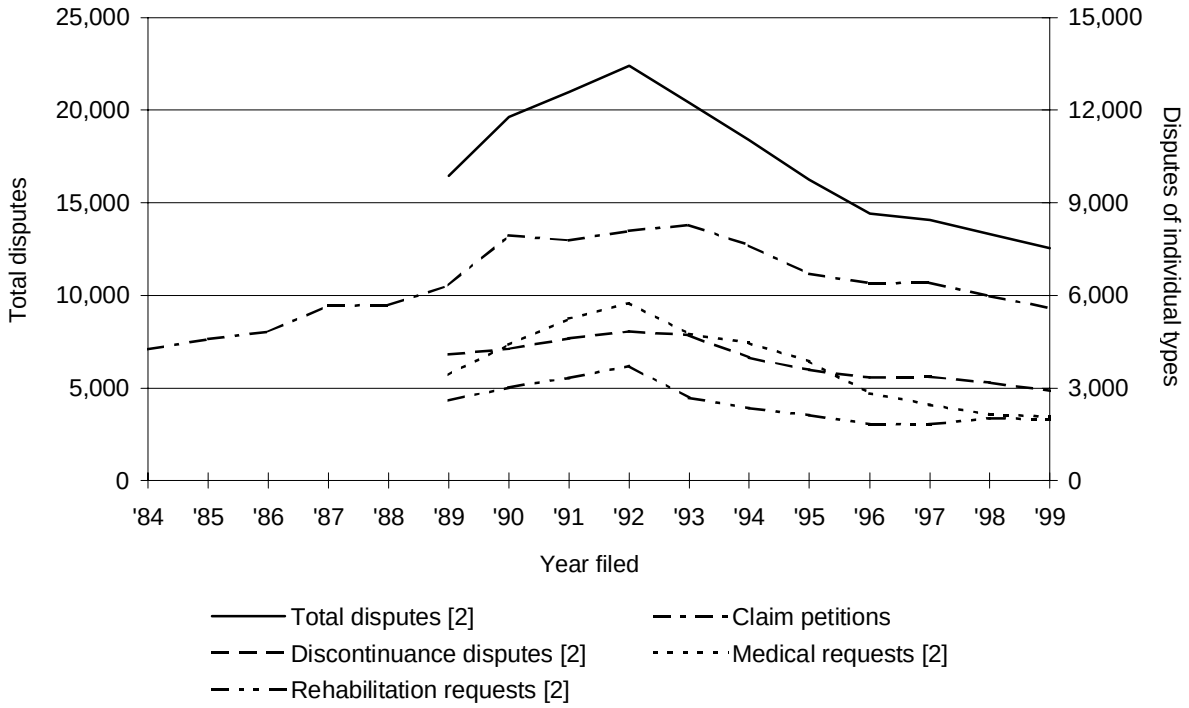
Many disputes occur without the filing of one of the documents counted in Figure 6.1, and are therefore not counted in the figure. These disputes typically come to the attention of Customer Assistance through phone contact from the parties, and are usually dealt with by mediation and other informal methods.

Figure 6.1 shows the numbers of disputes rising through 1992 and falling thereafter, with a plateau for claim petitions for 1990-1993. Total disputes rose from 16,460 in 1989 to 22,390 in 1992, and then fell to 12,550 by 1999, a 44 percent decrease. Claim petitions dropped from 8,270 in 1993 to 5,580 in 1999 (down 33 percent). From 1992 to 1999, discontinuance disputes fell from 4,830 to 2,910 (down 40 percent), *Medical Requests* fell from 5,750 to 2,070 (down 64 percent), and *Rehabilitation Requests* from 3,720 to 1,990 (down 47 percent).

The increase in disputes through 1992 and the decrease in later years are partly explained by similar trends in claims (Figure 2.1). However, the rising-then-falling dispute trend remains when disputes are counted relative to the number of claims, as shown in Figure 6.3 below. Possible explanations for the dispute trends are offered at that point.

Along with the changing frequencies of different dispute types, the composition of total disputes has changed, although not dramatically. In 1999, 45 percent of the dispute filings were claim petitions, 23 percent were discontinuance disputes, 17 percent were *Medical Requests,* and 16 percent were *Rehabilitation Requests.* Claim petitions in 1999 represented a somewhat larger

Figure 6.1
Number of Disputes by Year Filed, 1984-1999 [1]



Year Dispute Filed	Total Disputes	Claim Petitions	Pctg. of Total	Discontin-uance Disputes	Pctg. of Total	Medical Requests	Pctg. of Total	Rehabil-itation Requests	Pctg. of Total
1984	[2]	4,250		[2]		[2]		[2]	
1985		4,580							
1986		4,830							
1987		5,670							
1988		5,670							
1989	16,460	6,340	38.5%	4,080	24.8%	3,440	20.9%	2,600	15.8%
1990	19,630	7,940	40.4%	4,270	21.8%	4,410	22.5%	3,010	15.3%
1991	20,960	7,780	37.1%	4,610	22.0%	5,240	25.0%	3,330	15.9%
1992	22,390	8,090	36.1%	4,830	21.6%	5,750	25.7%	3,720	16.6%
1993	20,390	8,270	40.6%	4,700	23.1%	4,740	23.2%	2,680	13.1%
1994	18,400	7,610	41.4%	3,980	21.6%	4,460	24.2%	2,350	12.8%
1995	16,250	6,700	41.2%	3,580	22.0%	3,860	23.8%	2,110	13.0%
1996	14,400	6,400	44.4%	3,340	23.2%	2,830	19.7%	1,830	12.7%
1997	14,070	6,410	45.6%	3,370	24.0%	2,460	17.5%	1,830	13.0%
1998	13,300	5,970	44.9%	3,170	23.8%	2,140	16.1%	2,020	15.2%
1999	12,550	5,580	44.5%	2,910	23.2%	2,070	16.5%	1,990	15.9%

1. Data are from the DLI claims database.
2. Not available before 1989.

Figure 6.2
Claims with Multiple Disputes, Injury Year 1995 [1]

Dispute Type	Total Claims with Any Disputes	Claims with Given Number of Disputes of Given Type					Pctg. with Two or More Disputes
		One Dispute	Two Disputes	Three Disputes	Four Disputes	Five or More Disputes	
Claim petitions	4,379	4,018	317	35	9	0	8.2%
Discontinuance disputes	1,885	1,323	376	123	41	22	29.8%
Medical requests	1,485	1,270	161	38	10	6	14.5%
Rehabilitation requests	1,072	784	183	68	27	10	26.9%
Total (with any of the above)	6,441	4,303	1,119	480	242	297	33.2%

1. Data are from the DLI claims database.

share of the total than in 1989, and *Medical Requests* a somewhat smaller share.

Multiple Disputes

To a large degree, the numbers of disputes, in total and by type, reflect multiple disputes on individual claims. For example, a single injury may result in a dispute about benefit level and one or more disputes about medical treatments. These may be filed on separate forms and be counted and dealt with separately, or may be combined on a single form (usually a claim petition), counted as a single dispute (given the current database), and handled together in a single proceeding.

Figure 6.2 presents data on multiple disputes for injuries in 1995. The data show that multiple disputes are common. Among claims with any disputes (combining all types of disputes), about a third had more than one dispute. Among dispute types, discontinuance and rehabilitation disputes were the most likely to occur more than once on individual claims. Claim petition disputes, the most common of all in overall numbers (Figure 6.1), were the least likely to occur more than once per claim, with a multiple-dispute rate of eight percent.

Dispute Rates

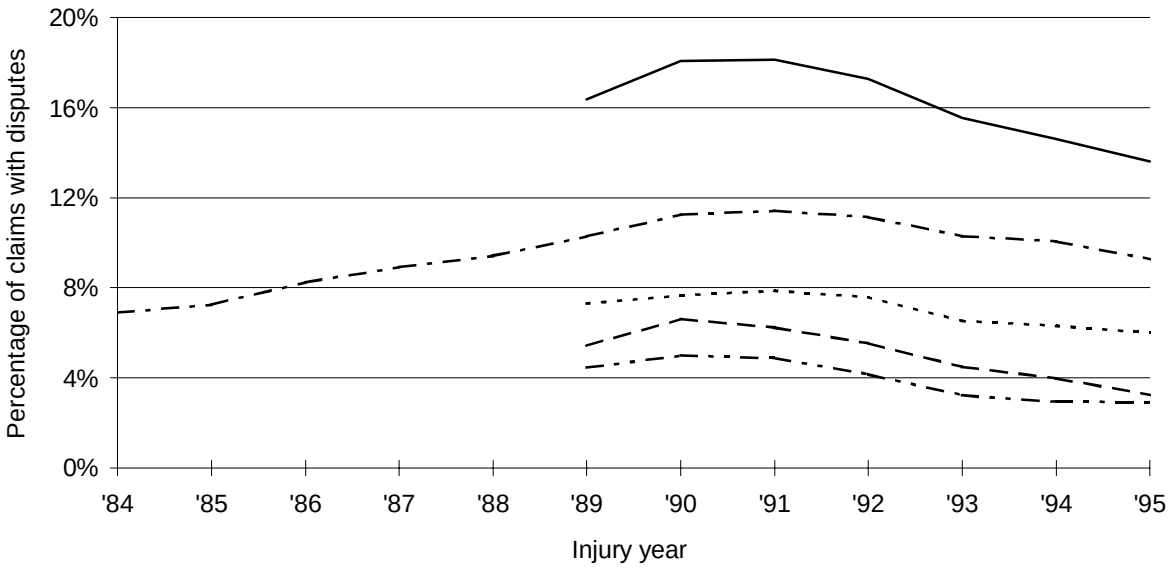
As previously indicated, the trends in dispute filings (Figure 6.1) partly reflect claim trends. Figure 6.3 presents trends in dispute propensity with the effects of claim trends removed. It shows the percentages of claims with different types of disputes for injury years through 1995. To produce a consistent trend, only disputes within four years and eight months of injury are counted (see Appendix C). Each dispute rate is computed among claims of the relevant type. Where the rates of claim petitions and of total disputes are concerned, "initial indemnity claims" are claims for indemnity benefits, whether these benefits are ultimately paid or not.

The proportion of initial indemnity claims with any disputes rose from 16.4 percent for injury year 1989 to 18.1 percent for 1990-1991. The incidence of claim petition disputes rose steadily from 6.9 percent in 1984 to 11.4 percent in 1991, and the other dispute types showed increased incidence between 1989 (the first year available) and 1990 or 1991.

After 1990 or 1991 (depending on the dispute type), all dispute rates fell continually. From 1990 to 1995, the total dispute rate fell from 18.1 to 13.6 percent, a 25 percent proportionate decrease. By 1995, the claim petition rate had fallen to 9.3 percent (down 18 percent from 1991), the rate of discontinuance disputes had fallen to 6.0 percent (down 24 percent from 1991), the medical dispute rate had fallen to 3.3 percent (down 50 percent from 1990), and the rehabilitation dispute rate had fallen to 2.9 percent (down 42 percent from 1990).

