Minnesota
Workers' Compensation System Report, 2018

DEPARTMENT OF LABOR AND INDUSTRY

Minnesota Workers' Compensation System Report, 2018

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Executive summary

This report, part of an annual series, presents trend data beginning with 1998 about several aspects of Minnesota's workers' compensation system: claims, benefits 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 and to offer explanations, where possible, for recent developments.

This is the last *Workers' Compensation System Report* whose statistics will be unaffected by the COVID-19 pandemic. In future reports, injury rates for 2020 and beyond, and costs for 2020 and prior injuries, will reflect effects from COVID-19 (see p. 2).

These are the report's major findings.[1]

Chapter 2 — Claims, benefits and costs: overview

- There were 4.1 paid claims per 100 full-time-equivalent workers in 2018, down 51 percent from 1998.
- Adjusting for average wage growth, both medical and indemnity benefits per insured claim rose rapidly between 1998 and 2003, but showed little net change thereafter. Adjusted indemnity and medical benefits per claim were 4 and 5 percent higher in 2017 than in 2003, respectively. The average cost of a 2017 workers' compensation claim was $11,120 for medical and indemnity benefits combined (including vocational rehabilitation).
- Relative to total payroll, indemnity benefits were down 29 percent between 1998 and 2018, while medical benefits were down 28 percent. These trends are the net results of a falling claim rate and higher (wage-adjusted) benefits per claim. Medical and indemnity benefits (including vocational rehabilitation) amounted to $.71 per $100 of payroll for 2018.
  - By counteracting the increase in benefits per claim, the falling claim rate has brought benefits per $100 of payroll to historically low levels, which has in turn affected pure premium rates and system cost per $100 of payroll.
- Pure premium rates for 2020 were down 36 percent from 1998, in a consistent downward trend.
- The total cost of Minnesota's workers' compensation system was an estimated $1.61 billion for 2018, or $1.02 per $100 of payroll.
  - Total system cost per $100 of payroll follows a multi-year cycle in line with a nationwide insurance pricing cycle; however, extrapolating from comparable periods in the cycle indicates a decrease of 34 percent over 20 years.
- In 2018, on a current-payment basis, the three largest components of total workers' compensation system cost were medical benefits (35 percent), insurer expenses (31 percent) and indemnity benefits other than vocational rehabilitation (29 percent).

Chapter 3 — Claims, benefits and costs: detail

- After adjusting for average wage growth, per paid indemnity claim:
  - total disability benefits (temporary total and permanent total disability benefits combined) per paid indemnity claim, after rising then falling from 1998 through 2004 (having risen as much as 26 percent

[1] See Glossary in Appendix A (p. 67). The time periods involved in these findings vary because of data availability; because statistics by injury year, which are projected to full maturity, may not be sufficiently stable for the most recent years; and because statistics on dispute resolution timelines, which are given by year of dispute filing, need to be given sufficient time for the dispute resolution process to play out.

by 2002) have remained relatively stable since;
- temporary partial disability benefits fell 21 percent from 1998 to 2017;
- permanent partial disability benefits fell 60 percent from 1998 to 2018; and
- settlement benefits rose 80 percent from 1998 to 2016, with a majority of this increase occurring by 2008 (settlement benefits may include indemnity, medical and vocational rehabilitation benefits); this happened through an increase in the proportion of claims with these benefits and an increase in adjusted average settlement benefits where they were paid.

Chapter 4 — Vocational rehabilitation

- In vocational rehabilitation (VR):
  - the participation rate increased from 16 to 24 percent of paid indemnity claimants from 1998 to 2018 (with signs of levelling off since 2013); and
  - after adjusting for average wage growth, the average cost of VR services per participant for injury year 2018 ($8,620) was just 2 percent above 1998 but 19 percent below its 2007 peak.
- Vocational rehabilitation accounted for an estimated 2.8 percent of total workers' compensation system cost in 2018.

Chapter 5 — Disputes and dispute resolution

Because the Office of Administrative Hearings (OAH) has a court case-management system (C-Track) separate from the Department of Labor and Industry (DLI) workers' compensation data system, the Workers' Compensation System Report currently includes dispute-resolution statistics from DLI but not OAH. As DLI and OAH work together to enhance data-sharing between C-Track and the new DLI system (Work Comp Campus[2]), future reports may also include OAH dispute-resolution statistics.

- For 2016, 21 percent of filed indemnity claims are projected to have one or more disputes of any type.
  - The rates of all component dispute types (claim petitions, discontinuance disputes, medical disputes and rehabilitation disputes) increased substantially between 1998 and 2008.
  - Since 2008, dispute rates have largely leveled off.
  - The percentage of paid indemnity claims with claimant attorney involvement rose from 17 to 24 percent from 1998 to 2016.
- Concerning dispute resolution at DLI:
  - From 1998 to 2019, the certification rate for medical and vocational rehabilitation disputes combined dropped from 69 to 46 percent.
  - About 31 percent of certified medical disputes and 26 percent of certified rehabilitation disputes were referred to OAH 2019.
  - About 59 percent of the dispute resolution proceedings at DLI for 2017 to 2019 were mediations; the remaining 41 percent were administrative conferences.
  - About 86 percent of resolutions at DLI for 2017 through 2019 were by agreement — most of these by informal intervention but a significant number (22 percent of DLI resolutions) by agreement via conference or mediation. The remaining 14 percent of DLI resolutions were decision-and-orders. For medical and rehabilitation requests received in 2018, the median times from the request to a decision-and-order (where this occurred) were 63 and 36 days, respectively. The interval for rehabilitation requests was substantially less than for 2011 and earlier years. The relatively low interval for rehabilitation requests reflects DLI's response to the 2013 law change requiring that most rehabilitation conferences be scheduled within 21 days of the request.

[2] "Campus" stands for "Claims Access and Management Platform User System."

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1

Introduction

Nationwide, workers' compensation claim rates have declined throughout the past 20 years. During the same period, indemnity and medical benefits per claim have increased more than wages. However, indemnity benefits have been largely stable relative to wages since 2001, and medical benefits since 2008.[3] In Minnesota, indemnity and medical benefits per claim rose rapidly relative to wages from 1998 to 2003, but have shown little net change during the ensuing period. A falling claim rate in Minnesota has counteracted increases in total benefits per claim, causing both indemnity and medical benefits per $100 of payroll to be substantially lower in 2018 than in 1998.

This report, part of an annual series, presents trend data beginning with 1998 about several aspects of Minnesota's workers' compensation system: claims, benefits and costs; vocational rehabilitation; and disputes and dispute resolution.[4] Its purpose is to describe statistically the current status and direction of workers' compensation in Minnesota and to offer explanations, where possible, for recent developments.

Chapter 2 presents overall claim, benefit and cost data. Chapter 3 provides more detailed data about indemnity (monetary) benefit trends. Chapters 4 provides statistics about vocational rehabilitation. Chapter 5 deals with disputes and dispute resolution. *To understand the major findings at the beginning of each chapter, readers may need to refer to the background material immediately following the major findings in question.*

Appendix A presents a glossary. Appendix B summarizes portions of the 2000, 2008, 2011, 2013 and 2018 law changes relevant to trends in this report. Appendix C describes data sources and estimation procedures.

Developed statistics — Many statistics in this report (from both the Department of Labor and Industry (DLI) and the insurance industry) are presented by injury year ("accident year" in the insurance data), insurance policy year or vocational rehabilitation plan-closure year.[5] An issue with injury year and policy year data is that the originally reported numbers for more recent years are not mature because of longer claims and reporting lags. In this report, all injury year and policy year data is "developed" to a uniform maturity to produce statistics that are comparable over time. The technique uses "development factors" (projection factors) based on observed data for older claims.[6]

The injury year and policy year statistics that result from this technique are projections of what the actual numbers will be when all claims are complete and all data is reported. Therefore, the statistics for any given injury year (especially for more recent years) are subject to change when more recent data becomes available.

DLI periodically reviews the developed statistics to determine their stability over time and, thus,

[3] National Council on Compensation Insurance, "State of the Workers' Compensation Line 2018," www.ncci.com/LearningCenter/Pages/LC_Webinar_SOTL Presentation-2019.aspx.

[4] "Benefits" in this report refers to monetary benefits, medical benefits and vocational rehabilitation benefits. "Costs" refers to the combined costs of these benefits and other costs such as insurer expenses. Using 1998 as the base year gives a 20-year observation window through 2018.

[5] Definitions in Appendix A.

[6] Development occurs in vocational rehabilitation (VR) plan-closure year data because a claim may have more than one VR plan and the plan-closure year statistics are computed for all plans combined, categorized by the closure year of the last plan. See Appendix C for more detail about the claim development techniques for the injury year, policy year and plan-closure year data.

their suitability for publication. Through this process, DLI has determined that some of the developed statistics from its own data for the most recent injury years are not sufficiently stable for publication. As a result, some of the trends from DLI developed statistics in this report extend only through 2016 or 2017.

Adjustment of cost data for wage growth — Some figures in this report present average or median costs per claim or per vocational rehabilitation (VR) plan over time. As wages and prices grow, a given cost in dollar terms represents a progressively smaller economic burden from one year to the next. If the total cost of indemnity and medical benefits grows at the same rate as wages, there is no net change in cost as a percentage of total payroll. Therefore, all costs per claim or per VR plan are adjusted for average wage growth. The adjusted trends reflect the extent to which cost growth per claim or per VR plan exceeds (or falls short of) average wage growth.[7]

COVID-19 — This the last *Workers' Compensation System Report* for several years whose statistics will be unaffected by the COVID-19 pandemic. The data for this report was harvested from the DLI database and other sources before the pandemic appeared. COVID-19 will affect claim rates and costs for 2020 and beyond. Claim rates will be affected not only by COVID claims but also by changes in the composition of employment with respect to industry and occupation (as layoffs affect some sectors more than others) and remote work. COVID-19 will also affect cost development for prior injuries as injured workers have more difficulty returning to work in the economic downturn or have fears of doing so in a potentially dangerous work environment. The effect on cost development will be reflected in data for the next system report which DLI will harvest from its own system in the fall of 2020 for injuries through 2019. This will affect some of the developed statistics in the current report for injuries through 2018, as actual claim development occurs differently from what is predicted by development factors computed from pre-COVID-19 data. In other words, the updates in these statistics in future reports (which would occur in any event) will include effects from COVID-19.

[7] See Appendix C for computational details.

2

Claims, benefits and costs: overview

This chapter presents overall indicators of the status and direction of Minnesota's workers' compensation system.

Major findings

- The total number of paid claims dropped 51 percent relative to the number of full-time-equivalent workers from 1998 to 2018 (Figure 2.1).
- Adjusting for average wage growth, both medical and indemnity benefits per insured claim rose rapidly between 1998 and 2003, but showed little net change thereafter. Adjusted indemnity and medical benefits per claim were 4 and 5 percent higher in 2017 than in 2003, respectively (Figure 2.3).
- Relative to total payroll, indemnity benefits were down 29 percent between 1998 and 2018, while medical benefits were down 28 percent (Figure 2.4). These trends are the net results of a falling claim rate and higher (wage-adjusted) benefits per claim.
    - By counteracting the increase in benefits per claim, the falling claim rate has brought benefits per $100 of payroll to historically low levels, which has in turn affected pure premium rates and system cost per $100 of payroll.
- Pure premium rates for 2020 were down 36 percent from 1998 (Figure 2.6).
- The total cost of Minnesota's workers' compensation system relative to payroll follows a multi-year cycle, but a comparison of similar points in the cycle indicates a long-term decrease that extrapolates to 34 percent over a 20-year period (Figure 2.7).
- In 2018, on a current-payment basis, the three largest components of total workers' compensation system cost were medical benefits (35 percent), insurer expenses (31 percent) and indemnity benefits other than vocational rehabilitation (29 percent) (Figure 2.8).
- Benefits per $100 of payroll, pure premium rates and system cost per $100 of payroll all decreased at roughly 2 percent a year over the past 20 years. This is to be expected given that the claim rate decreased by roughly 4 percent annually and wage-adjusted cost per claim increased by about 2 percent annually during the same period. That is, the downward pressure exerted by the falling claim rate on cost relative to payroll was partly offset by the increase in wage-adjusted cost per claim (Figure 2.9).

Background

The following basic information is necessary for understanding the figures in this chapter. See the glossary in Appendix A for more detail.

Workers' compensation benefits and claim types

Workers' compensation provides three basic types of benefits.

- ***Monetary benefits*** compensate the injured or ill worker (or surviving dependents) for wage loss, permanent functional impairment or death. These benefits are often called ***indemnity benefits.*** They are considered in detail in Chapter 3.
- ***Medical benefits*** consist of reasonable and necessary medical services and supplies related to the injury or illness.

- ***Vocational rehabilitation (VR) benefits*** consist of a variety of services to help eligible injured workers return to work. With very few exceptions, only workers receiving monetary benefits receive VR benefits. VR benefits are counted as indemnity benefits in insurance data but are counted separately in DLI data. They are considered in detail in Chapter 4.

Claims with indemnity benefits (including VR benefits in insurance data) are called ***indemnity claims****;* these claims typically have medical benefits also. The remainder of claims are called ***medical-only claims*** because they only have medical benefits.

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 insure through the Assigned Risk Plan, the insurance program of last resort administered by the Minnesota Department of Commerce. Employers meeting certain financial requirements, either individually or through a group, may self-insure.