What explains these trends? A possible factor behind the increasing rate of claim petitions through 1991was the major law changes enacted in 1983. In general, law changes can introduce uncertainty regarding benefit provisions. Some of the increase in claim petition disputes may have been a response to uncertainties resulting from the 1983 law changes. By 1991 and 1992, when the four dispute rates began falling,

Figure 6.3
Incidence of Disputes, Injury Years 1984-1995 [1]



Injury Year	Pctg. of Initial Indemnity Claims with Disputes	Pctg. of Initial Indemnity Claims with Claim Petitions	Pctg. of Paid Wage-loss Claims with Discontinuance Disputes	Pctg. of Paid Indemnity Claims with Medical Requests	Pctg. of Paid Indemnity Claims with Rehabilitation Requests
1984	[2]	6.9%	[2]	[2]	[2]
1985		7.3			
1986		8.2			
1987		8.9			
1988		9.4			
1989	16.4%	10.3	7.3%	5.4%	4.5%
1990	18.1	11.3	7.7	6.6	5.0
1991	18.1	11.4	7.9	6.2	4.9
1992	17.3	11.1	7.6	5.5	4.2
1993	15.5	10.3	6.5	4.5	3.2
1994	14.6	10.1	6.3	4.0	3.0
1995	13.6	9.3	6.0	3.3	2.9

1. Data are from the DLI claims database. In order to produce a consistent trend, only disputes within four years and eight months of injury are counted. Details in Appendix C.
2. Not available before 1989.

precedents had been set in case law on most questions related to the 1983 changes.

The 1992 law changes were probably an important factor in the decreasing dispute rates after 1990 and 1991. The medical treatment parameters, promulgated in 1993 under authority of the 1992 law, reduced the latitude for disputes over medical treatment by identifying accepted medical standards for treatment of common work injuries. Certified managed care organizations, which became active in 1993, are likely to have reduced medical disputes by providing case management services and procedures for resolving medical treatment disputes, which injured employees must exhaust before carrying these disputes to DLI. The 1992 law also reduced the number of claims involved in vocational rehabilitation (see Chapter 5), thus reducing the number of cases in which vocational rehabilitation disputes were possible. These medical and rehabilitation changes became effective in 1993 for both old and new injuries. It is thus interesting that the decreases in medical and rehabilitation dispute *filings* began in 1993 (Figure 6.1), while the decreases in medical and rehabilitation dispute rates began with *injury years* 1991 and 1992 (Figure 6.3).

The 1992 law changes also restricted TPD benefits to no more than 225 weeks of total duration and no more than 450 weeks after the injury. These limits may induce some insurers in long-term TPD cases to simply wait for the statutory end of the benefit stream rather than terminate benefits, in order to avoid dispute costs. Sufficient time has elapsed for the 225-week total duration limit to be reflected in the post-1992 data, but its contribution to the downward trend in discontinuance disputes is uncertain.

A possible factor in claim petition disputes is the PPD rating schedule that took effect (by rule) for injuries on or after July 1, 1993. By assigning ratings on the basis of objective findings of functional impairment and clinical test results to a greater degree than the old schedule, and by adding categories for some types of impairments not covered under the old schedule, the new rating schedule probably reduced the latitude for disputes over PPD ratings.

Another possible factor in the decreasing dispute rates is that DLI increased its emphasis on informal dispute prevention and resolution by establishing its Customer Assistance unit in 1995 (see below). The dispute rates in Figure 6.3 extend only through injury year 1995. However, since these numbers are shown by *year of injury*, the more recent numbers may reflect Customer Assistance efforts because disputes often occur years after the injuries to which they are related.

Numbers and Rates of Denied Claims

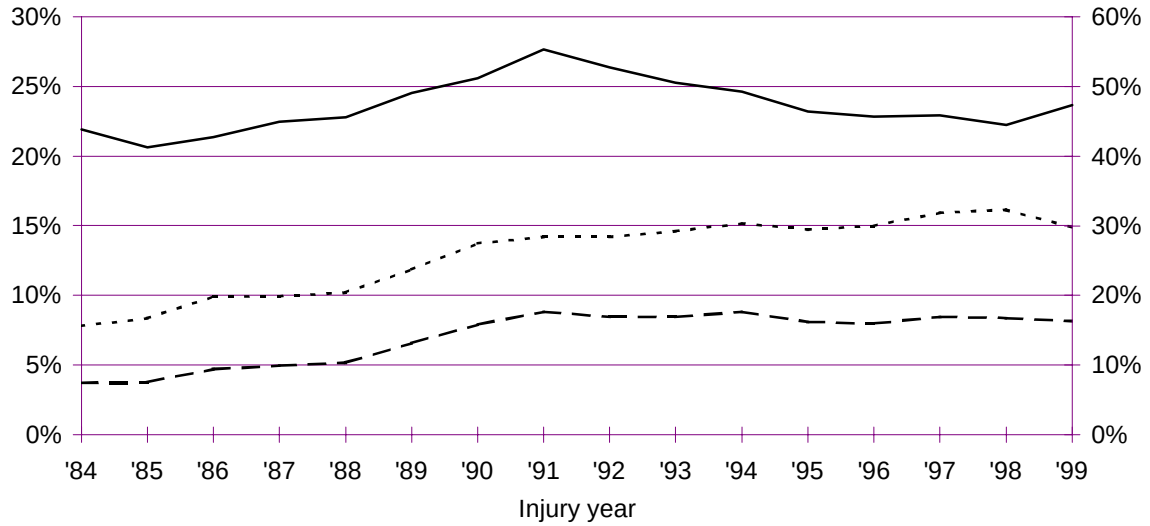
Since denial of primary liability is the source of many disputes, it is of interest to examine denials directly. The number of disputes over denials obviously depends to a large degree on the number of denials occurring in the first place.

Figure 6.4 presents data on denials of indemnity claims for injury years 1984-1999. The data are "developed," meaning that they include projection factors to represent what the numbers will be at full claim maturity. "Initial indemnity claims," in contrast with "paid indemnity claims," include all claims for indemnity benefits, whether paid or not. "Initially denied" means simply that a denial occurred, although the claim may eventually have been paid.

Among initial indemnity claims, the initial denial rate rose from about 8 percent in injury year 1984 to about 15 percent by 1994 and stayed near that level through 1999. Among paid indemnity claims, the proportion initially denied rose from about 4 percent in 1984 to 8-9 percent for 1990-1999. The reasons for the rising trends during the 1980s are unknown. Either a decreasing proportion of claims was meeting a constant standard of compensability or insurers were applying a more exacting standard of compensability, or both.

A claim may be both denied and paid for different reasons. An initial denial may be overturned through the dispute resolution process. Alternatively, an insurer may initially deny a claim but later accept it after receiving new information that establishes its compensability. In another situation, if the insurer has not obtained enough information to approve or deny the claim by the statutory

Figure 6.4
Initial Denials Among Initial Indemnity Claims and Paid Indemnity Claims, Injury Years 1984-1999 [1]



Injury Year	Initial Indemnity Claims			Paid Indemnity Claims			Denied and Paid as Pctg. of Denied Initial Indemnity Claims
	Total	Initially Denied	Pctg. Initially Denied	Total	Initially Denied	Pctg. Initially Denied	
1984	43,370	3,390	7.8%	40,060	1,480	3.7%	43.8%
1985	42,560	3,550	8.3	39,010	1,460	3.7	41.2
1986	41,640	4,130	9.9	37,550	1,760	4.7	42.8
1987	43,410	4,300	9.9	39,150	1,930	4.9	44.9
1988	46,730	4,760	10.2	42,000	2,170	5.2	45.6
1989	47,890	5,680	11.9	42,470	2,790	6.6	49.1
1990	47,800	6,560	13.7	42,550	3,360	7.9	51.2
1991	47,190	6,690	14.2	42,020	3,700	8.8	55.3
1992	44,500	6,320	14.2	39,430	3,330	8.5	52.8
1993	43,120	6,300	14.6	37,700	3,180	8.4	50.5
1994	43,720	6,630	15.2	37,070	3,270	8.8	49.2
1995	40,350	5,940	14.7	34,010	2,760	8.1	46.4
1996	39,490	5,920	15.0	33,850	2,700	8.0	45.7
1997	39,010	6,210	15.9	33,600	2,840	8.5	45.8
1998	38,320	6,190	16.1	32,860	2,750	8.4	44.4
1999	39,670	5,900	14.9	34,300	2,790	8.1	47.3

1. Data are from the DLI claims database. Numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when the claims are mature. Details in Appendix C.

Figure 6.5
Dispute Resolution Formats

Venue and Proceeding	Issue	Format
Customer Assistance Unit		
Mediation	Any issue	Agreement
Administrative conference	Medical less than $1,500, rehabilitation [1]	Decision [2]
Non-conference decision and order	Medical less than $1,500, rehabilitation [1]	Decision
Office of Administrative Hearings		
Settlement conference	Any issue other than discontinuance	Agreement
Administrative conference	Discontinuance [3], medical greater than $1,500 [1]	Decision [2]
Hearing [4]	Issues presented on claim petition [5], discontinuance [6]	Decision

1. If presented on *Medical Request* or *Rehabilitation Request* form.
2. Sometimes an administrative conference results in an agreement among the parties.
3. If presented on *Request for Administrative Conference* form or requested by phone.
4. A hearing *de novo* may be held at the request of a party to a dispute to reconsider an administrative conference decision and order or a non-conference decision and order.
5. Generally denial of primary liabiltiy or eligibility for or amount of monetary benefits, but sometimes medical or rehabilitation issues.
6. If presented on *Objection to Discontinuance* form or on petition to discontinue benefits.

deadline,[46] it may initially pay the claim "without prejudice" and later deny it on further evidence. As shown in Figure 6.3, among claims initially denied, the proportion eventually paid has ranged from 44 percent to 55 percent, peaking in 1991.

To what extent does the denial trend explain the trend in denial disputes? This is difficult to tell, partly because denial disputes are filed on claim petitions which are also used for other disputes. It is interesting to note, however, that the proportion of claims with claim petitions (Figure 6.3) rose from injury year 1984 through 1991, the period of greatest increase in the denial rate among initial indemnity claims (Figure 6.4). However, the claim petition rate fell after 1991 while the denial rate was steady or slightly increasing after that year. Perhaps this reflects a decrease in the other types of disputes presented on claim petitions.

Dispute Resolution Process

Depending on the nature of the dispute and the wishes of the parties, a workers' compensation dispute may be resolved in any of several ways:

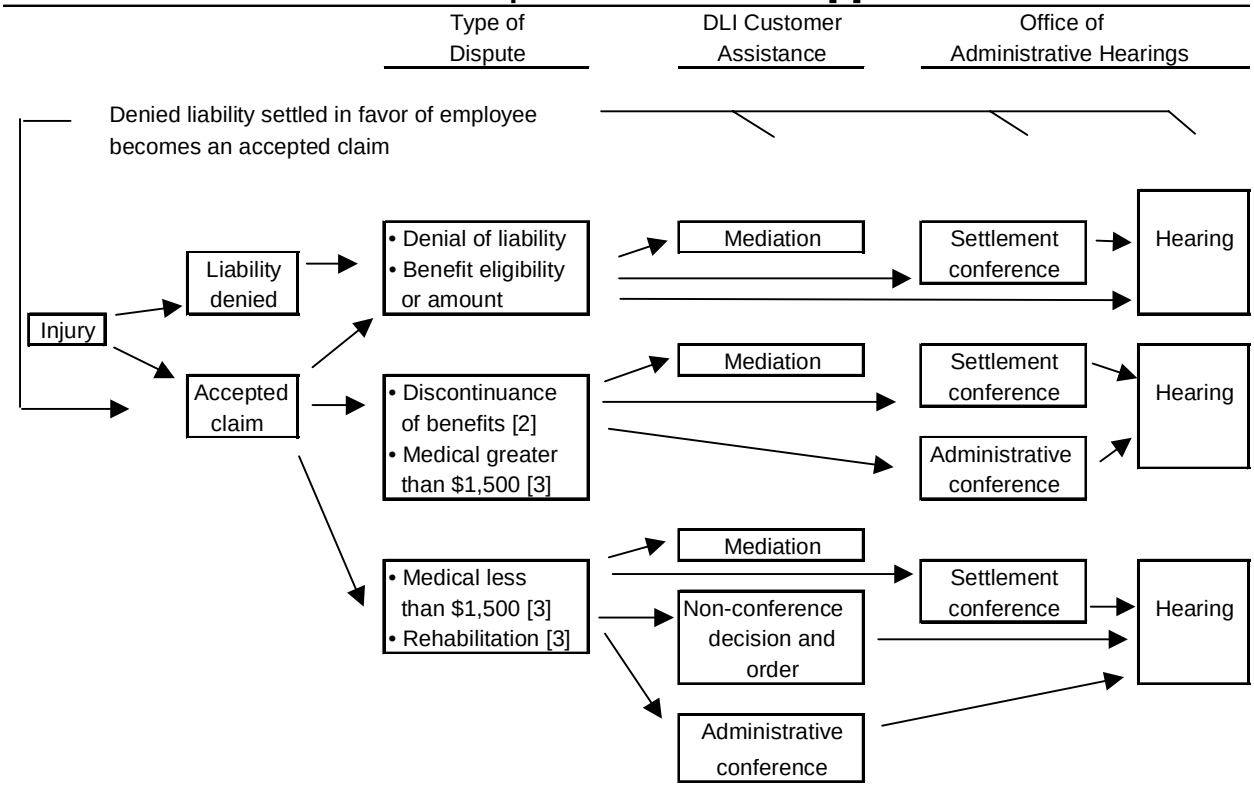
- informal assistance from the DLI Customer Assistance unit,
- mediation with Customer Assistance,
- an administrative conference at Customer Assistance or the Office of Administrative Hearings (OAH),
- a non-conference decision and order from Customer Assistance,
- a settlement conference at OAH, or
- a formal hearing at OAH.

Any party to a dispute may contact Customer Assistance for assistance in resolving the dispute informally. The informal process may involve phone calls or correspondence with the parties. The goal is to resolve as many disputes as possible at this stage in order to avoid a longer, more formal and costly process. Customer Assistance also provides information and policy clarification on request to any party to a claim with the goal of preventing disputes from arising in the first place.

Another process to encourage informal dispute resolution is "dispute certification," required by the 1995 law and begun in 1996. In this process, for a medical or rehabilitation dispute, Customer Assistance determines and certifies that informal intervention was attempted and did not resolve the dispute before an attorney may charge for services.

[46]The insurer must either pay or deny a wage-loss claim within 14 days after the employer is notified of the injury or otherwise has knowledge of it.

Figure 6.6
2000 Dispute Resolution Process [1]



1. This figure shows the most typical resolution proceedings for the different dispute types. The applicable proceeding depends both on the type of dispute and on how the dispute is presented to DLI (e.g. on a particular type of form or document or by a phone call requesting a mediation or administrative conference).
2. A discontinuance dispute can go directly to a hearing if presented on an *Objection to Discontinuance* form or on a petition to discontinue benefits.
3. A medical or rehabilitation dispute can go directly to a hearing if presented on a claim petition.

Figures 6.5 and 6.6 summarize the dispute resolution procedures other than informal assistance from Customer Assistance. Two of these, mediations and settlement conferences, involve voluntary agreement among the parties to the dispute.

Mediation, conducted by Customer Assistance, may deal with any issue. A mediation occurs when one party to a dispute requests it and all parties agree to participate in person or by phone. Mediations typically occur within days of the request, sometimes on the same day. The mediator, a Customer Assistance specialist, works to facilitate agreement among the parties and formally records its terms.

A settlement conference is initiated by OAH to resolve issues presented on a claim petition (or other type of petition) when it appears possible to settle the issues without a formal hearing.

The conference, conducted by a workers' compensation judge, is typically scheduled about six months from receipt of the petition, to allow the parties to conduct necessary preparatory activities such as having medical examinations, obtaining witness statements, and gathering other information. Attendance is mandatory for affected parties. If the conference produces a settlement (or if the parties agree before the conference), the attorneys formulate a "stipulation for settlement," which the judge ratifies (if appropriate) in an "award on stipulation." The settlement typically includes an agreement by the claimant to release the employer and insurer from future liability for the claim other than for medical treatment.

The remaining dispute resolution procedures involve decisions by a Customer Assistance specialist or OAH judge that are binding unless reversed at a higher level.

An administrative conference is held in a discontinuance, medical, or rehabilitation dispute when requested by the appropriate form or, for a discontinuance dispute, by phone. Currently, Customer Assistance is authorized to conduct administrative conferences and render decisions on rehabilitation disputes and on those medical disputes involving less than $1,500; OAH conducts administrative conferences on discontinuance disputes and on medical disputes involving more than $1,500. However, Customer Assistance may refer a dispute under its jurisdiction to OAH if the issue is especially complex or other issues on the claim are pending at OAH. The Customer Assistance specialist or OAH judge conducting the conference issues a "decision and order." Sometimes the parties in the conference reach an agreement, which is incorporated in the decision and order. If Customer Assistance believes a dispute under its jurisdiction does not require a conference, it may issue a "non-conference decision and order."

A formal hearing is held before a workers' compensation judge at OAH on issues presented on a claim petition (or other type of petition), unless OAH decides to pursue a negotiated agreement through a settlement conference. The hearing is typically scheduled about four to six months from receipt of the petition by the OAH hearing division to allow parties to prepare. OAH also conducts hearings on discontinuance disputes presented on an *Objection to Discontinuance* form or on a petition to discontinue benefits, disputes referred by Customer Assistance because they do not seem amenable to less formal resolution, and disputes over miscellaneous issues such as attorney fees and pre-hearing disputes. It also conducts hearings *de novo* when a party disagrees with a decision and order from a Customer Assistance or OAH administrative conference or with a non-conference decision and order. The judge issues a decision via a "findings and order."

Decisions from OAH hearings can be appealed to the Workers' Compensation Court of Appeals (WCCA). WCCA decisions can be appealed to the Minnesota Supreme Court.

Numbers of Dispute Resolution Proceedings

In fiscal year 1999, Customer Assistance took an average of 3,600 phone inquiries per month and served an estimated 30 to 35 walk-in customers every month. In the same year, Customer Assistance determined 490 medical and rehabilitation disputes to be "not certified" after it intervened and successfully resolved these disputes. Also in fiscal year 1999, Customer Assistance carried out approximately 6,100 interventions in "potential disputes." In these instances, a disputant contacted Customer Assistance before approaching an attorney and Customer Assistance resolved the issue.

Figure 6.7 shows the number of dispute resolution proceedings by type for fiscal years 1996-2000. The Customer Assistance unit numbers reflect decisions from the respective proceeding, while the OAH numbers reflect proceedings held. In the Customer Assistance unit, the annual number of mediation awards decreased from about 670 to 300 over the period shown. A larger decrease was shown by non-conference decision-and-orders (D&Os), which dropped from about 770 to 20. However, administrative conference D&Os and agreements (combined) increased in prevalence, from about 150 to 780.

The downward trend in mediation awards reflects a decrease for relatively easy cases and an increase of smaller magnitude for more difficult cases. Thus, the decreasing overall number of mediations does not necessarily mean a decline in total effort in this area. The increase in administrative conferences and the decrease in nonconference D&Os are at least partly attributable to an increasing preference among disputants for administrative conferences over nonconference D&Os. Also contributing to the sharp decrease in nonconference D&Os in the earlier years is that Customer Assistance was assisting with a temporary backlog that resulted when responsibility was transferred to DLI's Judicial Services unit for administrative conferences in discontinuance disputes and in medical disputes involving more than $1,500. Finally, increasing clarity about the provisions in the 1992 and 1995 laws may have exerted a downward influence on all three types of proceedings.

Figure 6.7
Number of Dispute Resolution Proceedings by Type, Fiscal Years 1996-2000 [1]

Fiscal Year	Customer Assistance Unit			Office of Administrative Hearings			Workers' Compensation Court of Appeals
	Mediation Awards	Administrative Conference Orders and Agreements [2]	Non-Conference Decision-and-Orders	Settlement Conferences	Administrative Conferences	Hearings [3]	Hearings
1996	670	150	770	[5]	[5]	[5]	380
1997	530	370	400	7,650	4,300	1,240	330
1998	460	630	140	6,950	3,800	1,030	300
1999	380	760	60	8,350	3,200	910	260
2000 [4]	300	780	20	7,310	2,980	850	260

1. Data are from the DLI Customer Assistance unit, the Office of Administrative Hearings, the Workers' Compensation Court of Appeals, and the DLI claims database.
2. Includes decision-and-orders and agreements resulting from adminstrative conferences.
3. Limited to hearings in the OAH hearings division. Relatively few hearings are conducted in the OAH settlement division, typically on matters such as attorney fees, penalties, or motions.
4. Customer Assistance unit numbers for 2000 are estimated.
5. Not available.

In OAH, all three types of dispute resolution proceedings showed decreases between fiscal years 1997 and 2000. Settlement conferences decreased from 7,650 annually to 7,310, administrative conferences decreased from 4,300 to 2,980, and hearings dropped from 1,240 to 850. WCCA hearings also decreased, from 380 per year to 260. These decreases probably reflect decreasing numbers of disputes, although they could also occur if decreasing proportions of disputes were advancing to more formal dispute resolution levels.

Figure 6.8 shows data on the proportions of disputes reaching OAH and WCCA for fiscal years 1996-2000 combined. Because of data limitations, these proportions are not computed on a single set of claims, but as ratios of proceedings and dispute filings occurring during the five-year period. As a result, they are approximations. A five-year period is used to reduce the imprecision caused by this calculation procedure. "Received at OAH for hearing" means that OAH received the dispute on a document, such as a claim petition, that would trigger a hearing unless OAH referred the issue to settlement conference instead.

The data indicate that of all disputes filed with DLI, about 33 percent are received at OAH for hearing at some point (either as their first dispute resolution venue or by referral or appeal after other proceedings), 8 percent actually go to an OAH hearing, and 2 percent go to a WCCA hearing. The disputes with an OAH hearing represent about 23 percent of those received for hearing. The remainder are settled (with or without a settlement conference), withdrawn, or otherwise disposed of. About 29 percent of the cases with an OAH hearing go on to a WCCA hearing.

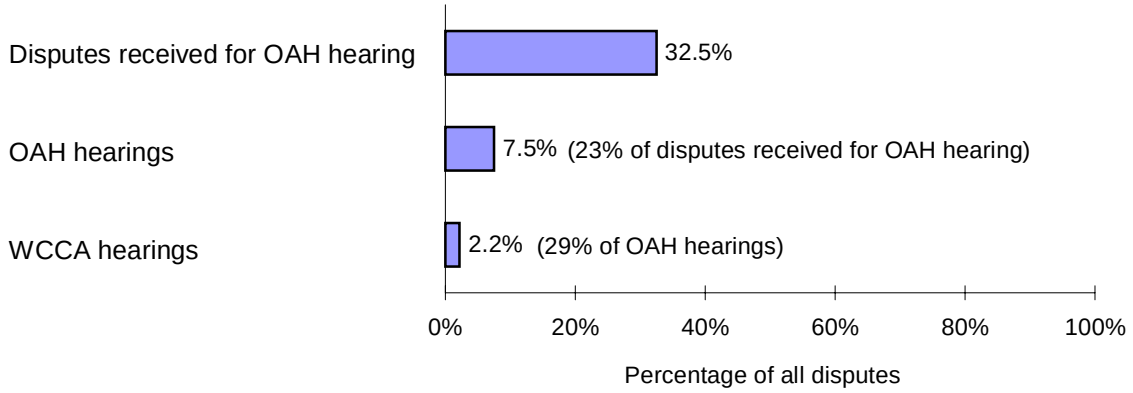
Proceedings for Different Dispute Types

Prior to 2000, DLI dispute resolution data for individual disputes pertain to referrals to various resolution proceedings. This section presents referral data for different types of disputes as an approximation of how these disputes have been resolved.