Rate-setting

Minnesota is an open-rating state for workers' compensation, meaning that rates are set by insurance companies rather than by a central authority. In determining their rates, insurance companies start with "pure premium rates" (also known as "advisory loss costs"). These rates represent expected losses (indemnity and medical) per $100 of payroll for some 600 payroll classifications. The Minnesota Workers' Compensation Insurers Association (MWCIA) — Minnesota's workers' compensation data service organization and rating bureau — annually calculates the pure premium rates for the next year from insurers' most recent pure premium (computed from prior pure premium rates and payroll) and indemnity and medical losses. Insurance companies add their own expenses to the pure premium rates and make other modifications in determining their own rates (which are filed with the Department of Commerce).

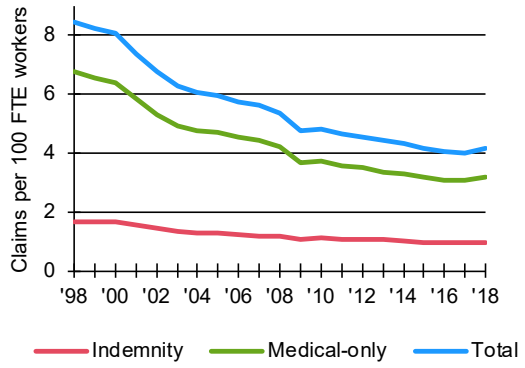
The pure premium rates are calculated from data for two to three years prior, which produces a lag between benefit trends and pure premium rate changes.

Claim rates

A starting point for understanding trends in the Minnesota workers' compensation system is the claim rate — the number of paid claims per 100 full-time-equivalent (FTE) workers. Claim rates declined nearly continually from 1998 to 2018.

- In 2018, there were:
  - 0.97 paid indemnity claims per 100 FTE workers, down 41 percent from 1998;
  - 3.2 paid medical-only claims per 100 FTE workers, down 53 percent from 1998; and
  - 4.1 total paid claims per 100 FTE workers, down 51 percent from 1998.
- The rates of indemnity, medical-only and total claims reached low-points in 2016 and 2017; in 2018 they were about the same as in 2015.
- Since 2009, indemnity claims have made up 23 to 24 percent of all paid claims, with medical-only claims constituting the remaining 76 to 77 percent. The indemnity claim percentage relative to total claims represents an increase from 20 percent for 1998.
- Since 1998, the total claim rate has followed a similar downward trend to Minnesota's total reportable case rate from the Survey of Occupational Injuries and Illnesses.[8]
- Because of the falling claim rate, the number of claims has fallen despite an increase in the number of covered workers. In 2018, there were an estimated 22,200 paid indemnity claims and 94,000 total paid claims, down 33 percent and 44 percent, respectively, from 1998.
- The falling claim rate has direct negative effects on benefits per $100 of payroll (Figure 2.4) and workers' compensation system cost per $100 of payroll (Figure 2.7).

Figure 2.1 Paid claims per 100 full-time-equivalent workers, injury years 1998-2018 [1]



Injury year	Indemnity claims	Medical-only claims	Total claims
1998	1.65	6.8	8.4
2005	1.28	4.7	6.0
2014	1.02	3.3	4.3
2015	.96	3.2	4.1
2016	.94	3.1	4.0
2017	.95	3.1	4.0
2018	.97	3.2	4.1

1. Developed statistics from DLI data and other sources (see Appendix C).

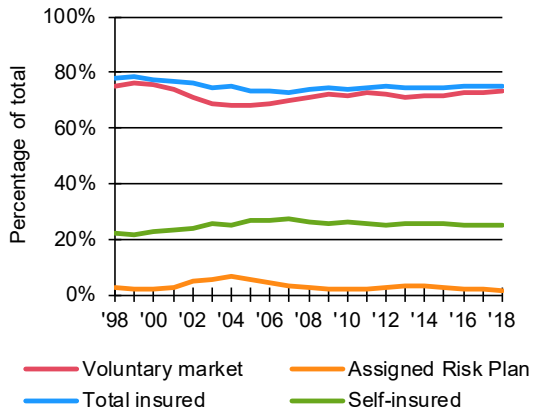
[8] This survey (the "SOII") is conducted jointly by state agencies and the U.S. Bureau of Labor Statistics. See www.dli.mn.gov/our-areas-service/research-and-statistics/survey-occupational-injuries-and-illnesses for Minnesota injury and illness rates from the SOII and for a description of the SOII itself.

Insurance arrangements

The voluntary market share of the workers' compensation insurance market is somewhat higher than the low-point reached in the mid-2000s.

- The voluntary market share of paid indemnity claims was about 73 percent in 2018, representing an increase from the low-point of 68 percent for 2005 but down from the 76-percent mark reached in 1999.
- The self-insured share, 25 percent for 2018, has ranged from 25 to 27 percent since 2003; its low-point was 22 percent for 1999.
- The Assigned Risk Plan share has generally ranged from 2 to 3 percent for the period shown, with a high-point of 6.4 percent in 2004 and a low-point of 1.5 percent in 2018.
- These shifts are at least partly due to changes in insurance costs shown in Figure 2.7. Cost increases in the voluntary market tend to cause shifts from the voluntary market to both the Assigned Risk Plan and self-insurance, while cost decreases in the voluntary market tend to cause shifts in the opposite direction.
- These figures have generally followed similar trends to market-share percentages based on pure premium.[9]

Figure 2.2 Market shares of different insurance arrangements as measured by paid indemnity claims, injury years 1998-2018 [1]



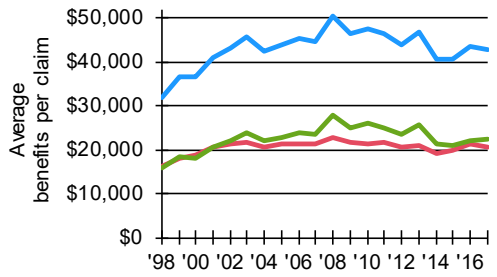
Injury year	Voluntary market	Assigned Risk Plan	Total insured	Self-insured
1998	75.1%	2.5%	77.6%	22.4%
1999	76.3	2.0	78.3	21.7
2004	68.4	6.4	74.7	25.3
2005	68.1	5.4	73.5	26.5
2007	70.0	2.9	72.9	27.1
2014	71.5	3.0	74.4	25.6
2015	71.7	2.9	74.6	25.4
2016	72.7	2.2	74.9	25.1
2017	73.0	1.8	74.8	25.2
2018	73.4	1.5	74.9	25.1

1. Data from DLI.

[9] The pure premium figures used in this comparison are from the Minnesota Workers' Compensation Reinsurance Association.

Figure 2.3 Average indemnity and medical benefits per insured claim, adjusted for wage growth, policy years 1998-2017 [1]

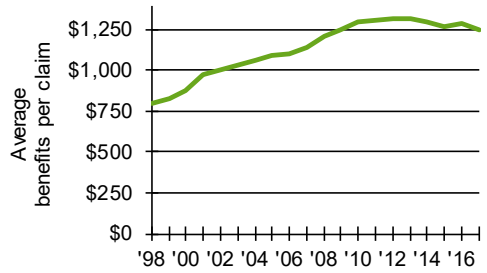
A: Indemnity claims



Policy year	Indemnity benefits [2]	Medical benefits	Total benefits
1998	$16,290	$15,640	$31,930
2003	21,660	23,800	45,470
2008	22,750	27,790	50,540
2015	19,910	20,760	40,660
2016	21,360	22,020	43,380
2017	20,590	22,270	42,860

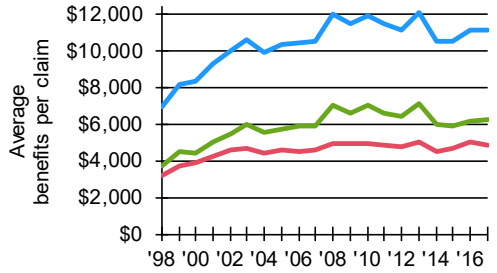
Indemnity [2] Medical Total

B: Medical-only claims



Policy year	Medical benefits	Total benefits
1998	$800	$800
2003	1,030	1,030
2008	1,210	1,210
2015	1,270	1,270
2016	1,290	1,290
2017	1,250	1,250

C: All claims



Policy year	Indemnity benefits [2]	Medical benefits	Total benefits
1998	$3,230	$3,740	$6,970
2003	4,690	5,960	10,640
2008	4,970	7,010	11,980
2015	4,700	5,870	10,570
2016	5,020	6,150	11,170
2017	4,890	6,240	11,120

Indemnity [2] Medical Total

1. Developed statistics from MWCIA data (see Appendix C). Includes the voluntary market and Assigned Risk Plan; excludes self-insured employers. Benefits are adjusted for average wage growth between the respective year and 2018. 2017 is the most recent year available.
2. Since these statistics are from insurance data, indemnity benefits include vocational rehabilitation benefits.

Benefits per claim

Adjusting for average wage growth, both medical and indemnity benefits per insured claim rose rapidly between 1998 and 2003, but showed little net change after 2003.

- For all claims combined, in 2017 relative to 2003:
  - average indemnity benefits were up 4 percent;
  - average medical benefits were up 5 percent; and
  - average total benefits were up 5 percent.
- For all claims combined, average indemnity benefits were 51 percent higher in 2017 than in 1998; average medical benefits were 67 percent higher; and average total benefits were 59 percent higher.

One factor here is that in 2016, Minnesota changed its method of paying for workers' compensation inpatient hospital services. The change was from a charge-based system to a "DRG" system based on Medicare's Inpatient Prospective Payment System.[10] DLI estimated that in its first year, this change reduced inpatient hospital cost by 9 to 16

[10] See Appendix A, p. 68 and Appendix B, p. 76.

percent and total workers' compensation medical cost by 1.3 to 2.3 percent, relative to what these costs would otherwise have been.[11] This finding is relevant for panels A and C of Figure 2.3 (medical-only claims are unlikely to involve hospitalizations). In these panels, average medical benefits per claim rose between policy years 2015 and 2016 after adjusting for average wage growth. The DLI finding implies that these per-claim benefits would have risen by a larger amount had it not been for the switch to the new inpatient reimbursement system.

- The benefits per claim shown in Figure 2.3 have a direct effect on benefits per $100 of payroll (Figure 2.4) and thereby on workers' compensation system cost per $100 of payroll (Figure 2.7).

[11] DLI, *Minnesota Workers' Compensation DRG Evaluation Report,* January 2018, pp. 25-27.

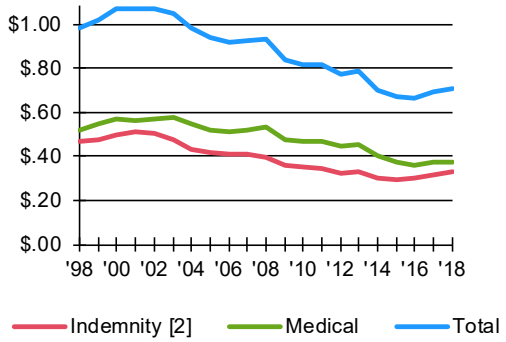
Benefits relative to payroll

Relative to total payroll, indemnity and medical benefits are now substantially lower than in 1998.

- During the 20 years shown, relative to payroll, indemnity and medical benefits reached peaks in 2001 and 2003, respectively; both fell almost continually thereafter.
- In 2018 as compared to 1998, relative to payroll:
  - indemnity benefits were 29 percent lower;
  - medical benefits were 28 percent lower; and
  - total benefits were 28 percent lower.
- These changes are the net result of a decreasing claim rate (Figure 2.1) and higher indemnity and medical benefits per claim (Figure 2.3).
- The falling benefits per $100 of payroll have a direct negative effect on pure premium rates (Figure 2.6) and thereby on workers' compensation system cost per $100 of payroll (Figure 2.7).
- Certain recent medical reimbursement and indemnity benefit changes are relevant in viewing Figure 2.4:
  - On Jan. 1, 2016, a new system took effect for reimbursing hospitals for inpatient services. DLI estimated that this would reduce workers' compensation medical costs by 1.3 to 2.3 percent relative to what they otherwise would have been.
  - On Oct. 1, 2018, a new system took effect for reimbursing ambulatory surgical centers for their services. DLI estimated that this would reduce workers' compensation medical costs by 2.1 percent relative to what they would otherwise have been.
  - For injuries on or after Oct. 1, 2018, indemnity benefit changes took effect that by DLI's estimate, raised total indemnity benefits by 2.0 percent relative to what they otherwise would have been.[12]
  - A two-percent difference in medical or indemnity benefits for 2018 would translate to about 7/10 of a cent per $100 of payroll.

[12] For details on all of these changes, see Appendix A (pp. 67 and 68) and Appendix B (pp. 76 and 77).

Figure 2.4 Benefits per $100 of payroll in the voluntary market, accident years 1998-2018 [1]



Accident year	Indemnity benefits [2]	Medical benefits	Total benefits
1998	$.47	$.52	$.98
2001	.51	.56	1.07
2003	.47	.58	1.05
2014	.30	.40	.70
2015	.30	.38	.67
2016	.30	.36	.66
2017	.32	.38	.70
2018	.33	.37	.71

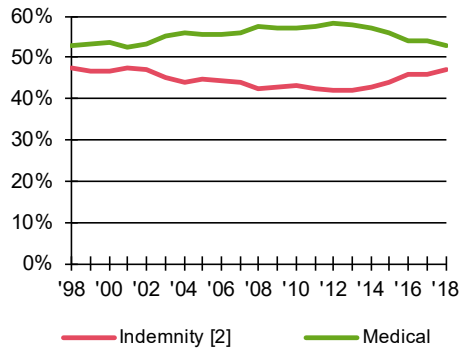
1. Developed statistics from MWCIA data (see Appendix C). Excludes self-insured employers, the Assigned Risk Plan and those benefits paid through DLI programs (including supplementary and second-injury benefits).
2. Includes vocational rehabilitation benefits.