Resolution of Claim Petition Disputes

Figure 6.9 shows data on resolution of claim petition disputes filed during 1989-1997. It shows the percentage of these disputes that were referred for settlement conferences and OAH hearings. In order to produce a consistent trend, only referrals within a fixed interval—two years and five months—of the dispute filing are counted (see Appendix C); as a result, only dispute filings through 1997 can be included.

Figure 6.8
Percentages of Disputes with Hearings,
Fiscal Years 1996-2000 Combined [1]



1. Data are from the Office of Administrative Hearings, the Workers' Compensation Court of Appeals, and the DLI claims database. Hearings data cover fiscal years 1996-2000. Total disputes are for calendar years 1995-1999. Office of Administrative Hearings numbers are limited to hearings in the hearings division.

Since multiple resolution proceedings may occur for a given dispute, the data are presented in two ways. Panel A shows the percentage of disputes referred to each type of proceeding at any point (within the fixed interval), meaning that more than one type of proceeding can be counted for a given dispute. Panel B is limited to the last referral (within the fixed interval) for each dispute. Thus, Panel A shows overall dispute resolution activity, while Panel B gives a picture of where these disputes are finally resolved, although this is not exact because some disputes reach their final resolution outside of the fixed time interval or at the WCCA.

Panel A shows that over 1989-1997, 83-91 percent of claim petition disputes were referred at some point to a settlement conference, while 49-57 percent were referred at some point to an OAH hearing. Resolution is typically attempted first at a settlement conference with subsequent referral to a hearing if the conference is unsuccessful. Where a dispute is first referred for hearing, the parties may request a settlement conference instead during preparation for the hearing.

Panel B shows that 44-52 percent of claim petition disputes over 1989-1997 had a settlement conference as their last referral, suggesting that resolution was achieved through settlement in these cases. Conversely, about 48-56 percent had a hearing as their last referral, suggesting that a hearing was the point of resolution.

Resolution of Discontinuance Disputes

As previously indicated, discontinuance disputes may be initiated through more than one type of form. From 1992 to present, about 91 percent of discontinuance disputes each year have been initiated by a *Request for an Administrative Conference* form or by phone call to OAH. Since 1994, about 96-97 percent of these cases each year have been referred for an administrative conference, while the remainder have been settled, withdrawn, or otherwise disposed of.

About 9 percent of discontinuance disputes since 1992 have been initiated by filing an *Objection to Discontinuance* form or a petition to discontinue benefits, about two-thirds on the former and one-third on the latter. These cases are referred directly to an OAH hearing.

Resolution of Medical Disputes

Figure 6.10 shows data on resolution of medical disputes filed on *Medical Requests* during 1989-1998. It shows the percentage of these disputes that were referred for various dispute resolution proceedings within a fixed interval—one year

Figure 6.9
Resolution of Claim Petition Disputes
Filed 1989-1997 [1]

A: Percentage Referred for Given Type of Proceeding at Any Point

Year Dispute Filed	Number Referred for Either Type of Proceeding	Settlement Conference	OAH Hearing
1989	6,330	90.5%	49.4%
1990	7,930	89.0	56.8
1991	7,770	86.4	54.7
1992	8,080	85.3	56.3
1993	8,240	86.6	49.0
1994	7,600	88.4	49.6
1995	6,640	87.5	53.9
1996	6,330	86.4	49.1
1997	6,270	83.1	57.0

B: Percentage with Given Type of Proceeding as Last Referral

Year Dispute Filed	Number Referred for Either Type of Proceeding	Settlement Conference	OAH Hearing
1989	6,330	51.9%	48.1%
1990	7,930	43.8	56.2
1991	7,770	45.6	54.4
1992	8,080	44.3	55.7
1993	8,240	51.3	48.7
1994	7,600	50.9	49.1
1995	6,640	46.4	53.6
1996	6,330	51.4	48.6
1997	6,270	46.1	53.9

1. Data are from the DLI claims database. In order to produce a consistent trend, only referrals within two years and five months of dispute filing are counted. Details in Appendix C.

and seven months—of the dispute filing (see Appendix C). As in the previous figure, Panel A includes referrals that occurred at any point (within the interval), while Panel B is limited to the last referral (within the interval) for each dispute. Referrals to more than one type of proceeding are counted in Panel A but not in Panel B. Again, Panel A gives a picture of overall dispute resolution activity for these disputes, while Panel B indicates (approximately) where these disputes are finally resolved.

In most medical disputes filed on a *Medical Request*, the parties desire a more formal proceeding than mediation, which is reflected in relatively low numbers of mediations in Figure 6.10. In many medical disputes, a *Medical Request* is not filed but mediation occurs in response to a phone request. The mediations in these cases are not counted in Figure 6.10.

Figure 6.10 shows large changes over time in the proceeding used to resolve medical disputes. This reflects a combination of procedural, organizational, and legal changes over the years.

As shown in Panel A, among medical disputes filed in 1998 (on *Medical Requests*), the most common dispute resolution proceedings were administrative conferences with DLI specialists (53 percent), followed by proceedings with settlement judges [administrative or settlement conferences] (24 percent), OAH hearings (17

Figure 6.10
Resolution of Medical Disputes Filed 1989-1998 [1]

A: Percentage Referred for Given Type of Proceeding at any Point

Year Dispute Filed	Number Referred for Any Type of Proceeding	Mediation	Non-Conference Decision & Order	Administrative Conference with DLI Specialists [2]	Settlement Judges [3]	OAH Hearing	Withdrawn or Otherwise Resolved
1989	3,050	3.9%	0.0%	71.3%	12.3%	6.4%	9.6%
1990	3,810	4.1	1.7	59.3	16.7	8.3	15.6
1991	4,300	2.8	6.8	46.3	15.6	8.2	25.4
1992	4,770	6.3	10.9	40.4	16.2	8.4	24.9
1993	4,090	6.5	6.1	7.4	61.8	7.3	17.7
1994	3,250	5.8	25.8	7.1	44.1	8.8	14.2
1995	3,310	6.5	20.6	9.8	53.5	19.9	7.4
1996	2,500	3.6	13.5	23.9	48.9	24.9	10.2
1997	2,280	1.5	7.6	35.7	44.1	23.8	14.0
1998	2,000	2.3	9.5	53.3	23.8	16.5	18.3

B: Percentage with Given Type of Proceeding as Last Referral

Year Dispute Filed	Number Referred for Any Type of Proceeding	Mediation	Non-Conference Decision & Order	Administrative Conference with DLI Specialists [2]	Settlement Judges [3]	OAH Hearing	Withdrawn or Otherwise Resolved
1989	3,050	2.1%	0.0%	71.3%	11.0%	6.2%	9.5%
1990	3,810	2.7	1.7	59.3	12.5	8.2	15.6
1991	4,300	1.4	6.7	46.3	12.1	8.2	25.3
1992	4,770	3.0	10.9	40.4	12.7	8.3	24.8
1993	4,090	3.6	6.1	7.4	58.1	7.2	17.6
1994	3,250	3.8	25.7	7.1	40.6	8.7	14.1
1995	3,310	4.3	20.6	9.3	38.8	19.8	7.2
1996	2,500	2.6	13.5	20.2	28.6	24.8	10.2
1997	2,280	1.1	7.5	27.8	26.3	23.7	13.6
1998	2,000	1.8	9.5	39.7	14.4	16.4	18.0

1. Data are from the DLI claims database. Limited to medical disputes filed on *Medical Request* forms. In order to produce a consistent trend, only referrals within one year and seven months of dispute filing are counted. Details in Appendix C.
2. Through 1992, administrative conferences were conducted by DLI dispute resolution specialists. Beginning in 1993, these conferences were held, in varying degrees, both by DLI specialists and by settlement judges.
3. Through 1992, referrals to settlement judges were for settlement conferences only. Beginning in 1993, they were for settlement conferences and, in varying degrees, for administrative conferences.

percent), and non-conference decision-and-orders (10 percent). Another 18 percent of the 1998 cases were withdrawn or otherwise resolved. Hearings for these disputes typically occur after an administrative conference, settlement conference, or non-conference decision and order fails to settle the dispute.

As shown in Panel B, among medical disputes filed in 1998, about 40 percent were finally resolved through administrative conferences with DLI specialists, while another 17 percent were resolved through administrative or settlement conferences with settlement judges. These figures are lower than their counterparts in Panel A, meaning that some of the disputes considered in these proceedings were not resolved and therefore went to other proceedings such as OAH hearings.

Figure 6.11
Resolution of Rehabilitation Disputes
Filed 1989-1998 [1]

A: Percentage Referred for Given Type of Proceeding at any Point

Year Dispute Filed	Number Referred for Any Type of Proceeding	Mediation	Non-Conference Decision & Order	Administrative Conference with DLI Specialists [2]	Settlement Judges [3]	OAH Hearing	Withdrawn or Otherwise Resolved
1989	2,120	1.2%	0.1%	57.1%	14.5%	13.4%	15.7%
1990	2,600	1.1	0.7	43.6	14.2	16.1	30.6
1991	3,060	0.7	3.5	36.0	10.8	13.1	40.2
1992	3,320	2.4	6.2	39.0	11.6	13.8	32.5
1993	2,320	4.3	7.6	10.1	46.8	13.6	23.1
1994	2,000	3.6	23.2	7.5	42.3	13.4	15.1
1995	1,840	2.7	25.0	14.1	39.1	16.8	9.9
1996	1,640	1.8	15.8	31.5	30.1	18.4	14.3
1997	1,680	0.1	7.2	40.0	26.8	18.5	21.2
1998	1,850	1.1	8.3	38.1	24.3	17.3	24.9

B: Percentage with Given Type of Proceeding as Last Referral

Year Dispute Filed	Number Referred for Any Type of Proceeding	Mediation	Non-Conference Decision & Order	Administrative Conference with DLI Specialists [2]	Settlement Judges [3]	OAH Hearing	Withdrawn or Otherwise Resolved
1989	2,120	0.6%	0.1%	57.1%	13.4%	13.1%	15.7%
1990	2,600	0.7	0.7	43.6	8.8	15.8	30.4
1991	3,060	0.5	3.5	36.0	7.1	12.9	40.0
1992	3,320	1.2	6.1	39.0	7.8	13.7	32.2
1993	2,320	2.4	7.6	10.1	43.7	13.4	22.8
1994	2,000	1.9	23.1	7.5	39.4	13.2	15.0
1995	1,840	1.5	24.8	13.5	33.6	16.8	9.9
1996	1,640	0.7	15.8	26.4	24.7	18.3	14.2
1997	1,680	0.1	7.2	31.9	21.7	18.1	21.1
1998	1,850	0.8	8.3	29.6	19.7	16.9	24.7

1. Data are from the DLI claims database. Limited to rehabilitation disputes filed on *Rehabilitation Request* forms. In order to produce a consistent trend, only referrals within one year and seven months of dispute filing are counted. Details in Appendix C.
2. Through 1992, administrative conferences were conducted by DLI dispute resolution specialists. Beginning in 1993, these conferences were held, in varying degrees, both by DLI specialist and by settlement judges.
3. Through 1992, the referrals to settlement judges were for settlement conferences only. Beginning in 1993, they were for settlement conferences and, in varying degrees, for administrative conferences.

Resolution of Rehabilitation Disputes

Figure 6.11 is similar to Figure 6.10 but with respect to rehabilitation disputes filed on *Rehabilitation Requests* during 1989-1998.

Figure 6.11 shows that the resolution proceedings for rehabilitation disputes have tended to be similar to those for medical disputes over the years. This is indicated by the similarity in both magnitude and trend of the percentages in Figures 6.10 and 6.11. As with the medical disputes, the mediation percentages are relatively low (compared to those for other proceedings) because the figures do not count mediations initiated by phone contact where a *Rehabilitation Request* has not been filed.

Dispute Costs: Attorney Involvement and Attorney Fees

Disputes typically increase the costs of workers' compensation (or reduce net benefits for the injured worker), because of attorney fees, other dispute-related expenses such as for medical examinations, higher administrative costs, and sometimes greater claim duration brought on by litigation itself as opposed to any increased compensation won by the claimant.

Under statute, employee (claimant) attorney fees are calculated as a percentage of the disputed portion of benefits awarded, and may be a lien against these benefits. Prior to July 1, 1992, claimant attorney fees were limited to 25 percent of the first $4,000 and 20 percent of the next $27,500 of disputed benefits awarded, not to exceed $6,500 except by petition. Under the 1992 law change, effective July 1, 1992, all fees related to the same claim became cumulative (with some exceptions) and were limited to 25 percent of the first $4,000 and 20 percent of the next $60,000 of disputed benefits awarded, not to exceed $13,000 except by petition. The 1992 law change also introduced a limit on defense attorney costs of $13,000 per claim, with exceptions by petition.

The 1995 law change removed the provisions allowing claimant and defense attorney costs to be paid above the statutory limits by petition. In 1999, the Minnesota Supreme Court ruled in the Irwin case[47] that the claimant attorney limits were unconstitutional because with the removal of the exception provision, they were absolute and thus infringed on the authority of the judicial branch to oversee attorneys. In 2000, the Workers' Compensation Court of Appeals applied this ruling to defense attorney fees.[48]

Claimant Attorney Data

Figure 6.12 presents data on claimant attorney involvement and associated fees for injury years 1984-1997. The figures are "developed," meaning that they are projections of what the numbers will be at full claim maturity. Data for 1998 and 1999 are not presented because they are not yet sufficiently stable.

The proportion of paid indemnity claims with claimant attorney fees rose from about 10 percent in injury year 1984 to about 17 percent for 1990-1992 and then declined to about 15 percent for 1995-1997. This trend roughly follows the trends in dispute rates through injury year 1995 presented in Figure 6.3.

The average indemnity benefit for indemnity claims with attorney fees ranged from roughly $34,000 to $48,000 for the period shown. This is several times higher than the average for all indemnity claims (see Figure 4.10), which is expected because more is at stake in serious claims to warrant attorney involvement.

Among paid indemnity claims with attorney involvement, the average attorney fee for ranged from about $3,800 to $4,300. Relative to the average indemnity benefit for these claims, the average fee rose from a range of 8.4-8.9 percent for 1984-1988 to 11.5-11.8 percent for 1993-1997. These percentages are less than the 20-25 percent range suggested by the formula indicated above because (1) the formula only applies to the disputed portion of benefits awarded and (2) for the period shown, the fee was capped (though with exceptions possible by petition until 1995).

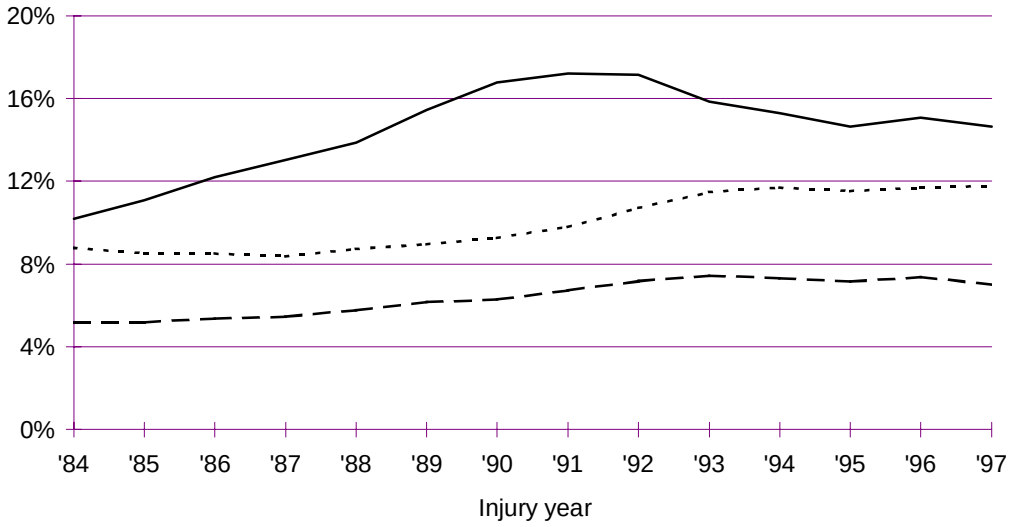
The increase between injury years 1989 and 1993 in attorney fees as a percentage of indemnity benefits in claims with attorney fees is probably due in large part to the increase in the maximum fee in the 1992 law change. Since the increase applied to fee *determinations* on or after July 1, 1992,[49] it affected prior injuries in which attorneys became involved after July 1, 1992 or in which attorneys were previously involved and retainers were renegotiated. The data suggest that the maximum fee increase had a minor overall effect on injuries through 1989, and that with each succeeding year from 1989 through 1993, an increasing proportion of injuries were affected by the increase because they were progressively closer to the effective date and thus more likely to have attorney

[47] Irwin v. Surdyk's Liquor, 599 N.W.2d 132 (Minn. 1999), September 2, 1999.

[48] Tucker v. Plymouth Plumbing, 60 W.C.D. 160 (May 25, 2000).

[49] Engman v. Metalcote Grease and Oil, 48 W.C.D. 327 (February 26, 1993).

Figure 6.12
Claimant Attorney Fees, Injury Years 1984-1997 [1]



Injury Year	Total Paid Indemnity Claims	Number of Paid Indemnity Claims with Attorney Fees	Pctg. of Paid Indemnity Claims with Attorney Fees	Paid Indemnity Claims with Attorney Fees: Average Indemnity Benefit	Paid Indemnity Claims with Attorney Fees: Average Attorney Fee	Paid Indemnity Claims with Attorney Fees: Average Attorney Fee as Pctg. of Average Indemnity Benefit	Total Attorney Fees ($millions)	Total Attorney Fees as Pctg. of Total Indemnity Benefits for All Claims
1984	40,060	4,080	10.2%	$43,460	$3,810	8.8%	$15.6	5.2%
1985	39,010	4,320	11.1%	$44,640	$3,810	8.5%	$16.4	5.2%
1986	37,550	4,570	12.2%	$45,830	$3,900	8.5%	$17.8	5.4%
1987	39,150	5,100	13.0%	$48,040	$4,020	8.4%	$20.5	5.5%
1988	42,000	5,820	13.9%	$46,990	$4,100	8.7%	$23.9	5.8%
1989	42,470	6,560	15.4%	$47,080	$4,210	8.9%	$27.6	6.2%
1990	42,550	7,140	16.8%	$45,170	$4,180	9.3%	$29.9	6.3%
1991	42,020	7,230	17.2%	$43,940	$4,300	9.8%	$31.1	6.7%
1992	39,430	6,750	17.1%	$40,300	$4,310	10.7%	$29.1	7.2%
1993	37,700	5,970	15.8%	$34,920	$4,010	11.5%	$23.9	7.4%
1994	37,070	5,670	15.3%	$33,720	$3,950	11.7%	$22.4	7.3%
1995	34,010	4,980	14.6%	$34,190	$3,940	11.5%	$19.6	7.2%
1996	33,850	5,120	15.1%	$36,320	$4,250	11.7%	$21.8	7.3%
1997	33,600	4,910	14.6%	$35,700	$4,200	11.8%	$20.6	7.0%

1. Data are from the DLI claims database. Numbers are "developed," meaning that they are estimates (based on observed historical rates of claim development) of what the final numbers will be when claims are mature. Details in Appendix C.

involvement beyond that date. Interestingly, the increasing percentage did not involve an increase in average attorney fees, but rather a stability in attorney fees in the face of falling average benefits for the claims concerned. Relative to total indemnity benefits for all claims, total attorney fees rose from somewhat above 5 percent for 1984-1987 to somewhat above 7 percent for 1993-1997. Total claimant attorney fees were near $20 million annually for 1995-1997. This represents roughly 2 percent of total system cost (see Figure 2.5). It should be noted, however, that claimant attorney fees do not add to system cost because they are typically paid as liens against benefits.

In view of the Irwin decision (see above), it seems likely that claimant attorney fees will increase as a proportion of indemnity benefits in cases with attorney involvement and as a proportion of total indemnity benefits for all claims.

Defense Attorney Data

Under the 1995 law, insurers are required to report aggregate defense attorney fees and other legal costs. Total reported defense attorney fees averaged $33.5 million annually over fiscal years 1995-1999, with some decrease over the period. Other insurer legal costs averaged $15.9 million, for an overall annual average legal cost of $49.4 million. This is somewhat more than twice as large as total claimant attorney fees, and roughly 4-5 percent of total system cost. These are only rough comparisons, however, because defense attorney fees are reported according the year paid, which means they are associated with both current and prior injuries.

Appendix A

Glossary

Accident year. The year in which the accident or condition occurred giving rise to the injury or illness. In accident year data, all claims and costs are tied to the year in which the accident occurred. Accident year, used with insurance data, is equivalent to injury year, used with Department of Labor and Industry (DLI) data.

Administrative conference. An expedited, informal proceeding where parties present and discuss viewpoints in a dispute. If agreement is not achieved, a "decision and order" is issued which is binding unless appealed. Currently, Customer Assistance conducts administrative conferences on medical issues involving less than $1,500 and on vocational rehabilitation issues, and OAH conducts conferences on medical issues involving more than $1,500 and on discontinuance disputes presented on a *Request for Administrative Conference.*

Assigned Risk Plan (ARP). The workers' compensation insurer of last resort, which insures employers unable to insure themselves in the voluntary market. The ARP is necessary because all nonexempt employers are required to have workers' compensation insurance or self-insure. The Department of Commerce operates the ARP through contracts with private companies for administrative services. The Commerce Department sets the ARP premium rates, which are different from the voluntary market rates.

Certified managed care organization (CMCO). A managed care organization certified by DLI under the 1992 law to manage medical services to injured workers. If the employer and insurer have arranged for medical care to be provided through a CMCO, injured workers must, with certain exceptions, obtain medical care for work injuries through health providers in the CMCO network.

Claim petition. A form by which the injured worker contests a denial of primary liability or requests an award of indemnity, medical, or rehabilitation benefits. In response to the claim petition, OAH generally schedules a settlement conference or formal hearing.

Company filed rates. Rates used by insurance companies in determining premium for individual employers in the voluntary market. Each insurer determines its own filed rates (per $100 of payroll by insurance class) using the pure premium rates as the starting point but adding (1) certain components of loss costs that are excluded from the pure premium rates by law and (2) company expenses, which include claims adjustment, litigation, insurance brokerage, overhead, assessments (including the Special Compensation Fund assessment), and profit. The insurer files these rates with the Department of Commerce for approval. The insurer determines premium for an individual employer by first applying its applicable filed rate(s) to covered payroll and then (1) modifying the result on the basis of characteristics of the employer under rating plans approved by the Department of Commerce and (2) adding taxes and assessments if these are not already included in the filed rates.

Cost-of-living adjustment (COLA). An annual adjustment of TTD, TPD, PTD, and dependents' benefits computed from the annual change in the SAWW. The percent adjustment is equal to the proportion by which the SAWW in effect at the time of the adjustment differs from the SAWW in effect one year earlier, not to exceed a statutory limit. The timing of the first adjustment and the annual percent limit have changed over time, as described in Appendix B.

Customer Assistance (CA). A unit in the Department of Labor and Industry that provides information and clarification on workers' compensation statute, rules, and procedures,

carries out a variety of dispute prevention activities, conducts informal dispute resolution activities including mediations, and holds administrative conferences on some issues (see administrative conference).