Indemnity and medical shares

The medical share of total benefits rose from 1998 to 2012 but has fallen since 2012. The increase through 2012 occurred primarily from 2001 to 2008.

- Reflecting the data in Figure 2.4:
  - medical benefits rose from a 53-percent share of total benefits in 1997 to 58 percent in 2012, but fell back to 53 percent by 2018; and
  - indemnity benefits fell to 42 percent by 2012, but increased to 47 percent by 2018.

Figure 2.5 Indemnity and medical benefit shares in the voluntary market, accident years 1998-2018 [1]



Accident year	Indemnity benefits [2]	Medical benefits
1998	47.3%	52.7%
2008	42.5	57.5
2012	41.8	58.2
2015	44.1	55.9
2016	46.0	54.0
2017	45.9	54.1
2018	47.1	52.9

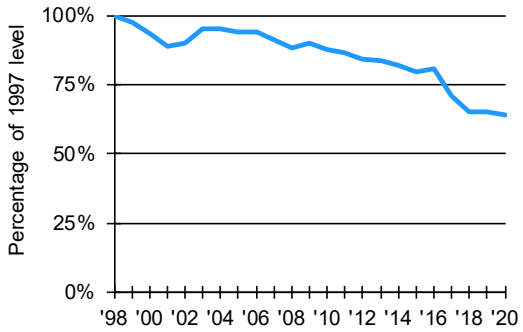
1. Note 1 in Figure 2.4 applies here.
2. Includes vocational rehabilitation benefits.

Pure premium rates

Pure premium rates have decreased by more than 35 percent since 1998.

- The 2020 rates were down 36 percent from 1998.
- The rates fell 19 percent between 2015 and 2020 alone.[13]
- Pure premium rates, determined by the Minnesota Workers' Compensation Insurers Association (MWCIA), are ultimately driven by the trend in benefits relative to payroll (Figure 2.4). However, this occurs with a lag of two to three years because the pure premium rates for any period are derived from prior premium and loss experience.[14]
- Insurers in the voluntary market consider the pure premium rates, along with other factors, in determining their own rates, which in turn affect total system cost (Figure 2.7).

Figure 2.6 Average pure premium rate as percentage of 1997 level, 1998-2020 [1]



Effective year	Percentage of 1998
1998	100.0%
2008	88.5
2016	80.9
2017	70.8
2018	65.4
2019	65.0
2020	64.3

1. Data from the MWCIA. Pure premium rates represent expected indemnity and medical losses per $100 of covered payroll in the voluntary market (see p. 4). Since the MWCIA has been increasing the loss maturity in its calculations for the past few years, the rates shown here are adjusted to reflect a constant loss maturity (see Appendix C, p. 79).

[13] A "percent change" means the proportionate change in the initial percentage, not the number of percentage points of change. For example, a change from 10 percent to either 5 or 15 percent is a 50-percent change.

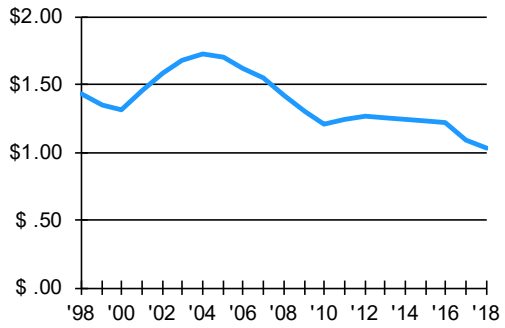
[14] Changes in pure premium rates directly following law changes also include anticipated effects of those law changes as estimated by the MWCIA.

System cost

The total cost of Minnesota's workers' compensation system per $100 of payroll has followed a cycle since 1998, with low-points reached in 2000 and 2010 and a high-point in 2004. Amid the annual fluctuations, the long-term trend is downward.

- The total cost of the system was an estimated $1.02 per $100 of payroll in 2018, below the previous low point reached in 2010.
- The total cost of workers' compensation in 2018 was an estimated $1.61 billion.
- These figures reflect benefits (indemnity, medical and vocational rehabilitation) plus other costs such as insurance brokerage, underwriting, claim adjustment, litigation, and taxes and assessments. They are computed primarily from actual premium for insured employers (adjusted for costs under deductible limits) and experience-modified pure premium for self-insured employers (see Appendix C).
- These figures partly reflect trends in pure premium rates (Figure 2.6) and in insurance expenses relative to payroll; however, they also reflect a nationwide insurance pricing cycle, in which the ratio of premium to insurance losses varies over time.[15]
- The average system cost per $100 of payroll was $1.54 for 1998 to 2007 and $1.25 for 2008 to 2017 — two comparable cycles 10 years apart; this indicates a long-term downward trend with a 19-percent decrease between the two cycles. Extrapolated to 20-years, this would be a 34-percent decrease.[16] This is very close to the average pure premium rate decrease of 36 percent for 1998 to 2020, which is to be expected because insurers use the pure premium rates as the starting point for determining their own premium rates.

Figure 2.7 System cost per $100 of payroll, 1998-2018 [1]



	Cost per $100 of payroll
1998	$1.42
2000	1.31
2004	1.72
2010	1.21
2014 [2]	1.24
2015 [2]	1.23
2016 [2]	1.21
2017 [2]	1.09
2018 [2]	1.02

1. Data from several sources (see Appendix C). Includes insured and self-insured employers.
2. Subject to revision.

[15] One indicator of this pricing cycle is the nationwide ratio of employers' cost of workers' compensation insurance (primarily reflecting premium) to workers' compensation benefits paid, computed by the National Academy of Social Insurance (NASI). This ratio varied from 1.41 for 1993 to 1.22 for 1999, 1.59 for 2006, 1.25 for 2010 and 1.56 for 2016 (*Workers' compensation: benefits, costs, and coverage,* NASI, October 2019, Table 15, www.nasi.org/sites/default/files/nasiRptWkrsComp201710_31%20final(1).pdf). Relevant data also appears in National Council on Compensation, "2020 State of the Line Guide," at www.ncci.com/SecureDocuments/SOLGuide2020.html, and "Understanding What Drives the Underwriting Cycle," May 2014, at www.workcompwire.com/2014/06/new-ncci-report-understanding-what-drives-the-underwriting-cycle/. The latter also explores several theories about the causes of the underwriting cycle.

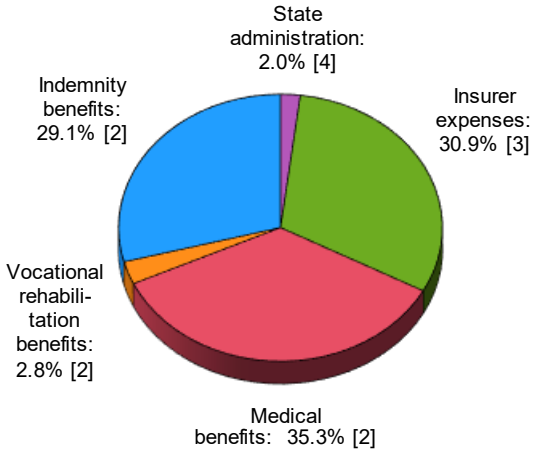
[16] $(1 - .19)^2 - 1 = -.34$.

System cost components

The largest share of total workers' compensation system cost goes to medical benefits.

- In 2018, on a current-payment basis, medical benefits accounted for an estimated 35 percent of total system cost, followed by insurer expenses at 31 percent and indemnity benefits other than vocational rehabilitation at 29 percent.
- Total benefit payments accounted for 67 percent of total system cost.
- As shown in Figure 2.5, the indemnity and medical shares of total benefits have varied over time.
- As shown in Figure 3.12, state agency administrative cost has declined relative to payroll since 1998.

Figure 2.8 System cost components, 2018 [1]



1. Estimated by DLI with data from several sources. These numbers are on a current-payment basis and therefore differ from others estimated on an injury year or policy year basis. Because these numbers follow a multi-year cycle, they are averaged over the most recent complete cycle (see Appendix C).
2. Indemnity and medical benefits include those reimbursed through DLI programs (including supplementary and second-injury benefits) and those paid through insurance guaranty entities (the Minnesota Insurance Guaranty Association and the Self-Insurers' Security Fund). Indemnity benefits include those claimant attorney costs that are paid out of indemnity benefits. Indemnity benefits here exclude vocational rehabilitation.
3. Includes underwriting, brokerage, claim adjustment, litigation, general operations, taxes, fees and profit. Litigation costs include defense attorney costs plus those claimant attorney costs that do not come out of indemnity benefits but are paid by the insurer. Excludes assessments on insurers and self-insurers because the benefits and state administration financed with those assessments are counted elsewhere in the figure.
4. Includes costs of workers' compensation functions in DLI, the Office of Administrative Hearings, the Workers' Compensation Court of Appeals and the Department of Commerce, as well as the state share of the cost of Minnesota's OSHA program. Excludes costs of benefit payments reimbursed by the Special Compensation Fund (such as supplementary and second-injury benefits). Costs are net of fees for service.

Annual rates of change in key measures

At earlier points in this chapter, it is pointed out that (1) benefits per $100 of payroll depend on the total paid claim rate and average benefits per claim (as adjusted for wage growth) and (2) the average pure premium rate and system cost per $100 of payroll depend on benefits per $100 of payroll. Figure 2.9 summarizes these relationships by presenting average annual rates of change for these key measures of the workers' compensation system.

- As expected, the average annual rate of change in benefits per $100 of payroll (-2.2 percent) is roughly equal to the annual rate of change in the total paid claim rate (-3.9 percent) plus the annual rate of change in average benefits per claim (adjusted for wage growth) (+2.0 percent). [17] This relationship is only approximate because the three measures are computed from different data sources.
- The average pure premium rate has changed at about the same average annual rate (-2.0 percent) as benefits per $100 of payroll (-2.2 percent). This is because the MWCIA computes the pure premium rate change every year essentially by comparing historical pure premium to total claim costs (or "benefits").
- System cost per $100 of payroll has changed at about the same average annual rate (-2.1 percent) as the average pure premium rate (-2.0 percent). This is because system cost is primarily a premium-based number and individual insurers use the pure premium rates as the starting point in establishing their own premium rates each year.

Figure 2.9 Annual rates of change in key measures

Measure	Beginning period	Ending period	Average annual rate of change [1]
Total paid claim rate [2]	1998-2000	2016-2018	-3.9%
Average benefits per claim [3]	1998-2000	2015-2017	+2.0%
Benefits per $100 of payroll [4]	1998-2000	2016-2018	-2.2%
Average pure premium rate [5]	1998-2000	2018-2020	-2.0%
System cost per $100 of payroll [6]	1998-2007	2008-2017	-2.1%

1. The average annual rate of change is computed from the average value for the beginning period to the average value for the ending period. The number of years used in computing the rate of change is from the mid-point of the the beginning period to the mid-point of the ending period.
2. From Figure 2.1.
3. From Panel C of Figure 2.3. Includes indemnity and medical-only claims. Adjusted for average wage growth.
4. From Figure 2.4.
5. From Figure 2.6.
6. From Figure 2.7. Because system cost per $100 of payroll follows an approximately ten-year cycle, the beginning and ending periods for this measure are ten years apart. Also, because of the variabiility of the cyclical pattern from one cycle to the next, the averages are taken over all ten years in each cycle.

[17] -3.9% + 2.0% = -1.9%, which is approximately equal to -2.2%. The exact relationship is as follows: claims per 100 FTE workers (claim rate) x benefit dollars per claim (average claim cost) ÷ wage dollars per worker (wage-growth adjustment) = benefit dollars per 100 wage dollars (benefits per $100 of payroll).

3

Claims, benefits and costs: detail

This chapter presents additional data about workers' compensation claims, benefits and costs. Most of the data provides further detail about the indemnity claim and benefit information in Chapter 2. Some of the data relates to costs of special benefit programs and state agency administrative functions. Some developed statistics by injury year from DLI data are not given all the way through 2018 because the most recent years are not always sufficiently stable (see Chapter 1).

Major findings

- The average amount of time an injured worker received total disability benefits for injury year 2017 was 30 percent longer than for 1998 but about the same as for 2003; the average duration of temporary partial disability (TPD) showed no long-term trend (Figure 3.3).

- After adjusting for average wage growth:

  - Settlement benefits per paid indemnity claim rose 80 percent from 1998 to 2016, with a majority of the increase occurring by 2008 (Figure 3.10). This resulted from a 42-percent increase in the proportion of claims with settlement benefits (Figure 3.2) and a 26-percent increase in the wage-adjusted average amount of these benefits where they were paid (Figure 3.9).
  - Total disability benefits (temporary total and permanent total disability benefits combined) per paid indemnity claim, after rising then falling from 1998 through 2004 (having risen as much as 26 percent by 2002) have remained relatively stable since (Figure 3.10). This resulted from an increase in average total disability duration during the early part of the period (Figure 3.3).
  - Temporary partial disability (TPD) benefits per paid indemnity claim fell 21 percent from 1998 to 2017 (Figure 3.10). These resulted from declines in the proportion of claims with TPD benefits (Figure 3.2) and in the wage-adjusted average weekly amounts of these benefit (Figure 3.3).
  - Permanent partial disability (PPD) benefits per paid indemnity claim fell by 60 percent from 1998 to 2018 (Figure 3.10). This occurred primarily because, under the fixed PPD benefit schedule, PPD benefits became smaller relative to rising wages. Other factors were (1) a decline in the percentage of claims with PPD benefits, (2) a decline in the average PPD impairment rating and (3) increases in statutory benefit levels in 2000 and 2018, but these were relatively minor.

- DLI indemnity benefits per paid indemnity claim and per $100 of payroll follow closely their counterparts computed from MWCIA data (Figures 3.11 and 3.12).

- The Special Compensation Fund assessment rate fell from 28.0 percent of paid indemnity benefits in 1998 to 14.4 percent in 2019 and 2020 (Figure 3.15). This reflects decreasing liabilities under the supplementary and second-injury benefit programs (Figure 3.13) and decreasing state agency administrative costs relative to payroll (Figure 3.14).

Background

The following basic information is necessary for understanding the figures in this chapter. See the glossary in Appendix A for more detail.

Benefit types

- ***Temporary total disability (TTD)*** — A weekly wage-replacement benefit paid to an employee who is temporarily unable to work because of a work-related injury or illness, equal to two-thirds of pre-injury earnings subject to a weekly minimum and maximum and a duration limit. TTD ends when the employee returns to work (or when certain other events occur).

- ***Temporary partial disability (TPD)*** — A weekly wage-replacement benefit paid to an injured employee who has returned to work at less than his or her pre-injury earnings, generally equal to two-thirds of the difference between current earnings and pre-injury earnings and subject to weekly maximum and duration provisions.

- ***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 an impairment rating that ranges from 0 to 100 percent. The benefit is derived by multiplying the impairment rating by a statutory benefit amount per rating point that increases for higher ratings. The total benefit is unrelated to the workers' pre-injury earnings.

- ***Permanent total disability (PTD)*** — A weekly wage-replacement benefit paid to an employee who sustains one of the severe work-related injuries specified in law or who, because of a work-related injury or illness in combination with other factors, is permanently unable to secure gainful employment (subject to a permanent impairment rating threshold).

- ***Settlement benefits*** — Indemnity, medical and/or vocational rehabilitation benefits included in a claim settlement — "stipulation for settlement" — agreed to by the parties to a claim. A settlement usually occurs in a dispute, and settlement benefits are usually paid in a lump sum.

- ***Total disability*** — The combination of TTD and PTD benefits. Most figures in this chapter — those presenting DLI data — use this category because the DLI data does not distinguish between TTD and PTD benefits.

Counting claims and benefits: insurance data and department data

The first figure in this chapter uses insurance data from the MWCIA; all other figures use DLI data; two figures present DLI and MWCIA data side-by-side.

In the insurance data, claims and benefits are categorized 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 (TTD or TPD), PPD, PTD and death. For example, a claim with medical, TTD and PPD payments is a PPD claim. PPD claims also include claims with temporary disability benefits lasting more than 130 weeks and claims with settlements. In the insurance data, all benefits on a claim are counted in the one claim-type category into which the claim falls.

In the DLI data, by contrast, each claim may be counted in more than one category, depending on the types of benefits paid. For example, the same claim may be counted among claims with total disability benefits and among claims with PPD benefits.

Costs supported by Special Compensation Fund assessment

DLI, through its Special Compensation Fund, levies an annual assessment on insurers and self-insured employers to finance (1) costs in DLI, the Office of Administrative Hearings and other state agencies to administer the workers' compensation system and (2) certain benefits for which DLI is responsible. Primary among these benefits are ***supplementary benefits*** and ***second-injury benefits.*** Although these programs were eliminated in the 1990s, benefits must still be paid on prior claims (see Appendix A). The assessment (or benefits and administrative costs paid with the assessment) is included in total workers' compensation system cost (Figures 2.7 and 2.8).

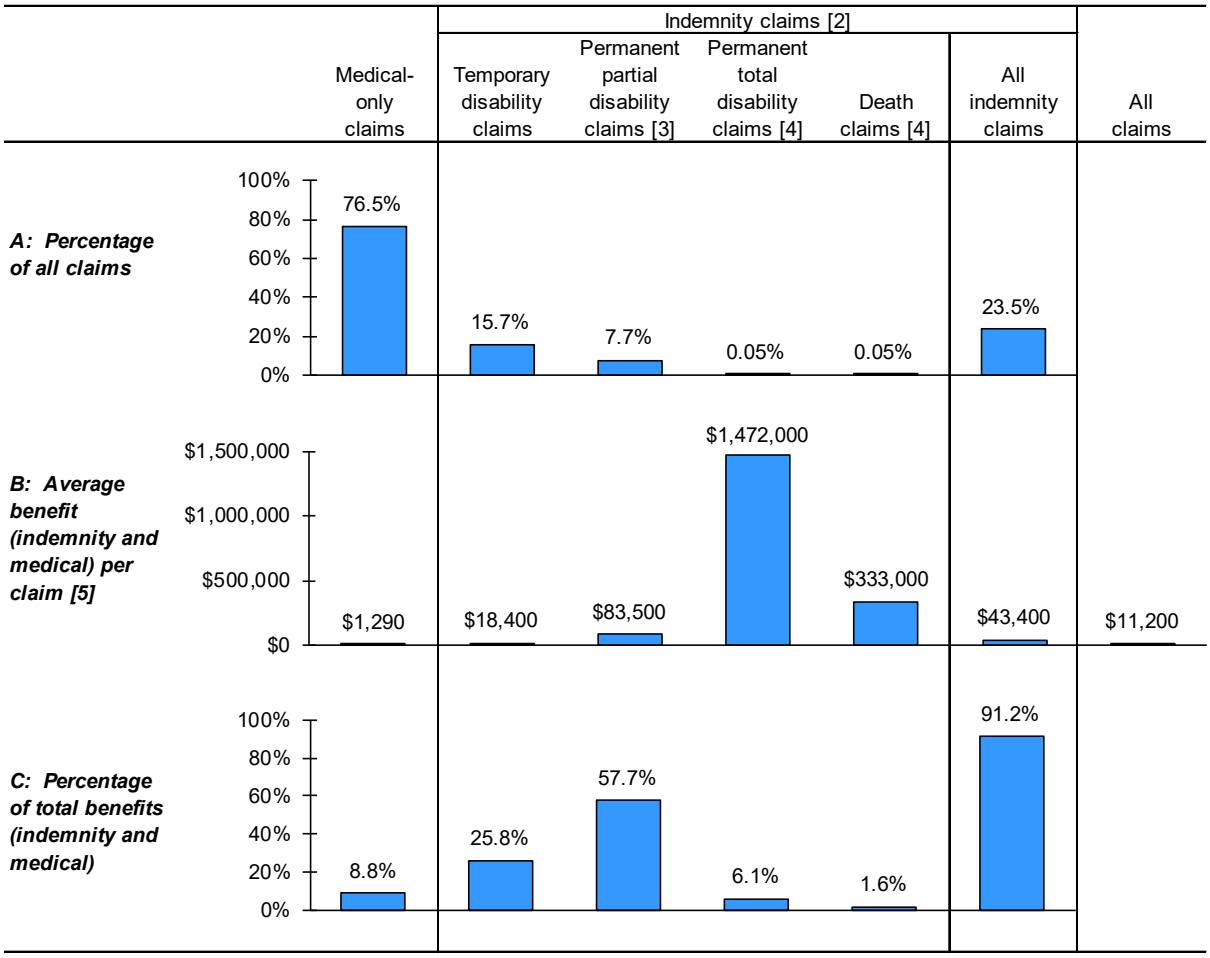
Benefits by claim type

In the insurance data, each claim type contributes to total benefits paid depending on its relative frequency and average benefit. PPD claims account for the majority of total benefits.

As indicated in the introduction to this chapter, in the insurance data, the benefits for each claim type include all types of benefits paid on that type of claim. PPD claims, for example, may include medical, TTD, TPD and vocational rehabilitation benefits in addition to PPD benefits.

- PPD claims accounted for 58 percent of total benefits in 2016 (panel C in Figure 3.1) through a combination of moderately low frequency (panel A) and substantially higher-than-average benefits per claim (panel B).
- Other claim types contributed smaller amounts to total benefits because of very low frequency (PTD and death claims) or relatively low average benefits (medical-only and temporary disability claims).
- Indemnity claims were 24 percent of all paid claims, but accounted for 91 percent of total benefits because they have far higher benefits on average than medical-only claims ($43,400 vs. $1,290 for 2016). Medical-only claims accounted for 77 percent of claims but only 9 percent of total benefits.

Figure 3.1 Benefits by claim type for insured claims, policy year 2016 [1]



1. Developed statistics from MWCIA data (see Appendix C). 2016 is the most recent year available.
2. Indemnity claims consist of all claim types other than medical-only. These claims typically have both indmenity and medical benefits.
3. PPD claims in the insurance data, and as shown here, include any claims with settlements or with temporary disability lasting more than 130 weeks, in addition to claims with permanent partial disability.
4. Because of large annual fluctuations, data for PTD and death claims is averaged over 2012 to 2016 (see Appendix C).
5. Benefit amounts in panel B are adjusted for overall wage growth between 2016 and 2018.

Claims by benefit type

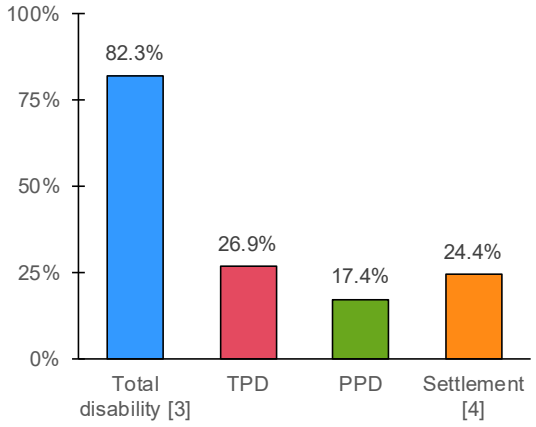
A majority of paid indemnity claims have total disability benefits, but only minorities of claims receive the other benefit types. The proportion with settlement benefits has shown a substantial increase since 1998; the proportion with PPD benefits has fallen significantly since 2008 after rising gradually before that time; the proportions with total disability and TPD benefits have changed by smaller amounts.

- For injury year 2016 (the most recent year available for all four benefit types), 82 percent of paid indemnity claims received total disability benefits. The proportion receiving the other benefit types shown ranged from 17 to 27 percent.
- The percentage of claims with settlement benefits rose 42 percent from 1998 to 2016.[18] This is related to a similar increase in the dispute rate (Figure 5.1).
- The percentage of claims with PPD benefits rose gradually from 1997 to 2008 but fell 27 percent between that year and 2018.
- The percentage of claims with total disability benefits has remained quite stable throughout the period, with minimal yearly fluctuations.
- The percentage of claims with TPD benefits has fallen gradually during the period.

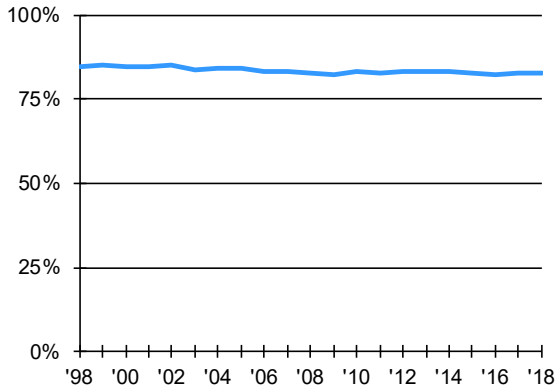
[18] See note 13 on p. 10.

Figure 3.2 Percentages of paid indemnity claims with selected types of benefits, injury years 1998-2018 [1]

A. Four benefit types, injury year 2016 [2]



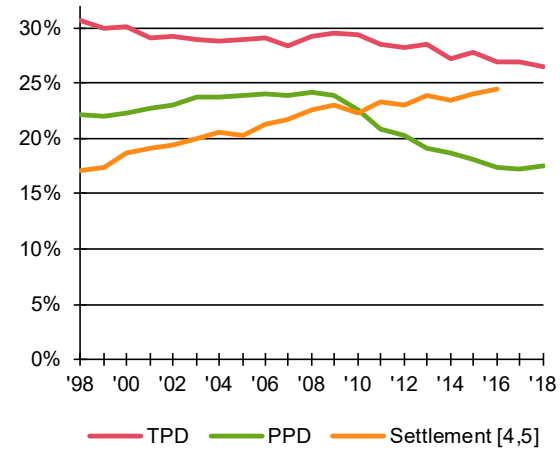
C. Total disability benefits [3], injury years 1998-2018



B. Table of values

Injury year	Total disabilty [3]	TPD	PPD	Settle-ment [4,5]
1998	84.4%	30.6%	22.2%	17.2%
2006	83.3	29.1	24.0	21.2
2014	83.5	27.3	18.7	23.5
2015	82.8	27.8	18.2	24.0
2016	82.3	26.9	17.4	24.4
2017	82.6	26.9	17.2	
2018	82.9	26.4	17.6	

D. TPD, PPD and settlement benefts [4], injury years years 1998-2018



1. Developed statistics from DLI data (see Appendix C). An indemnity claim may have more than one type of benefit paid; therefore, the sum of the precentages for the different benefit types is greater than 100 percent.
2. Injury year 2016 is shown here because it is the latest year for which the values for all four benefit types are sufficiently stable (see Table of Values and note 5).
3. Total disability includes TTD and PTD.
4. Includes indemnity, medical and vocational rehabilitation components.
5. The percentages for injury years 2017 and 2018 are not shown because those statistics are not yet sufficiently stable.

Benefit duration

The average duration of total disability benefits rose significantly between 1998 and 2008, but has been stable since; the duration of TPD showed little movement, other than annual fluctuation, from 1998 to 2017.