Dependents' benefits. Benefits paid to dependents of a worker who has died from a work-related injury or illness. These benefits are equal to a proportion of the worker's gross pre-injury wage and are paid for a specified period of time, depending on the dependents concerned.

Developed numbers. Estimates of what the number of claims or their cost will be at a given maturity. Developed numbers are relevant for accident year, policy year, and injury year data. They are obtained by applying development factors, based on historical rates of development of claim and cost figures, to tabulated numbers.

Development. The change over time in the reported number or cost of claims for a particular accident year, policy year, or injury year. Claim costs develop whether the costs are paid or incurred. The reported figures develop both because of the time necessary for claims to mature and, in the case of Department of Labor and Industry data, because of reporting lags.

Disability Status Report (DSR). A form the insurer must file with DLI at certain points to notify the department of the employee's disability and rehabilitation consultation status. When the insurer files a DSR, it must either refer the employee for a rehabilitation consultation or request a waiver of rehabilitation services.

Experience. Prior premiums and losses. In determining pure premium rates, the MWCIA uses "experience" in the form of voluntary market indemnity and medical losses relative to pure premium for the most recent report periods.

Full-time-equivalent (FTE) covered employment. An estimate of the number of full-time employees that would work the same number of hours during a year as the actual workers' compensation covered employees, some of whom are part-time. It is used in computing workers' compensation claims incidence rates.

Hearing. A formal proceeding on a disputed issue or issues in a workers' compensation claim held at the Office of Administrative Hearings or Workers' Compensation Court of Appeals, after which the judge issues a decision that is binding unless appealed.

Incurred costs (or incurred losses). Indemnity and medical costs already paid plus amounts reserved for future payments on claims included in a given report period.

Indemnity benefit. A benefit to the injured or ill worker or survivors to compensate for wage loss, functional impairment, or death. Indemnity benefits include TTD, TPD, PPD, and PTD benefits, supplementary benefits, death benefits, and, in insurance industry accounting, vocational rehabilitation costs.

Indemnity claim. A claim with paid indemnity benefits. Most indemnity claims involve more than three days of total or partial disability, since this is the threshold for qualifying for the TTD or TPD benefits paid on most of these claims. Indemnity claims typically include medical as well as indemnity costs.

Injury year. The year in which the injury occurred or the illness began. In injury year data, all claims, costs, and other statistics are tied to the year in which the injury occurred. Injury year, used with Department of Labor and Industry data, is essentially equivalent to accident year, used with insurance data.

Loss costs. See pure premium rates.

Medical cost. The cost of medical services and supplies provided to the injured or ill worker, including payments to providers and certain reimbursements to the worker. All reasonable and necessary medical costs related to the injury or illness are covered, subject to a maximum-fee schedule.

Medical-only claim. A claim with paid medical costs and no indemnity benefits.

Medical Request. A form by which a party to a medical dispute requests assistance from the Department of Labor and Industry in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by

Customer Assistance, or to an administrative conference.

Mediation. A voluntary, informal proceeding conducted by Customer Assistance to facilitate agreement among the parties in a dispute. If agreement is reached, its terms are formally recorded. A mediation occurs when one party requests it and the others agree to participate. This often takes place after attempts at resolution by phone and correspondence have failed.

Minnesota Workers' Compensation Insurers Association (MWCIA). Minnesota's workers' compensation data service organization (DSO). State law specifies the duties of the DSO and the Department of Commerce designates the entity to be the DSO. Among other activities, the MWCIA collects data on claims, premium, and losses from insurers and annually produces pure premium rates.

Non-conference decision and order. A decision issued by Customer Assistance without an administrative conference on a dispute for which it has administrative conference authority (see "administrative conference"), when it has sufficient information without conducting a conference. The decision is binding unless appealed or overturned by review at OAH.

Objection to Discontinuace. A form by which the injured worker requests a formal hearing to contest a proposed discontinuance of wage-loss benefits (TTD, TPD, or PTD). The hearing is held at OAH.

Office of Administrative Hearings (OAH). An executive branch body that conducts hearings on administrative law cases. One section is responsible for workers' compensation cases; it conducts administrative conferences and settlement conferences as well as hearings.

Permanent partial disability (PPD). A benefit that compensates for permanent functional impairment resulting from a work-related injury or illness. The benefit is based on the worker's impairment rating, which is a percentage of whole-body impairment determined on the basis of health care providers' assessments according to a rating schedule in rules. Currently, the PPD benefit is calculated under a schedule specified in law, which assigns a benefit amount per rating point with higher ratings receiving proportionately higher benefits. The scheduled amounts per rating point were fixed for injuries from 1984 through September 2000. The PPD benefit is paid after TTD has ended. For injuries from October 1995 through September 2000, it is paid at the same rate and intervals as TTD until the overall amount is exhausted. See Appendix B for related law changes.

Permanent total disability (PTD). A wage-replacement benefit paid if the worker sustains a severe work-related injury specified in law. Also paid if the worker, because of a work-related injury or illness in combination with other factors, is permanently unable to secure gainful employment, provided that, for injuries on or after October 1, 1995, the worker has a PPD rating of 13-17 percent, depending on age and education. The benefit is equal to 2/3 of the worker's gross pre-injury wage, subject to minimum and maximum weekly amounts, and is paid at the same intervals as wages were paid before the injury. For injuries on or after October 1, 1995, benefits end at age 67 under a rebuttable presumption of retirement. Minimum and maximum weekly benefit provisions are described in Appendix B. Cost-of-living adjustments are described in this Appendix and Appendix B.

Petition to Discontinue Benefits. A document by which the insurer requests a formal hearing to allow a discontinuance of wage-loss benefits (TTD, TPD, or PTD). The hearing is held at OAH.

Policy year. The year of initiation of the insurance policy covering the accident or condition that caused the injury or illness. In policy year data, all claims and costs are tied to the year in which the applicable policy took effect. Since policy periods often include portions of two calendar years, the data for a policy year include claims and costs for injuries occurring in two different calendar years.

Primary liability. The overall liability of the insurer for any costs associated with a claim once the injury is determined to be compensable. An insurer may deny primary liability (deny that the injury is compensable) if it has reason to believe the injury was not work-related, was intentionally self-inflicted, resulted from

intoxication, or happened during participation in a non-required recreational program.

Pure premium rates. Rates of expected indemnity and medical losses per year per $100 of covered payroll, also referred to as "loss costs." Pure premium rates are determined annually by the MWCIA for approximately 560 insurance classes in the voluntary market. They are based on insurer "experience" and statutory benefit changes. "Experience" refers to actual losses relative to pure premium for the most recent report periods. The pure premium rates are published with documentation in the annual *Minnesota Ratemaking Report* subject to approval by the Department of Commerce.

Pure premium. A measure of expected losses, equal to the sum, over all insurance classes, of payroll times the applicable pure premium rate(s) (the rate(s) for the insurance class(es) concerned), adjusted for individual employers' prior loss experience. It is different from (and somewhat lower than) the actual premium charged to employers because actual premium includes other insurance company costs plus taxes and assessments.

Qualified Rehabilitation Consultant (QRC). A professionally trained individual registered with DLI to provide statutory vocational rehabilitation services to injured workers. The QRC determines whether the injured worker is eligible for vocational rehabilitation services by means of a rehabilitation consultation, develops a rehabilitation plan with assistance from the injured worker and employer, and facilitates implementation of the plan.

Rehabilitation Consultation Report (RCR). A form the Qualified Rehabilitation Consultant (QRC) is required to file with DLI and the injured worker, employer, and insurer after a rehabilitation consultation to notify them of whether the injured worker is eligible for vocational rehabilitation services.

Rehabilitation Request. A form by which a party to a vocational rehabilitation dispute requests assistance from Department of Labor and Industry in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by Customer Assistance, or to an administrative conference.

Request for Administrative Conference. A form by which the injured worker requests an administrative conference to contest a proposed discontinuance of wage-loss benefits (TTD, TPD, or PTD).

Second-injury claim. A claim for which the insurer (or self-insured employer) is entitled to reimbursement from the Special Compensation Fund because the injury was a subsequent (or "second") injury for the worker concerned. The 1992 law eliminated reimbursement (to insurers) of "second-injury" claims for subsequent injuries occurring on or after July 1, 1992.

Self-insurance. A mode of workers' compensation insurance in which an employer or employer group insures itself or its members. In order to do so, the employer or employer group must meet financial requirements and be approved by the Department of Commerce.

Settlement conference. A proceeding held at OAH to resolve issues presented on a claim petition when it appears possible to settle the issues without a formal hearing. If a settlement is reached, it typically includes an agreement by the claimant to release the employer and insurer from future liability for the claim other than for medical treatment.

Special Compensation Fund (SCF). A fund within DLI that, among other things, pays uninsured claims and reimburses insurers (including self-insured employers) for supplementary and second-injury benefit payments. (The supplementary benefit and second-injury provisions only apply to older claims because they were eliminated by the law changes of 1995 and 1992, respectively.) Revenues come primarily from an assessment on paid indemnity benefits. The SCF also funds the operations of DLI, the workers' compensation portion of the Office of Administrative Hearings, the Workers' Compensation Court of Appeals, and workers' compensation functions in the Department of Commerce.

Statewide average weekly wage (SAWW). The average wage used by DLI to adjust certain workers' compensation benefits (see cost-of-living adjustment) and provider fee limits. The SAWW is also used in this report to adjust average benefit amounts for different years so that they are all expressed in constant (1998)

wage dollars. The SAWW, from the Department of Economic Security, is the average weekly wage of nonfederal workers covered under Unemployment Insurance.

Stipulated benefits. Indemnity and/or medical benefits specified in a "stipulation for agreement," which states the terms of settlement of a claim among the affected parties. A stipulation usually occurs in a dispute, but not always. The stipulation may be incorporated into a mediation agreement, or may be reached in a settlement conference or associated preparatory activities, in which case it must be approved by a workers' compensation judge. Stipulated benefits are usually paid in a lump-sum.

Supplementary benefits. Additional benefits paid to certain workers receiving TTD or PTD benefits for injuries prior to October 1992 or receiving PTD benefits for injuries from October 1992 through September 1995. For injuries from October 1, 1983 forward, eligibility begins after 208 weeks of TTD or PTD benefits have been paid, or four years from the first date of total disability for TTD beneficiaries injured during October 1983 - September 1992 or PTD beneficiaries injured during October 1992 - September 1995. These benefits are equal to the difference between 65 percent of the SAWW and the TTD or PTD benefit. The SCF reimburses insurers (and self-insured employers) for supplementary benefit payments. For injuries on or after October 1, 1995, supplementary benefits were repealed (see Appendix B).

Temporary partial disability (TPD). A wage-replacement benefit paid if the worker is employed with earnings that are reduced because of a work-related injury or illness, provided that three calendar days have passed starting with the first day of disability. (A day of disability is a day with any loss of work time or wages due to the injury or illness.) The benefit is equal to 2/3 of the difference between the worker's gross pre-injury wage and his or her gross current wage, subject to a maximum weekly amount, and is paid at the same intervals as wages were paid before the injury. For injuries on or after October 1, 1992, TPD benefits are limited to a total of 225 weeks and to the first 450 weeks after the injury (with an exception for approved retraining). Maximum weekly benefit provisions are described in Appendix B. Cost-of-living adjustments are described in this Appendix and Appendix B.