- Total disability duration averaged 11.8 weeks for 2017, 30 percent above 1998. Most of this increase had occurred by 2003, and all of it by 2008.
- TPD duration averaged 15.5 weeks for 2017; it showed no discernable long-term trend for the period shown.
- The increase in total disability duration in 2008 and beyond, in comparison with earlier years, suggests an effect from the Great Recession.[19] TPD duration, however, does not show a correlation with the recession.

Weekly benefits

After adjusting for average wage growth, average weekly total disability and TPD benefits decreased between 1998 and 2018.

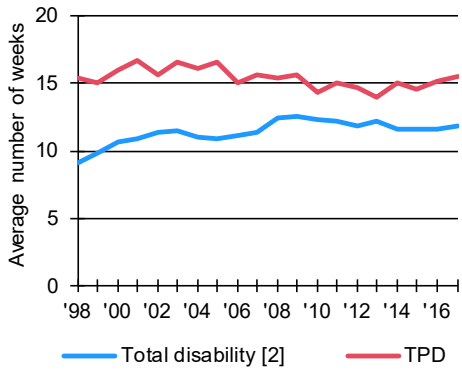
- Adjusted average weekly total disability and TPD benefits, respectively, were 10 and 9 percent lower in 2018 than in 1998.[20]
- For both benefit types, all of the decrease had occurred by 2008.

[19] For 2006 to 2011, Minnesota's annual average unemployment rate was (as a percentage, by year) 4.1, 4.7, 5.4, 8.0, 7.4 and 6.5; for the same years, total unemployment-insurance-covered employment was (in millions) 2.68, 2.69, 2.68, 2.57, 2.56 and 2.60. Data from the Minnesota Department of Employment and Economic Development (www.mn.gov/deed/data).

The limit on TTD duration was raised from 104 weeks to 130 weeks under a law change effective Oct. 1, 2008 (see Appendix B). DLI estimated this change would raise average TTD duration by 2.0 percent. Given that this provision took effect in the last quarter of 2008, this would have caused a 0.5-percent increase in duration from 2007 to 2008. This accounts for about 5 percent of the actual 10-percent increase in average total disability duration from 2007 to 2008.

[20] *Unadjusted* average weekly benefits rose during the period examined, but less rapidly than the statewide average weekly wage, causing *adjusted* average weekly benefits to decline as shown here.

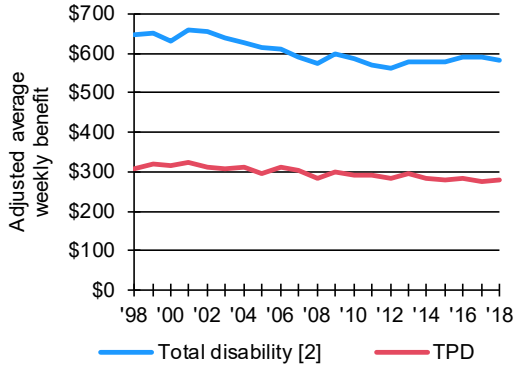
Figure 3.3 Average duration of wage-replacement benefits, injury years 1998-2017 [1]



Injury year	Average weeks: Total disability [2]	TPD
1998	9.1	15.4
2003	11.5	16.6
2008	12.4	15.3
2014	11.6	15.0
2015	11.6	14.5
2016	11.6	15.2
2017	11.8	15.5

1. Developed statistics from DLI data (see Appendix C). Statistics for 2018 are not shown because they are not yet sufficiently stable
2. Total disability includes TTD and PTD.

Figure 3.4 Average weekly wage-replacement benefits, adjusted for wage growth, injury years 1998-2018 [1]



Injury year	Total disability [2]	TPD
1998	$648	$308
2008	575	283
2014	578	283
2015	577	278
2016	591	282
2017	589	276
2018	581	281

1. Developed statistics from DLI data. Benefit amounts are adjusted for average wage growth between the respective year and 2018. See Appendix C.
2. Total disability includes TTD and PTD.

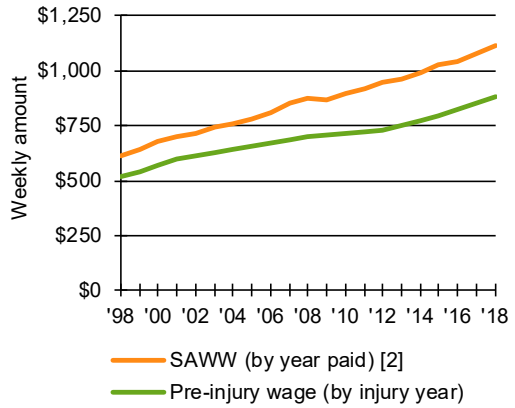
Growth of average pre-injury wage in comparison with statewide average weekly wage

The pre-injury wage of injured workers is the primary basis for weekly wage-replacement benefits. Examining the trend in pre-injury wages relative to the statewide average weekly wage (SAWW) helps to understand the trends in adjusted average weekly benefits in Figure 3.4.

The average pre-injury wage of injured workers (APIW) rose more slowly than the SAWW from 1998 to 2018.

- While the SAWW rose 81 percent over this period, the APIW rose 69 percent (Figure 3.5).
- The APIW is less than the SAWW because injuries are more common in lower-wage jobs.
- Because of its relatively slow rate of increase, the APIW fell from 85 percent of the SAWW in 1998 to 79 percent in 2018 (Figure 3.6).[21]
- Because average weekly benefits (Figure 3.4) are adjusted for growth in the SAWW, a change in the APIW relative to the SAWW will cause a change in these adjusted benefits, other things equal. The decrease in the APIW relative to the SAWW explains about 65 percent of the estimated decrease in adjusted average weekly benefits for total disability (for 1997 through 2017) and 58 percent for TPD.[22]

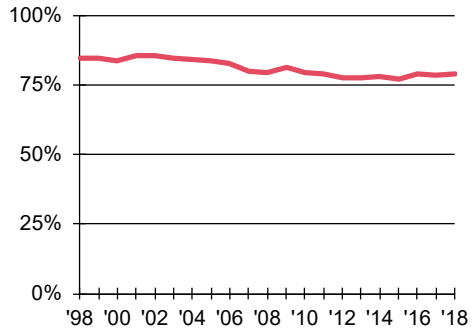
Figure 3.5 Statewide average weekly wage and average pre-injury wage, injury years 1998-2018 [1]



Injury year	SAWW (by year paid) [2]	APIW (by injury year)
1998	$615	$521
2004	759	639
2011	916	724
2018	1,112	880

1. Data from DLI.
2. The statewide average weekly wage (SAWW) is shown here by the year in which the wages were paid. This makes it comparable to the pre-injury wage, which is by year of injury. By contrast, as it is used in workers' compensation benefit adjustment, the effective SAWW for the 12-month period beginning Oct. 1 of each year reflects wages paid during the prior calendar year.

Figure 3.6 Average pre-injury wage as percentage of statewide average weekly wage, injury years 1998-2018 [1]



Injury year	APIW as pctg. of SAWW
1998	84.6%
2002	85.8
2007	80.3
2012	77.5
2018	79.1

1. Data from Figure 3.5.

[21] The APIW has been declining relative to the SAWW at least since 1984, when the two were equal.

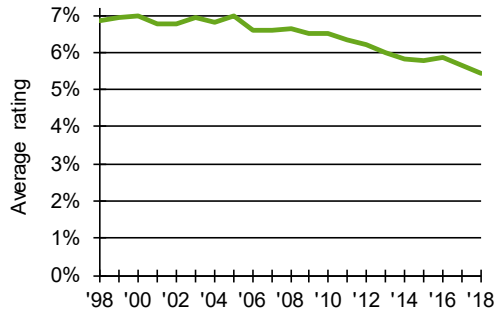
[22] Because of year-to-year fluctuations in the data, three-year averages were used to calculate the percentage of the change in adjusted average weekly benefits due to the decrease in the APIW relative to the SAWW.

Average permanent partial disability rating

The trend in the average PPD rating helps to explain the trend in average PPD benefits in Figure 3.9. The average PPD rating has fallen since 1998.

- The average rating stood at 5.4 percent for injury year 2018. This represents a 20-percent decrease from 1998.[23]
- By itself, a decrease in the average rating would decrease average PPD benefits because the PPD benefit is calculated as the rating times a statutorily specified benefit amount per rating point.[24]

Figure 3.7 Average permanent partial disability rating, injury years 1998-2018 [1]



Injury year	Average PPD rating
1998	6.8%
2005	7.0
2010	6.5
2014	5.8
2018	5.4

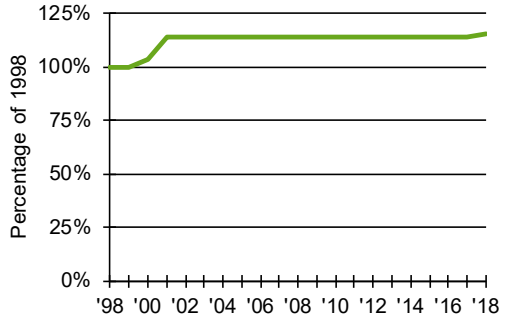
1. Developed statistics from DLI data (see Appendix C).

Average level of permanent partial disability benefit schedule

The trend in average PPD benefits in Figure 3.9 is also partly explained by the trend in the level of the PPD benefit schedule. This benefit schedule is fixed in statute but has been raised twice since 1998.

- The PPD benefit schedule was raised in 2000 and in 2018 by 14 percent (estimated) and 5 percent, respectively (see note 1 in Figure 3.8).
- As a result of these changes, the benefit schedule was higher by an estimated 15.4 percent for injury year 2018 than for injury year 1998 (see note 1 in Figure 3.8).

Figure 3.8 Average level of permanent partial disability benefit schedule as percentage of 1998, injury years 1998-2018 [1]



Injury year	Pctg. of 1998
1998	100.0%
2001	114.0
2017	114.0
2018	115.4

1. This reflects the law changes of 2000 and 2018. The 2000 law change raised PPD benefits by different proportionate amounts throughout the benefit schedule, effective for injuries on or after Oct. 1, 2000. DLI estimated that this change would increase PPD benefits by 14 percent overall. One quarter of the effect is assumed to occur for injury year 2000 and the remaining additional three-quarters for injury year 2001, with the full 14 percent felt in 2001 and later years. The 2018 law change raised PPD benefits by a uniform 5 percent throughout the benefit schedule, effective for injuries on or after Oct. 1, 2018. One quarter of the 5-percent increase is thus assumed to be felt for injury year 2018.

[23] See note 13 on p. 10.

[24] The benefit amount per rating point increases with the size of the rating (Minnesota Statutes, §176.101, subd. 2a). As a result, a given percent decrease in the average rating will tend to produce a somewhat larger percent decrease in the average benefit as more claims are in lower brackets in the schedule with lower benefit amounts per rating point.

Average benefits by type

Settlement benefits are far higher on average (where they are paid) than total disability, TPD and PPD benefits (Figure 3.9). With respect to trends, after adjusting for average wage growth, average benefits of different types have moved in widely divergent ways.

- For injury year 2016 (the most recent year with reliable data for all four benefit types shown), settlement benefits averaged about $51,000 per claim where they were paid. The other four benefit types shown averaged about $4,300 to $6,900.

- After adjusting for average wage growth:

  - average total disability benefits rose 25 percent from 1998 to 2002 and decreased slightly thereafter;
  - average TPD benefits fell 12 percent from 1998 to 2010 and have been steady since;
  - average PPD benefits fell 50 percent from 1998 to 2018; and
  - average settlement benefits rose 26 percent from 1998 to 2016.

- The trends in average total disability and TPD benefits are driven by the trends in average benefit duration and average weekly benefits.

  - Average total disability benefits increased between 1998 and 2002 because of rising duration (with average weekly benefits showing only small change) and were little-changed after 2002 because of opposing trends in duration and average weekly benefits (Figures 3.3 and 3.4).
  - The slightly falling trend in average TPD benefits occurred because of slightly falling average weekly benefits with relatively little change in duration (Figures 3.3 and 3.4).

- Adjusted average PPD benefits fell nearly continually from 1998 to 2018. This occurred primarily because the statutory PPD benefit schedule changed only twice during that period with an overall combined increase of 15.4 percent during the period concerned (Figure 3.8).[25] Under the mostly fixed schedule, PPD benefits become smaller relative to rising wages, which is reflected in adjusted average benefits.

  - As shown in Figure 3.7, the average PPD rating fell roughly 20 percent from 1998 to 2008.[26] This would produce a decrease in the average PPD benefit (unadjusted for wage growth) of roughly the same percentage.[27] The net effect of this decrease and the 15.4-percent increase in the benefit schedule (Figure 3.8) would be a predicted decrease in average (unadjusted) benefits of roughly 8 percent.[28]
  - Actual average PPD benefits, *unadjusted for average wage growth,* fell during the period by 9 percent, about as expected from the preceding calculation.
  - This decrease is only a small fraction of the 50-percent decrease in average PPD benefits *as adjusted for average wage growth* shown in Figure 3.9. Again, this decrease represents the fall in unadjusted average PPD benefits relative to rising wages. Most of the decrease in the adjusted average benefit occurred because the average wage used to adjust the average benefits grew by 81 percent from 1998 to 2018.

- Settlement benefits depend in part on the value of benefits the claimant might receive without a settlement. When considering the trend in average settlement benefits, it should be borne in mind that these benefits include medical and vocational rehabilitation benefits in addition to total disability, TPD and PPD benefits.[29]

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[25] When injury year 2019 is included in the observation period, the overall increase is 19.7 percent (1.14 x 1.05 = 1.197).

[26] See note 13 on p. 10.

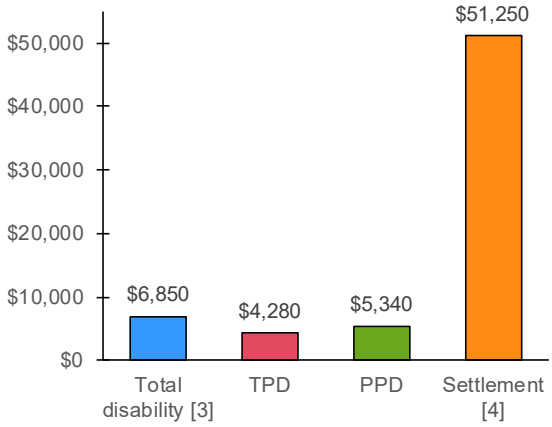
[27] See second bullet on p. 22 and note 24 on that page.

[28] (1 - .204 [the more exact decrease in the average rating]) x (1 + .154) = .919, or an 8.1-percent decrease. When the progressive nature of the PPD benefit schedule is considered, a given change in the average rating can be expected to produce a somewhat-more-than-proportionate change in the average PPD benefit.

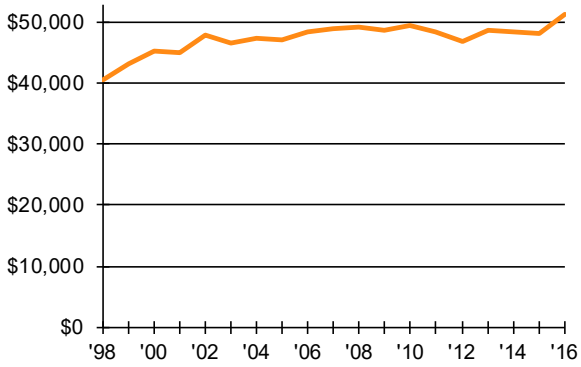
[29] Under current DLI protocols, insurers do not separate the indemnity, medical and vocational rehabilitation components of settlement awards in their reporting to DLI. Settlements rarely close out all medical benefits, but they often close out certain types of these benefits.

Figure 3.9 Average benefit by type *per claim with that benefit type,* adjusted for wage growth, injury years 1998-2018 [1]

A. Four benefit types, injury year 2016 [2]



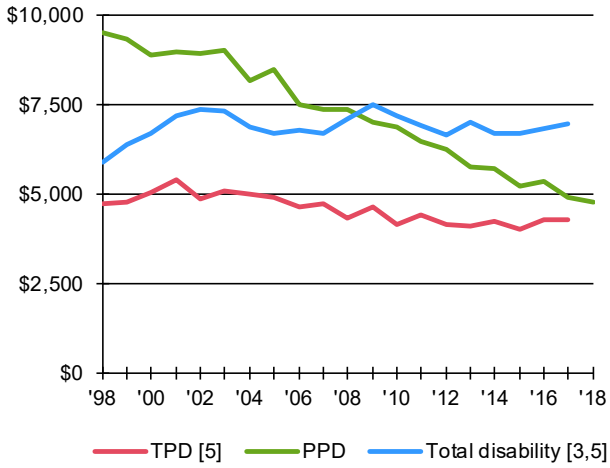
C. Settlement benefits [4], injury years 1998-2016 [5]



B. Table of values

Injury year	Total disabilty [3,5]	TPD [5]	PPD	Settle-ment [4,5]
1998	$5,900	$4,750	$9,540	$40,530
2002	7,380	4,860	8,930	47,870
2010	7,200	4,180	6,880	49,370
2014	6,720	4,250	5,710	48,550
2015	6,680	4,040	5,230	48,120
2016	6,850	4,280	5,340	51,250
2017	6,970	4,270	4,900	
2018			4,800	

D. Total disability [3], TPD and PPD benefits, injury years 1998-2018



1. Developed statistics from DLI data (see Appendix C). An indemnity claim may have more than one type of benefit paid. Benefit amounts are adjusted for average wage growth between the respective injury year and 2018.
2. Injury year 2016 is shown here because it is the latest year for which the values for all four benefit types are sufficiently stable (see Table of Values and note 5).
3. Total disability includes TTD and PTD.
4. Includes indemnity, medical and vocational rehabilitation components. The percentages for injury years 2017 and 2018 are not shown because those statistics are not yet sufficiently stable.
5. The statistics for total disability and TPD for 2018 and the statistics for settlement benefits for 2017 and 2018 are not shown because they are not yet sufficiently stable.

Benefits by type per indemnity claim

Per paid indemnity claim, settlement benefits are about twice as high as total disability benefits and far higher than TPD and PPD benefits (Figure 3.10). With respect to trends, after adjusting for average wage growth, average benefits per paid indemnity claim followed widely divergent paths.

Note: Figure 3.10 differs from Figure 3.9 in that it shows the average benefit of each type *per paid indemnity claim,* rather than *per claim with that type of benefit.* Figure 3.10 reflects the percentage of indemnity claims with each benefit type (Figure 3.2) and the average benefit amount per claim with that benefit type (Figure 3.9). For example, the $12,520 average settlement benefit per paid indemnity claim for 2016 (Figure 3.10, Panel A) is equal to the percentage of indemnity claims with settlement benefits (24.4%, Figure 3.2, Panel A) times the average settlement benefit where paid ($51,250, Figure 3.9, Panel A).

- For injury year 2016 (the most recent year with reliable data for all four benefit types shown), settlement benefits averaged about $12,500 per paid indemnity claim. Total disability was less than half that amount at $5,600, and TPD and PPD were in the neighborhood of $1,000.

- After adjusting for average wage growth:

  - total disability benefits per indemnity claim, after rising then falling from 1998 through 2004 (having risen as much as 26 percent by 2002), have remained stable since;
  - TPD benefits per indemnity claim fell 21 percent from 1998 to 2017;
  - PPD benefits per indemnity claim fell 60 percent from 1998 to 2018; and
  - settlement benefits per indemnity claim rose 73 percent from 1998 to 2016, with most of this increase occurring by 2008.

- The increase in total disability benefits per indemnity claim from 1998 to 2002 resulted from an increase in adjusted average total disability benefits per claim where these were paid (Figure 3.9), given the flat trend in the proportion of indemnity claims with these benefits for the same period (Figure 3.2).

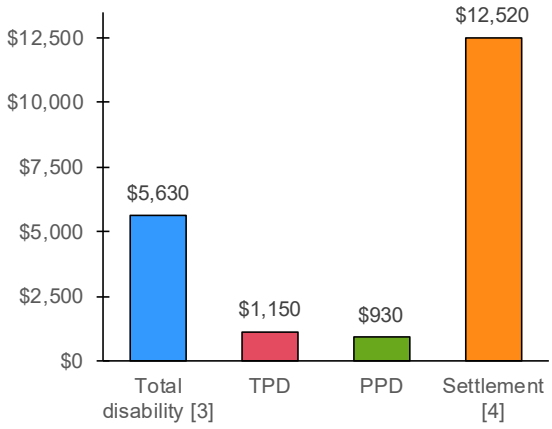
- The decline in TPD benefits per indemnity claim is attributable to declines in the percentage of indemnity claims with these benefits (Figure 3.2) and in adjusted average TPD benefits where these were paid (Figure 3.9).

- The decline in average PPD benefits per indemnity claim resulted primarily from a decrease in adjusted average PPD benefits where these were paid (Figure 3.9) and to a lesser degree from a decrease in the percentage of claims with these benefits (Figure 3.2).

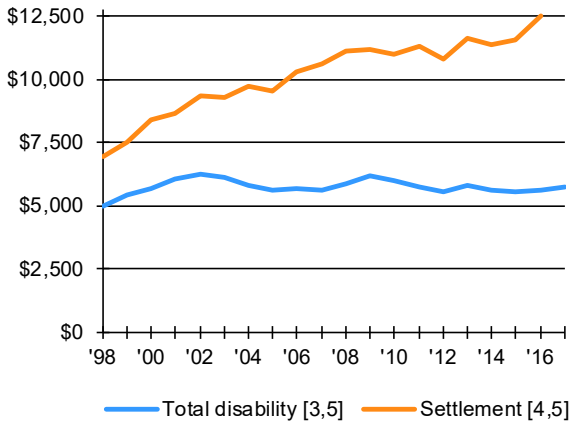
- The increase in settlement benefits per indemnity claim resulted from an increase in the proportion of claims with these benefits (Figure 3.2) and an increase in adjusted average settlement benefits where they were paid (Figure 3.9).

Figure 3.10 Average benefit by type *per paid indemnity claim,* adjusted for wage growth, injury years 1998-2018 [1]

A. Four benefit types, injury year 2016 [2]



C. Total disability [3] and settlement benefits [4], injury years 1998-2017



B. Table of values

Injury year	Total disabilty [3,5]	TPD [5]	PPD	Settle-ment [4,5]
1998	$4,980	$1,460	$2,120	$6,950
2002	6,270	1,420	2,060	9,320
2008	5,900	1,270	1,780	11,160
2014	5,600	1,160	1,070	11,400
2015	5,530	1,120	950	11,540
2016	5,630	1,150	930	12,520
2017	5,760	1,150	840	
2018			840	

D. TPD and PPD benefits, injury years 1998-2018

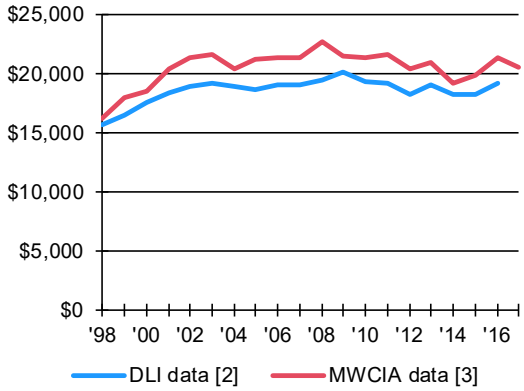
1. Developed statistics from DLI data (see Appendix C). An indemnity claim may have more than one type of benefit paid. Benefit amounts are adjusted for average wage growth between the respective injury year and 2018.
2. Injury year 2016 is shown here because it is the latest year for which the values for all four benefit types are sufficiently stable (see Table of Values and note 5).
3. Total disability includes TTD and PTD.
4. Includes indemnity, medical and vocational rehabilitation components. The percentages for injury years 2017 and 2018 are not shown because those statistics are not yet sufficiently stable.
5. The statistics for total disability and TPD for 2018 and the statistics for settlement benefits for 2017 and 2018 are not shown because they are not yet sufficiently stable.

Indemnity benefits per claim, DLI and MWCIA data

As computed from DLI and MWCIA data, indemnity benefits per claim from the two sources follow each other closely.

- From 1998 through 2016, the MWCIA figure has exceeded the DLI figure. This is largely because the MWCIA figure includes vocational rehabilitation benefits while the DLI figure does not.[30]
- It is uncertain why the MWCIA figure seems to fluctuate more than the DLI figure. One possible explanation is that the MWCIA figure is based on payments plus claim-specific reserves while the DLI figure is based on payments alone.[31]
- Both data sources show a generally stable trend in wage-adjusted indemnity benefits per indemnity claim since 2002, with some yearly fluctuations.
- The agreement between the data sources lends credibility to both.

Figure 3.11 Average indemnity benefits per paid indemnity claim, adjusted for wage growth, DLI and MWCIA data, 1998-2017 [1]



	DLI data (by injury year) [2]	MWCIA data (by policy year) [3]
1998	$15,730	$16,290
2002	19,000	21,370
2007	19,110	21,330
2013	19,030	20,940
2014	18,200	19,210
2015	18,260	19,910
2016	19,150	21,360
2017		20,590

1. Benefit amounts are adjusted for average wage growth between the respective year and 2017 (see Appendix C).
2. Developed statistics from DLI data (see Appendix C). Includes insured and self-insured employers. In DLI reporting, benefits paid under a stipulation for settlement are not divided into indemnity and medical components. Consequently, all settlement benefits are included with indemnity benefits in the DLI data here. Indemnity benefits in DLI reporting exclude vocational rehabilitation service costs. Statistic not shown for 2017 because it is not yet sufficiently stable.
3. From Figure 2.3, Panel A. Includes insured employers only (including those in the Assigned Risk Plan). In MWCIA reporting, insurers are instructed to divide settlement benefits into indemnity and medical components. Indemnity benefits in MWCIA reporting include vocational rehabilitation service costs. Not yet available for 2018.

[30] As shown in Figure 4.3, the average cost vocational rehabilitation has been somewhat above $2,000 per paid indemnity claim (adjusted for wage growth) since 2001. From 2001 to 2016, the MWCIA number in Figure 3.11 exceeded the DLI number by an average of $2,060.

Another possible factor is that the MWCIA figure excludes self-insured employers while the DLI figure includes them, although the effect of this difference is uncertain.

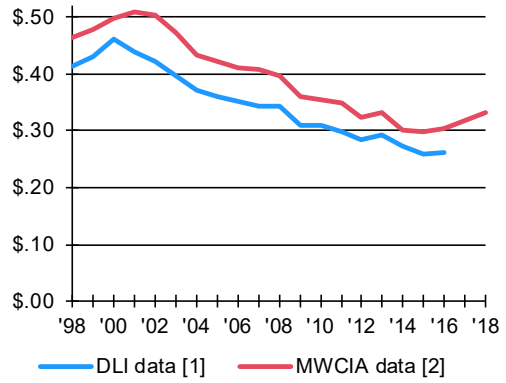
[31] Claim-specific reserves are funds an insurer sets aside to cover anticipated future costs of particular claims.