Temporary total disability (TTD). A wage-replacement benefit paid if the worker is unable to work because of a work-related injury or illness, provided that three calendar days have passed starting with the first day of disability. (A day of disability is a day with any loss of work time or wages due to the injury or illness.) The benefit is equal to 2/3 of the worker's gross pre-injury wage, subject to minimum and maximum weekly amounts, and is paid at the same intervals as wages were paid before the injury. Currently, TTD stops if (1) the employee returns to work, (2) the employee withdraws from the labor market, (3) the employee fails to diligently search for work within his or her physical restrictions, (4) the employee is released to work without physical restrictions from the injury, (5) the employee refuses an appropriate offer of employment, (6) 90 days have passed after the employee has reached maximum medical improvement or completed an approved retraining plan, (7) the employee fails to cooperate with an approved vocational rehabilitation plan or with certain procedures in the development of such a plan, or (8) 104 weeks of TTD have been paid (with an exception for approved retraining). Minimum and maximum weekly benefit provisions are described in Appendix B. Cost-of-living adjustments are described in this Appendix and Appendix B.

Vocational rehabilitation consultation. The first in-person meeting between the injured worker and a Qualified Rehabilitation Consultant (QRC), to determine whether the injured worker is a "qualified employee"—eligible for rehabilitation services. The QRC reports to DLI on the consultation by filing a Rehabilitation Consultation Report form.

Vocational rehabilitation plan. A plan for vocational rehabilitation services developed by the QRC in consultation with the employee and the employer and/or insurer. The plan is developed after the QRC determines the injured worker to be eligible for rehabilitation services, and is filed with DLI and provided to the affected parties. The plan indicates the vocational goal, the services necessary to

achieve the goal, and their expected duration and cost.

Vocational rehabilitation waiver. A delay in an injured worker's vocational rehabilitation eligibility consultation, requested by the insurer on the DSR form and granted by DLI. DLI grants the waiver if the insurer and employer document that the employee will return to "suitable gainful employment" with the employer within 180 days of injury. If the employee is not working after 180 days, a rehabilitation consultation must be conducted.

Voluntary market. The workers' compensation insurance market associated with policies issued voluntarily by insurers. Insurers may choose whether to insure a particular employer. See Assigned Risk Plan.

Workers' Compensation Reinsurance Association (WCRA). A nonprofit entity created by law to provide reinsurance to workers' compensation insurers (including self-insureds) in Minnesota. Every workers' compensation insurer must purchase "excess of loss" reinsurance (reinsurance for losses above a specified limit per event) from the WCRA. Insurers may obtain other forms of reinsurance (such as aggregate coverage for total losses above a specified amount) through other means.

Workers' Compensation Court of Appeals (WCCA). An executive branch body that hears appeals of workers' compensation decisions from OAH. The next and final level of appeal is the Minnesota Supreme Court.

Written premium. The entire "bottom-line" premium for insurance policies initiated in a given year, regardless of when the premium comes due and is paid. Written premium is "bottom-line" in that it reflects all premium modifications in the pricing of the policies.

Appendix B

Workers' Compensation Law Changes of 1992 and 1995

This appendix summarizes those components of the 1992 and 1995 workers' compensation law changes that are relevant to this report. Other components of the 1992 and 1995 law changes, as well as law changes in other years, are not described because they are not relevant.

1992 Law Change

Indemnity Benefits

The indemnity benefit changes in the 1992 law took effect for injuries on or after October 1, 1992. The new PPD rating schedule, promulgated by DLI after clarifications of statutory authority in the 1992 law, took effect for injuries on or after July 1, 1993.

TTD and PTD minimum benefit. The minimum weekly TTD and PTD benefit became the lesser of 20 percent of the SAWW or the employee's pre-injury wage. Previously, the minimum was the lesser of 50 percent of the SAWW or the pre-injury wage, but no less than 20 percent of the SAWW.

TTD, TPD, and PTD maximum benefit. The maximum weekly TTD, TPD, and PTD benefit was increased from 100 percent of the SAWW to 105 percent of the SAWW.

Additional TPD weekly benefit limit. An additional limit was placed on the weekly TPD benefit, restricting it to no more than 500 percent of the SAWW minus the employee's weekly wage earned while receiving TPD benefits.

TPD duration limit. TPD benefits were limited to 225 weeks of total duration and to the first 450 weeks after the injury (with an exception for approved retraining).

Supplementary benefit eligibility. Supplementary benefit eligibility was limited to PTD beneficiaries. Previously, TTD beneficiaries were also eligible. The law retained the provision that (for injuries on or after October 1, 1983) eligibility begins four years after the beginning of temporary total or permanent total disability.

Cost-of-living adjustments. Cost-of-living adjustments were limited to 4 percent per year and delayed until the second anniversary of the injury. Previously, adjustments were limited to 6 percent per year and began on the first anniversary of the injury. Cost-of-living adjustments are further described in Appendix A.

PPD rating schedule. The 1992 law clarified that PPD ratings must be based on objective medical evidence, and further provided that (1) the rating schedule must be reviewed periodically to determine whether any omitted impairments should be included, and must be amended accordingly; (2) the schedule may contain zero ratings for minor impairments; and (3) an impairment must be rated exclusively according to the categories in the schedule or, if it is not in the schedule, according to the most similar condition in the schedule. DLI promulgated a new permanent impairment rating schedule reflecting these provisions, effective for injuries on or after July 1, 1993. The department devised the schedule with the intent of following a pre-existing statutory provision that total PPD benefits should remain the same, to the extent possible, as under the old schedule.

The old schedule had assigned ratings primarily on the basis of diagnoses and surgeries performed. The new schedule relies less on these factors and more on objective findings of functional impairment and clinical test results. Thus, some cases that would have received a

positive rating under the old schedule because of a diagnosis or surgery do not receive such a rating under the new schedule if the condition has completely resolved with no remaining functional impairment. The new schedule contains more zero-rated categories than the old schedule, but also some positively rated categories for impairments not in the old one.

Medical Services and Fees

Maximum medical fees. The 1992 law froze maximum medical fees from October 1992 through September 1993 at the previous year's level and provided for a relative-value fee schedule for non-inpatient-hospital services with a 15 percent overall payment reduction. The new fee schedule took effect in December 1993. Annual adjustments in the new schedule are based on growth in the SAWW (without the cap that applies to benefit adjustments), rather than on growth in medical charges as they had been previously.

Medical treatment parameters. The law required DLI to institute medical treatment parameters. An emergency rule took effect for one year on May 18, 1993, and a permanent rule took effect on January 4, 1995.

Certified managed care organizations (CMCOs). The law allowed employers and insurers to require workers (with certain exceptions) to obtain medical care for work injuries from providers in a CMCO network. CMCOs are certified by DLI on the basis of statutory criteria. They began to be used early in 1993.

Other Provisions

Second-injury reimbursement. The 1992 law ended SCF reimbursement of insurers (including self-insured employers) for subsequent ("second") injuries to the same worker, effective for subsequent injuries on or after July 1, 1992.

Insurance policy deductibles. The law required all insurers, including the Assigned Risk Plan, to offer deductibles in workers' compensation policies. Under deductible provisions, employers directly bear costs up to the deductible amount (through reimbursements to insurers) in exchange for a reduced premium.

Fraud. The law required DLI to establish a unit to investigate fraudulent and other illegal practices of health care providers, employers, insurers, attorneys, employees, and others. It also stipulated that knowingly misrepresenting or concealing information in order to receive workers' compensation benefits to which a person is not entitled is theft punishable as a criminal offense.

Safety committees. The law required all private and public employers with more than 25 employees, and smaller employers in high-hazard industries, to establish and use joint labor-management safety committees.

Insurer safety consultation services. The law required insurers to offer safety consultation services to their insured employers.

Vocational rehabilitation. The vocational rehabilitation system was modified so that eligibility for services is determined in a consultation (by a qualified rehabilitation consultant) only at the request of the employee, the employer (or insurer), or DLI. For this purpose, the insurer must notify DLI when temporary total disability is likely to exceed 13 weeks, but no later than 90 days from the injury. Previously, the injured worker had to be referred into the vocational rehabilitation system after 30 days of lost work time for back injuries and after 60 days of lost work time for all other injuries.

Attorney fees. Effective for fee determinations on or after July 1, 1992, all claimant attorney fees related to the same claim became cumulative (with some exceptions) and were limited to 25 percent of the first $4,000 and 20 percent of the next $60,000 of disputed benefits awarded, not to exceed $13,000 except by petition. Previously, claimant attorney fees were limited to 25 percent of the first $4,000 and 20 percent of the next $27,500 of disputed benefits awarded, not to exceed $6,500 except by petition. The 1992 law change also introduced a limit on defense attorney costs of $13,000 per claim, with exceptions by petition.

Mandated 16 percent rate reduction. The law prohibited insurers from increasing their filed rates from April 1, 1992 until October 1, 1992, mandated a 16 percent filed rate reduction effective October 1, 1992, and prohibited filed

rate increases from that date until April 1, 1993, at which time insurers were again free to file rate increases.

1995 Law Change

Indemnity benefits

The following provisions took effect for injuries occurring on or after October 1, 1995.

TTD minimum benefit. The minimum weekly TTD benefit was fixed at $104, not to exceed the employee's pre-injury wage. Previously, the minimum was 20 percent of the SAWW, not to exceed the pre-injury wage; 20 percent of the SAWW would have been $101 as of October 1, 1995.

TTD, TPD, and PTD maximum benefit. The maximum weekly TTD, TPD, and PTD benefit was fixed at $615. Previously, the maximum was 105 percent of the SAWW; this amount would have been $530.25 as of October 1, 1995.

TTD duration limit. TTD benefits were limited to a total of 104 weeks (regardless of when paid), with an exception for approved retraining.

PPD benefits. The higher tier of the two-tier PPD benefit schedule was eliminated. Previously, a PPD beneficiary received either "impairment compensation" (IC) or "economic recovery compensation" (ERC). The IC benefit was equal to the impairment rating (in percentage points) times a scheduled amount per rating point, with increasing amounts per point for higher ratings. The ERC benefit depended on both the impairment rating and the pre-injury wage, and was substantially higher than the IC benefit. If the employee received a "suitable job" offer, they received the IC benefit, paid in a lump-sum if they accepted the offer or in the same weekly amounts and intervals as TTD if they did not. If the employee did not receive a "suitable job" offer, they received the ERC benefit, paid in the same weekly amounts and intervals as TTD. The 1995 law eliminated ERC and provided for all PPD benefits to be determined under the previous impairment compensation schedule, which has been fixed since 1984, and to be paid in the same weekly amounts and intervals as TTD.

Supplementary benefits and PTD minimum benefit. Supplementary benefits, available only to PTD beneficiaries after the 1992 law change, were repealed, and the PTD minimum weekly benefit was raised to 65 percent of the SAWW. In contrast with supplementary benefits, the new minimum (1) is available to all PTD beneficiaries regardless of the amount of time since the first day of total disability, and (2) is subject to the offset provision along with the remainder of the PTD benefit.[50] Under the offset provision, after $25,000 of PTD benefits have been paid, the weekly PTD benefit is reduced by the amount of any other government disability benefits for the same disability and by the amount of any social security retirement or survivor benefits.

PTD eligibility threshold. The law required that for PTD eligibility, the injured worker must have (1) a 17 percent permanent impairment rating, (2) a 15 percent impairment rating if he or she is at least 50 when injured, or (3) a 13 percent impairment rating if he or she is at least 55 when injured and has not completed high school or obtained an equivalency certificate.

PTD benefit termination. The law provided that PTD benefits end at age 67 under a rebuttable presumption of retirement.

Cost-of-living adjustment. Cost-of-living adjustments were limited to 2 percent per year and delayed until the fourth anniversary of the injury. Previously, adjustments were limited to 4 percent per year and delayed until the second anniversary of the injury. Cost-of-living adjustments are further described in Appendix A.