Indemnity benefits per $100 of payroll, DLI and MWCIA data

As computed from DLI and MWCIA data, indemnity benefits per $100 of payroll from the two sources follow each other closely.

- Since 1998, the DLI figure has ranged from 84 to 93 percent of the MWCIA figure.
- As with average indemnity benefits per paid indemnity claim (Figure 3.11), much of the difference between the DLI and MWCIA numbers is because the MWCIA figure includes vocational rehabilitation service costs while the DLI number does not.[32]
- Again, the general agreement between the data sources lends credibility to both.

Figure 3.12 Indemnity benefits per $100 of payroll, DLI and MWCIA data, 1998-2018



Injury year	DLI data [1]	MWCIA data [2]
1998	$.41	$.47
2002	.42	.50
2007	.34	.41
2014	.27	.30
2015	.26	.30
2016	.26	.30
2017		.32
2018		.33

1. Indemnity benefits are developed statistics from DLI data; payroll data is from several sources (see Appendix C). Includes insured and self-insured employers. In DLI reporting, benefits paid under a stipulation for settlement are not divided into indemnity and medical components. Consequently, all settlement benefits are included with indemnity benefits in the DLI data here. Indemnity benefits in DLI reporting exclude vocational rehabilitation service costs. Statitistics are not shown for 2017 and 2018 because they are not yet sufficiently stable.
2. From Figure 2.4. Includes insured employers in the voluntary market only. In MWCIA reporting, insurers are instructed to divide settlement benefits into indemnity and medical components. Indemnity benefits in MWCIA reporting include vocational rehabilitation service costs.

[32] The data in Figure 2.8 indicates that the vocational rehabilitation (VR) component of total system cost is about 8.7 percent of the combined VR and indemnity (without VR) components (2.8% / (29.1% + 2.8%) = 8.7%). This accounts for a majority of the average 13.0-percent difference between the DLI and MWCIA numbers in Figure 3.12 for the period shown.

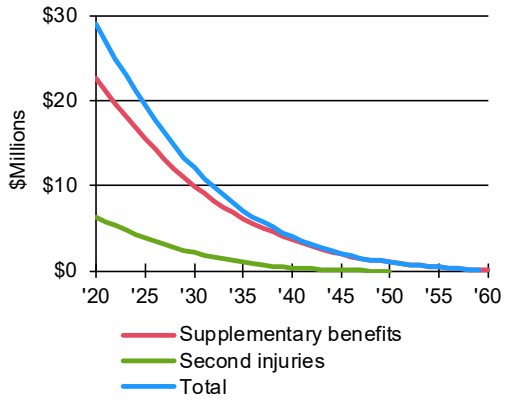
Another possible factor is that the MWCIA figure excludes self-insured employers while the DLI figure includes them, although the effect of this difference is uncertain.

Supplementary benefit and second-injury costs

DLI produces an annual projection of supplementary benefit and second-injury reimbursement costs as they would exist without future settlement activity. The total annual cost is projected to fall by 58 percent during the next 10 years and to disappear by 2060.

- The 2020 projected cost of $29 million consists of roughly $23 million for supplementary benefits and $6 million for second injuries.
- Without settlements, supplementary benefit claims are projected to continue until 2060 and second-injury claims until 2045.
- Claim settlements will reduce future projections of these liabilities. Settlements amounted to $1.4 million in fiscal year 2019.
- The cost of supplementary and second-injury benefits for calendar year 2018, $48.4 million including settlements, came to 3.0 percent of total workers' compensation system cost.[33]

Figure 3.13 Projected cost of supplementary benefit and second-injury reimbursement claims, fiscal claim-receipt years 2020-2060 [1]



Fiscal year of claim receipt	Projected amount claimed ($millions)		
	Supple-mentary benefits	Second injuries	Total
2020	$22.5	$6.4	$28.9
2025	15.5	3.9	19.4
2030	9.9	2.1	12.0
2035	6.1	1.0	7.1
2050	1.0	.0	1.0

1. Projected from DLI data, assuming no future settlement activity. See Appendix A for definitions.

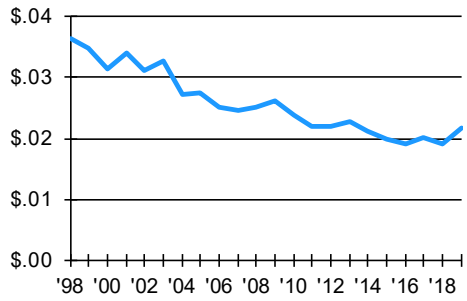
[33] This percentage was calculated with techniques similar to those for Figure 2.8 to reduce the effects of annual fluctuations in total system cost.

State agency administrative cost

State agency administrative cost paid out of the workers' compensation assessment has fallen as a proportion of workers' compensation covered payroll during the past several years.

- In fiscal year 2019, state agency administrative cost (see note 1 in Figure 3.14) came to 2.2 cents per $100 of payroll.
- The main factor in the decline of administrative cost relative to covered payroll over time has been the steady increase in payroll itself, as administrative cost has been relatively stable over the last two decades.
- The increase in administrative cost in 2019 primarily reflected the beginning of substantial expenditure for the Workers' Compensation Modernization Program, or Campus.[34]
- Administrative cost for 2019 was $34.4 million. As indicated in Figure 2.8, state administration accounted for about 2.0 percent of total workers' compensation system cost in 2018.

Figure 3.14 Net state agency administrative cost per $100 of workers' compensation covered payroll, fiscal years 1998-2019 [1]



Fiscal year	State agency admin. cost per $100 of payroll
1998	$.036
2017	.020
2018	.019
2019	.022

1. Data from DLI, MWCIA and the Workers' Compensation Reinsurance Association. Includes costs of workers' compensation administrative functions in DLI, the Office of Administrative Hearings, the Workers' Compensation Court of Appeals and the Department of Commerce, as well as the state share of the cost of Minnesota's OSHA program, beyond what is paid from revenues other than the Special Compensation Fund assessment. Estimated as described in Appendix C.

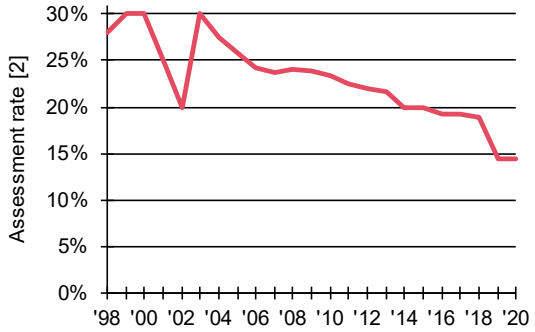
[34] "Campus" stands for "Claims Access and Management Platform User System." Campus expenditures, funded by the workers' compensation assessment, were $3.6 million in 2019 as compared with $0.2 million in 2018. The Legislature has authorized a total of $19 million in Campus development expenditures. An additional reason for the cost increase in 2019 is that 2019 was the second half of a biennium; more was spent in the second half than in the first half, as is often true.

Special Compensation Fund assessment rate

The Special Compensation Fund assessment rate has fallen by nearly half since 1998.

- The rate fell from 28.0 percent for 1998 to 14.4 percent for 2019 and 2020. This reflects primarily the continuing decreases in supplementary benefit and second-injury reimbursement costs (Figure 3.13) and, to a lesser degree, the decreasing trend in state agency administrative costs relative to total covered payroll (Figure 3.14).
- The fluctuations of the assessment rate between 20 and 30 percent from 1999 to 2003 reflected DLI responses to legislative actions.[35]
- At its highest, the assessment rate was 31 percent for fiscal years 1988 through 1992 (before the period shown in Figure 3.15).

Figure 3.15 Special Compensation Fund assessment rate, fiscal years 1998-2020 [1]



Fiscal year assess-ment is due	Assess-ment rate [2]
1997	28.0%
2002	20.0
2003	30.0
2016	19.3
2017	19.3
2018	18.9
2019	14.4
2020	14.4

1. Data from DLI.
2. The assessment rate is the percentage of paid indemnity benefits collected as the assessment. The graph shows an assessment rate of 25 percent for 2001, reflecting the 30- and 20-percent rates for the two halves of that year (see note 35 in text). For assessments due through fiscal year 2003, DLI determined the assessment rate in advance of the assessment and applied that rate to paid indemnity benefits for insurers and self-insurers to determine the assessment due. Beginning with assessments due in fiscal year 2004, DLI determines the total assessment amount to be collected and then allocates this amount between insurers and self-insurers (as groups) according to their relative shares of total indemnity benefits paid. The insurer share is then allocated among insurers according to their pure premium and the self-insurer share is allocated among self-insurers according to their paid indemnity benefits. The assessment rate shown here for 2004 and later years is the total assessment divided by total indemnity benefits paid.

[35] The 2000 Legislature transferred $325 million of surplus from the Assigned Risk Plan to the Special Compensation Fund for the purpose of settling liabilities of the supplementary benefit and second-injury programs. The legislative action also mandated a decrease in the assessment rate by Jan. 1, 2001, of at least 30 percent from the rate in effect on Jan. 1, 2000 (Minn. Laws 2000, ch. 447, secs. 24-27) (see note 2 in Figure 3.15). DLI reduced the rate from 30 percent to 20 percent effective July 1, 2000, for assessments due in the second half of fiscal year 2001. The 2002 Legislature directed that the remaining balance of the transferred amount be transferred to the state general fund as of July 1, 2003. The transferred amount was $265 million. DLI raised the assessment rate to 30 percent for assessments due in fiscal year 2003.

4

Vocational rehabilitation

This chapter provides data about vocational rehabilitation (VR) services in Minnesota's workers' compensation system. Some of the statistics are presented by the year of the worker's injury or illness; others are presented by the year of the VR plan closure. VR plan closure years cover the period from Oct. 1 through Sep. 30 of the indicated year.

Major findings

- Participation in vocational rehabilitation rose from 16 percent of paid indemnity claims for injury year 1998 to 24 percent for 2018 (Figure 4.1).
- After adjusting for average wage growth, the average cost of VR services for injury year 2018 ($8,860) was 19 percent below the 2007 peak ($10,930) (Figure 4.3). VR services accounted for an estimated 2.8 percent of total workers' compensation system cost for 2018 (Figure 2.8).
- The average time from injury to the start of VR services fell from 8.8 months for injury year 1998 to 5.6 months for injury year 2018 (Figure 4.5).
- The percentage of VR plans closed with a plan completion fell from 55 percent for plans closed in 2005 to 50 percent for 2019; during the same period, the percentage of closures resulting from claim settlement or agreement of the parties increased from 43 percent to 46 percent. The decrease in plan completions took place between 2005 and 2010; the plan-completion rate has remained at 46 percent or higher since 2011 (Figure 4.7).
- The percentage of VR participants with a job reported at plan closure fell from 66 percent for plan-closure year 2005 to 61 percent for 2019 (Figure 4.9).
- The return-to-work wage of VR participants varies widely relative to their pre-injury wage, but 68 percent of the workers returned to a wage at least 96 percent of their pre-injury wage (Figure 4.11).
- For VR participants who returned to work at a different employer, the average return-to-work wage ratio (relative to the pre-injury wage) was 92 percent for plan-closure year 2019, an increase from 81 percent in 2005. For workers returning to the same employer, the average ratio was 97 percent for 2019, which has not significantly changed since 2005 (Figure 4.12).

Background

The following basic information is necessary for understanding the figures in this chapter. See the glossary in Appendix A for more detail.

Vocational rehabilitation is the third type of workers' compensation benefit, supplementing indemnity and medical benefits. VR services are provided to injured workers who need help in returning to suitable gainful employment because of their injuries.[36]

VR services include the following:

- medical management;
- on-site job analysis;
- job modification;
- transferable skills analysis;
- job development;
- job placement;
- vocational counseling and guidance;

[36] Minnesota Statutes § 176.102, subd. 1(b) and Minnesota Rules, part 5220.0100, subp. 34.

- vocational testing;
- labor market survey;
- job-seeking skills training; and
- retraining and on-the-job training.

These services are delivered or facilitated by qualified rehabilitation consultants (QRCs) and registered rehabilitation vendors. These providers are registered with DLI and must follow professional conduct standards specified in Minnesota Rules. QRCs determine eligibility for VR services, develop VR plans for those determined eligible and coordinate service delivery under those plans.

QRCs work mostly in private-sector VR firms and may also provide services to non-workers'-compensation clients. Some VR firms also have job-placement staff. DLI's Vocational Rehabilitation Unit provides VR services primarily to injured workers whose claims are involved in primary liability or causation disputes; it may also provide services in non-contested cases.

Registered rehabilitation vendors are approved to provide job-development and job-placement service under an approved VR plan. They help injured workers to secure suitable employment through a series of activities including teaching job-seeking skills and assisting with preparation of resumes, cover letters and job applications. Job-placement vendors also contact prospective employers to identify jobs, arrange interviews, discuss employment incentives and conduct labor market surveys.

The VR eligibility process begins when the insurer files a disability status report (DSR) to notify DLI that it is referring the injured worker to a QRC for a VR consultation or requesting a waiver of VR services. The insurer must file the DSR within 14 days of becoming aware that temporary total disability is likely to exceed 13 weeks, 90 days after the injury if the employee has not returned to work or 14 days after receiving a consultation request from the employee. A QRC holds a consultation with the employee if the insurer has referred the employee for one via the DSR or if, before or after the DSR, the employee or employer requests a consultation or DLI orders one. A QRC in DLI's Vocational Rehabilitation Unit may also provide a consultation if the insurer denies that the employee's injury or condition is work-related. If the QRC determines through the consultation that the employee is qualified for VR services, a VR plan is then developed.