Other Provisions

Attorney fees. The provisions allowing claimant and defense attorney costs to be paid above the statutory limits by petition were removed. In 1999, the Minnesota Supreme Court ruled that the claimant attorney fee limits were unconstitutional because with the removal of the exception provision, they were absolute and thus

[50]This interpretation has been upheld by the Workers' Compensation Court of Appeals (Vezina v. Best Western and Shelton v. National Painting and Sandblasting, July 28, 2000) and is on appeal to the state Supreme Court.

infringed on the authority of the judicial branch to oversee attorneys.[51] In 2000, the Workers' Compensation Court of Appeals applied this ruling to defense attorney fees.[52]

[51] Irwin v. Surdyk's Liquor, 599 N.W.2d 132 (Minn. 1999), September 2, 1999.

[52] Tucker v. Plymouth Plumbing, 60 W.C.D. 160, (May 25, 2000).

Appendix C

Data Sources and Estimation Procedures

Figure 2.1

Number of paid claims. The annual number of indemnity claims for injury years 1984-1999 is tabulated from the Department of Labor and Industry (DLI) claims database. As with insurance data, the number of indemnity claims for any given injury year in the department data increases, or "develops," over time, because for some claims it may take months or even years for the department to receive data, particularly payment data, to identify the claim as an indemnity claim. For this reason, the tabulated numbers are adjusted to reflect expected development in each year's number of claims after the time of tabulation. This is done using development factors derived from historical rates of growth in the number of identified indemnity claims for each injury year.

For example, in Figure 2.1, the developed number of indemnity claims for injury year 1999 is 34,300 (rounded to the nearest hundred). This is equal to the tabulated number as of October 1, 2000, 30,939, times the appropriate development factor, 1.1085.

The development factors for data through injury year 1999 cover a period of 16 years, because the department database begins with injury year 1983. Therefore, the injury year data are currently developed to a 16-year maturity. Because the developed number for any injury year is an estimate of the ultimate number, it is always subject to revision.

The annual number of medical-only claims is estimated by applying the ratio of medical-only to indemnity claims for insured employers to the total number of indemnity claims. (This assumes that the ratio is the same for insured and self-insured employers.) The MWCIA, through special tabulations, provides this ratio by injury year for compatibility with the injury year indemnity claims numbers. The ratio of medical-only to indemnity claims was not yet available for 1999, and so the medical-only and total paid claims numbers could not be estimated for that year.

Paid claims per 100 Full-Time-Equivalent Workers. The number of paid claims is the number described above. The number of full-time-equivalent (FTE) workers covered by workers' compensation is estimated as total nonfederal Unemployment Insurance (UI) covered employment (from the Department of Economic Security) times average annual hours per employee (from the annual survey of occupational injuries and illnesses, conducted jointly by the U.S. Bureau of Labor Statistics and state labor departments) divided by 2,000 (annual hours per full-time worker). Nonfederal UI covered employment is used because there are no data on workers' compensation covered employment.

Figure 2.2

Pure premium in Panel A is from the Minnesota Workers' Compensation Reinsurance Association (WCRA). (WCRA uses pure premium as the basis for reinsurance premium.) Paid indemnity claims in Panel B are from the DLI claims database. The percentages are taken from undeveloped claim counts. Using undeveloped rather than developed claim counts has little effect on the percentages, because the number of indemnity claims develops at nearly the same rate for the different insurance arrangements.

Figure 2.5

Total cost. For insured employers, total cost is computed as written premium adjusted for deductible credits, minus paid policy dividends. Written premium and paid dividends for the voluntary market are obtained from the Department of Commerce. Written premium for

the Assigned Risk Plan (ARP) is obtained from the Park Glen National Insurance Company, the Plan Administrator. (There are no policy dividends in the ARP.)

Written premium is adjusted upward by the amount of premium credits granted with respect to policy deductibles, in order to reflect that portion of cost for insured employers that falls below deductible limits. Premium credit data through policy year (PY) 1998 came from the MWCIA. A figure was estimated for 1999 by assuming that the ratio of premium credits to written premium for the voluntary market was the same for that year as for 1998. When the actual amount becomes available for 1999, that year's total cost figure will be revised.

For self-insured employers, the primary component of estimated total cost is pure premium from the WCRA. A second component is administrative cost, estimated as 10 percent of pure premium. The final component of estimated cost for self-insureds is the total assessment paid to the Special Compensation Fund (SCF), net of the portion used to pay claims from defaulted self-insureds, since this is already reflected in pure premium. The assessment amount used includes (among other things) the portion used to reimburse self-insureds for supplementary and second-injury benefits, because pure premium does not include these costs.

The time reference of the total cost estimate is mixed. Written premium and deductible credits for insured employers are by policy year. Policy dividends for insured employers are by year paid. Pure premium for self-insured employers is by year earned, meaning the payment year of the payroll from which the pure premium is computed. The SCF assessment for self-insureds is by year incurred.

Cost per $100 of covered payroll. Total cost is the figure just described. Total workers' compensation covered payroll is computed as the sum of insured payroll, from the MWCIA (annual *Ratemaking Reports* through PY 1997, unpublished data for PY 1998), and self-insured payroll, from the WCRA. Insured payroll was not yet available for 1999, and self-insured payroll is not available for 1980-1989. These figures were estimated by extrapolating from actual figures using the trend in nonfederal UI-covered payroll (from the Department of Economic Security) and the trend in the relative insured and self-insured shares of total pure premium (from the WCRA). Payroll through 1995 is adjusted for the former paid-leave exclusion by dividing by 0.9. Insured payroll is by policy year and self-insured payroll by payment year, so that the resulting total payroll figure has the same time reference as total cost and is thus comparable with it.

Figures 3.1-3.4

Figures 3.1-3.4 use claims and loss data from the MWCIA's *2001 Minnesota Ratemaking Report*, Appendix 7. These data come from insurance company reports on policy experience for the voluntary market and the ARP, which show claims numbers and indemnity and medical losses by claim type plus payroll for individual policies. The experience for each policy is updated through a series of five annual reports. The loss data in each report reflect losses paid to date plus claim-specific reserves not yet paid. With each succeeding report, the claims, loss, and payroll data are updated.

The claims and loss data in the *Ratemaking Report* are shown as of each report for each policy year. Fifth-report data were available only through policy year 1993. Data for policy years 1994-1997 were developed to a fifth-report basis using the "selected" development factors in Appendix 7, which reflect average rates of development for recent policy years.

Figures 3.1 and 3.2 present data by claim type. For PTD cases, and to a lesser degree for death cases, the number of claims and their average cost (at any given maturity) fluctuate a great deal from one policy year to the next because of small numbers of cases. Also, the amount of development between first and fifth report, and especially between first and third report, varies a great deal between policy years. Therefore, in order to produce more meaningful comparisons among claim types, the data on PTD and death claims were averaged over policy years 1989-1995. 1996 and 1997 were excluded in order to avoid the relatively large variability in development between first and third report.

Figures 3.1 and 3.4 present average indemnity and medical costs per claim. Without

adjustment for wage growth, any given average claim cost means different things in different years because its magnitude is different relative to the cost of labor. In order to standardize the cost of benefits over time, average benefit costs per claim are adjusted for wage growth. The number for each year is multiplied by the ratio of the 1999 statewide average weekly wage (SAWW) to the SAWW for that year, using the SAWW reflecting wages paid during the respective year. Thus, the numbers for all years reflect average benefits per claim expressed in 1999 wage dollars.

Figures 3.5 and 3.6

Figures 3.5 and 3.6 use data from insurer financial reports, supplied by the MWCIA. The financial reports, which cover only the voluntary market, provide different measures of premium and of indemnity and medical losses by accident year and policy year. Updates are provided through a series of annual reports for each accident year and policy year.

Following the procedure in MWCIA's *Ratemaking Report,* Figures 3.5 and 3.6 are based on paid losses since these are more stable than incurred losses, which include reserves. Paid losses are developed to an eighth-report basis using the selected development factors in the *2001 Ratemaking Report,* and then converted to an incurred basis using the selected ratios of paid to incurred losses at eighth report, from the *Ratemaking Reports* of different years. The resulting figures thus represent incurred losses at eighth report.

Payroll data for Figure 3.6 are from insurer reports on policy experience, which include the ARP. The MWCIA supplies payroll for the voluntary market only, for comparability with the financial report data. Since the payroll data are by policy year, averages are taken between appropriate policy years for use with accident year loss data.

Figures 4.1-4.4 & 4.6-4.9

These figures are based on indemnity claims and payment data from the DLI claims database. The data are tabulated by injury year. In similar fashion to insurance data, the tabulated claims, payment, and duration numbers for any given injury year develop over time, as described with respect to the department indemnity claims data in Figure 2.1. Therefore, the tabulated numbers are adjusted to reflect the expected development of these numbers after the time of tabulation, using the same technique as for the indemnity claims in Figure 2.1. Because the developed number for any injury year is an estimate of the ultimate number, it is always subject to revision.

Figures 4.4, 4.7, and 4.8 present average indemnity costs per claim. These numbers are adjusted for average wage growth, for the same reasons and in the same manner as the numbers in Figures 3.1 and 3.4. Thus, the numbers for all years reflect average benefits per claim expressed in terms of 1999 wage dollars. Figures 4.1 and 4.9 also use data from sources other than the DLI claims database. The estimated number of FTE workers covered by workers' compensation, used in Figure 4.1, is the same as in Figure 2.1. The total covered payroll figure used in Figure 4.9 is the same as in Figure 2.5 with a slight modification. In Figure 2.5, the insured component of payroll is on a policy year basis. For Figure 4.9, policy year insured payroll is converted to a payment year basis for comparability with the indemnity benefit figures, which are by injury year. This is done by taking averages of appropriate policy years.

Figures 5.2, 5.4, 6.3, 6.4, 6.9-6.11, & 6.12

In all of these figures, the underlying data develop over time for each injury year (Figures 5.2, 5.4, 6.3, 6.4, and 6.12) or for each dispute-filed year (Figures 6.9-6.11). If nothing is done about this issue, the trends are biased because the data for each succeeding year are progressively less mature. Chapters 2-4 handle this issue by presenting "developed" statistics—projections of what the numbers will be at full maturity. The derivation of developed statistics is described briefly in connection with Figure 2.1. Figures 6.4 and 6.12 deal with the development issue in the same manner as Chapters 2-4, by presenting developed statistics, which is possible because DLI has been tabulating the numbers concerned at regular intervals in order to calculate development factors.

Figures 5.2, 5.4, 6.3, and 6.9-6.11 handle the development issue differently because DLI has

not been tabulating the numbers concerned at regular intervals and is thus unable to produce the associated developed statistics. For Figures 5.2, 6.3, and 6.9-6.11, the item being counted (e.g. *Disability Status Reports* or *Rehabilitation Consultation Reports* in Figure 5.2) is only counted within a fixed interval from a specified start point for each claim (e.g. 32 months from the injury date in Figure 5.2). The resulting number is not fully mature, but is of uniform maturity for all years presented because of the fixed observation period for each claim.

In this technique, choosing the observation period to be applied to each claim is a balancing act. A longer observation period produces statistics of greater maturity, while a shorter observation period allows more recent data to be included (e.g. more recent injury years in Figures 5.2 and 6.3). The observation period for each figure is chosen to be long enough to encompass most of the activity concerned, so that the resulting statistics are close to reflecting full maturity. The observation period is long enough to allow activity for the most recent case to be observed until the point when data were extracted from the DLI database for analysis. For example, in Figure 6.9, two years and five months is the amount of time from the last dispute filing in the analysis period (December 31, 1997) to June 2000, when the data were extracted for analysis.

In Figure 5.4, the fixed-observation-period technique was not used because of data-quality issues with the form-filed dates for vocational rehabilitation plans. Consequently, the numerator and denominator in the percentages in Figure 5.4 are the number of claims with plans filed to date and the number of paid indemnity claims identified to date, respectively. The result is that for more recent injury years, both numerator and denominator are progressively less mature so that the errors tend to offset each other in the overall percentage.