VR plan costs reported to DLI include charges for services by QRCs and vendors and direct costs of certain other services, such as vocational testing. VR plan costs also include the costs of planning and facilitating other services, such as functional capacity evaluations, technical or academic skills improvement, retraining and on-the-job training. The direct costs of these other services, such as tuition, are paid directly by the insurer and are not reported as a plan cost to DLI.

Annual changes in hourly VR service charges through 2012 were limited to the lesser of the percent increase in the statewide average weekly wage or 2 percent. The 2013 workers' compensation law change increased the annual change in hourly charges to the lesser of the percent increase in the SAWW or 3 percent, effective Oct. 1, 2013.

The 2013 law change also defined job-development services and limited these services to 20 hours a month for up to 13 weeks, or 26 weeks by agreement between the injured worker and employer or by order of DLI or the Office of Administrative Hearings. This limit is effective for employees injured on or after Oct. 1, 2013. Neither DLI nor OAH can order more than 26 weeks of job-development services, although the parties can agree to additional weeks. Injured workers with earlier dates of injury have no limit on their job-development services.

Rule amendments effective Sept. 24, 2018, eliminated the $10 an hour fee reduction for lengthy and costly VR plans and adjusted the hourly rate to maintain cost neutrality. The rule change also increased the limit on payment to QRCs for their services during job development and job placement to six hours a month.

The maximum hourly fee levels for QRCs and for job-development and job-placement services, effective Oct. 1, 2018, through Sep. 30, 2019, were $106.19 and $85.06, respectively. These rates changed to $109.38 and $87.61, respectively, for Oct. 1, 2019, through Sep. 30, 2020.

Data sources and time period covered

The data in this chapter comes from VR documents filed with DLI for claims with VR activity. Injured workers may receive services from multiple VR service providers (at different times), each of which may file VR plans. The duration and cost of VR services reported in this chapter are the cumulative values from all plans involved with a particular claim. For brevity, combined plans are referred to simply as plans. The service outcomes are the outcomes of the most recent plan closure.

The trend statistics in this chapter reported by injury year or plan-closure year are developed (projected) to a uniform maturity as described in Appendix C. VR plan-closure years cover the period from Oct. 1 through Sep. 30 of the indicated year.

Participation

The VR participation rate increased markedly during the past 20 years, but appears to have leveled off in the past 5 years.

- The VR participation rate — the percentage of paid indemnity claims with a VR plan filed — increased from 16 percent in 1998 to 24 percent in 2013, and it has remained nearly level since then.
- A projected 5,300 of the estimated 22,200 workers with indemnity claims for injury year 2018 are expected to receive VR services.
- The increase in the participation rate between 2005 and 2009 coincides with the Great Recession; however, it is uncertain to what degree the recession affected VR participation.[37]

Participation and injury severity

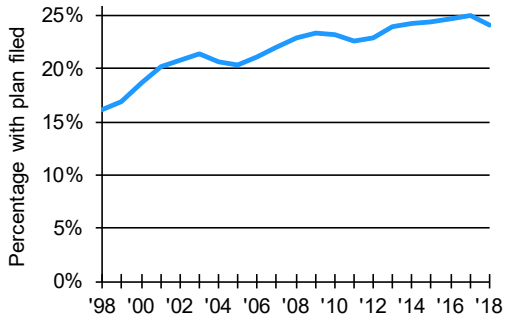
VR participation varies with injury severity (as measured by the amount of time the injured worker has been off the job) and by the worker's degree of permanent partial disability.

- For workers with indemnity claims closed between October 2016 and September 2019:
  - VR participation ranged from 13 percent for workers with no more than three months of TTD benefits to 96 percent for workers with more than 12 months of these benefits; and
  - VR participation ranged from 15 percent for workers without PPD benefits (and no settlement agreement) to 84 percent for workers with PPD ratings of 20 percent or more (no figure shown).[38] VR participation was 48 percent for workers with a settlement and no PPD benefits.

[37] Since the statistics here are by year of injury, the recession could have affected claim duration for workers injured before it began and could therefore have affected VR participation for those workers.

[38] Workers with a settlement are excluded from the group without PPD benefits because the settlement might have included consideration for PPD. Some of the workers with a PPD benefit may also have received a settlement that included consideration for additional PPD.

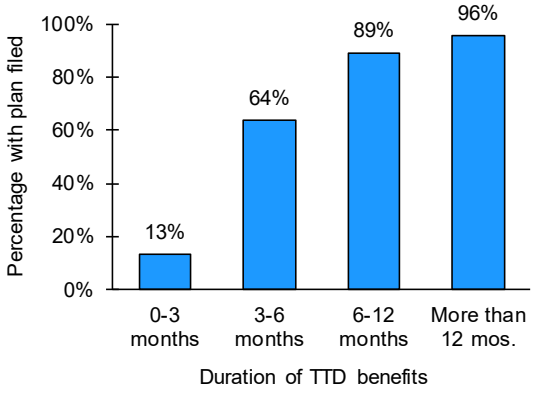
Figure 4.1 Percentage of paid indemnity claims with a VR plan filed, injury years 1998-2018 [1]



Injury year	Percentage with plan
1998	16.1%
2003	21.4
2009	23.4
2013	24.0
2014	24.3
2015	24.4
2016	24.8
2017	25.0
2018	24.1

1. Developed statistics from DLI data (see Appendix C).

Figure 4.2 Percentage of paid indemnity claims with a VR plan filed by TTD duration, claim-closure years 2017-2019 combined [1]



1. Data from DLI. Statistics by claim-closure year exclude injuries prior to 1998. Claim-closure years start in October and end in September of the indicated year.

Cost

Adjusted for average wage growth, the average cost of VR services peaked in 2007 but has fallen since then.[39]

- The adjusted average cost of $8,860 for 2018 was just 2 percent above 1998 but 19 percent below the 2007 peak of $10,930.
- Median cost showed a somewhat similar pattern, peaking in 2008. The 2018 median of $5,710 was about the same as in 2000.
- The total cost of VR services for injury year 2018 is estimated at $47 million. As shown in Figure 2.8, VR service costs account for an estimated 2.8 percent of total workers' compensation system cost for payment year 2018.
- Average VR service cost per indemnity claim (counting claims with and without plans) was $2,130 for 2018. This trend has been largely flat since 2002. It reflects the trends in the participation rate (Figure 4.1) and average service cost (Figure 4.3).
- For plans closed in 2019, 87 percent of total VR cost was for QRC services and 13 percent was vendor services. Job development and placement services accounted for 10 percent of total service costs (4 percent by QRC firms and 6 percent by vendors).

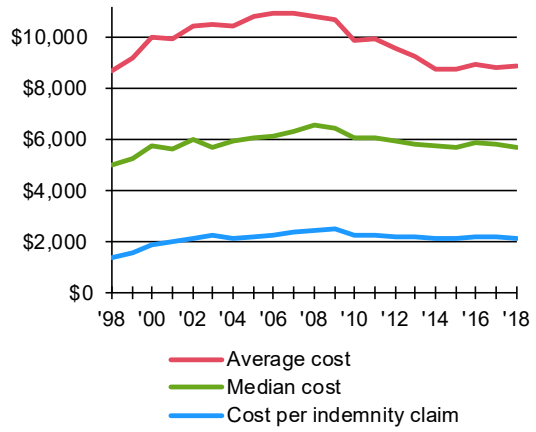
Cost and injury severity

VR service costs increase with injury severity as measured by PPD rating, reflecting an increased amount and duration of services.

- For plan-closure years 2017 to 2019 combined, participants with higher PPD ratings had progressively higher VR costs. For workers with PPD ratings of 15 percent or more, the average cost of VR services was more than double the cost for workers with PPD ratings of 5 percent or less.
- For workers with a settlement but no PPD rating, their average VR service costs were $5,720, the lowest of all the groups.

[39] The VR service costs indicated here are those reported by QRCs to DLI on the plan-closure form. These costs do not always represent the full amounts paid by insurers (see p. 34).

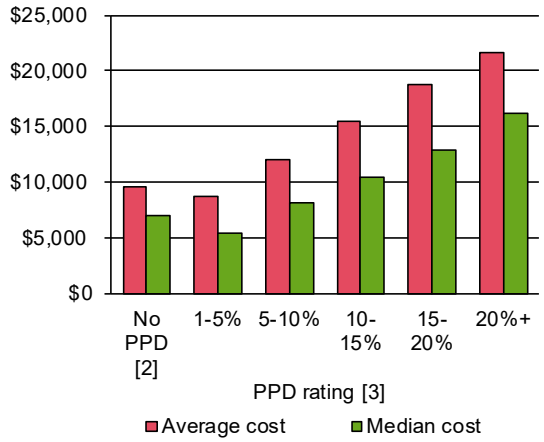
Figure 4.3 VR service costs, adjusted for wage growth, injury years 1998-2018 [1]



Injury year	Average cost	Median cost	Cost per indemnity claim
1998	$8,720	$5,040	$1,410
2002	$10,460	$6,020	$2,180
2007	$10,930	$6,310	$2,410
2015	$8,790	$5,730	$2,150
2016	$8,960	$5,890	$2,220
2017	$8,810	$5,800	$2,200
2018	$8,860	$5,710	$2,130

1. Developed statistics from DLI data. Costs are adjusted for average wage growth between the respective year and 2018.

Figure 4.4 VR service cost by PPD rating, adjusted for wage growth, plan-closure years 2017-2019 combined [1]



1. Data from DLI. Costs are adjusted for average wage growth between the year of injury and 2018. Plan-closure years start in October and end in September of the indicated year.
2. Workers with a settlement are excluded from the group without PPD benefits because the settlement might have included consideration for PPD.
3. Some of the workers with a PPD benefit may also have received a settlement that included consideration for additional PPD.

Timing of services

Prompt service provision is closely linked to successful VR outcomes. The average time from injury to the start of VR services has decreased by more than three months since 1998 and two months since 2005.

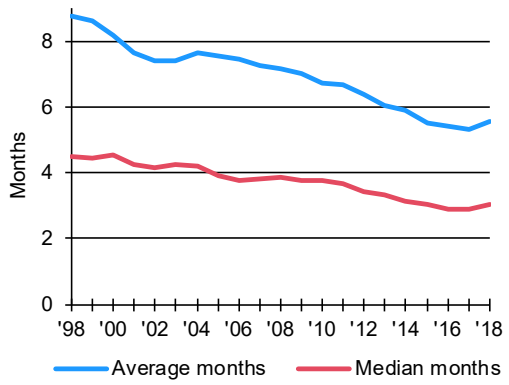
- The average time to the start of VR services was 5.6 months for injury year 2018, down 37 percent from 1998; the median time was 3.0 months for 2018, down 33 percent from 1998.
- The time to the start of services seems to have levelled off in the last few years.
- Among plans closed in 2019, 48 percent of VR starts were within three months of injury and 75 percent were within six months.
- Among VR participants with plans closed in 2019, those who began services within three months of injury, as compared to those starting more than a year after their injury, had:
  - 31-percent lower average VR service costs ($8,460 vs. $12,300);
  - 23-percent shorter average service durations (12.0 months vs. 15.6 months); and
  - Slightly better chances of returning to work at plan closure (62 percent vs. 59 percent).

Service duration

VR service duration — measured by the time between the initial consultation and plan closure — has increased and then fallen since 2005.

- Average duration dropped below 12.5 months for plan closure years 2018 and 2019; median duration dropped to just under 9.0 months. These values were the lowest in the entire 2005 through 2019 plan-closure period.
- The relatively high average service durations for 2008 through 2013 suggest an effect of the Great Recession.
- Among plans closed in 2019, average service duration was 9.8 months for participants who returned to work with their pre-injury employer; 15.8 months for those who went to a different employer; and 14.6 months for workers who had their plans closed without a recorded return to work.

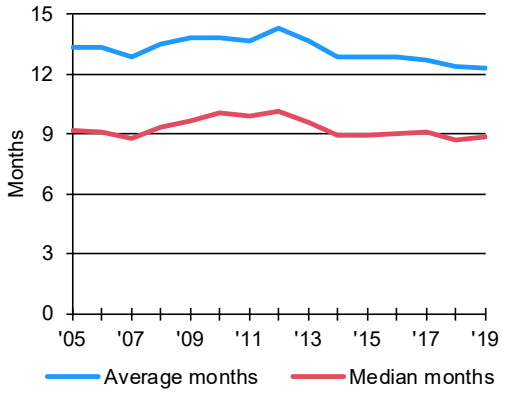
Figure 4.5 Time from injury to start of VR services, injury years 1998-2018 [1]



Injury year	Average months	Median months
1998	8.8	4.5
2014	5.9	3.2
2015	5.5	3.0
2016	5.4	2.9
2017	5.3	2.9
2018	5.6	3.0

1. Developed statistics from DLI data (see Appendix C).

Figure 4.6 VR service duration, plan-closure years 2005-2019 [1]



Plan-closure year	Average months	Median months
2005	13.3	9.2
2007	12.9	8.8
2015	12.9	8.9
2016	12.8	9.0
2017	12.7	9.1
2018	12.4	8.7
2019	12.3	8.9

1. Developed statistics from DLI data. The statistics by plan-closure year begin with 2005 to allow the data concerned, which begins with injury year 1998, to be sufficiently mature. Plan-closure years start in October and end in September of the indicated year. See Appendix C.

Reason for plan closure

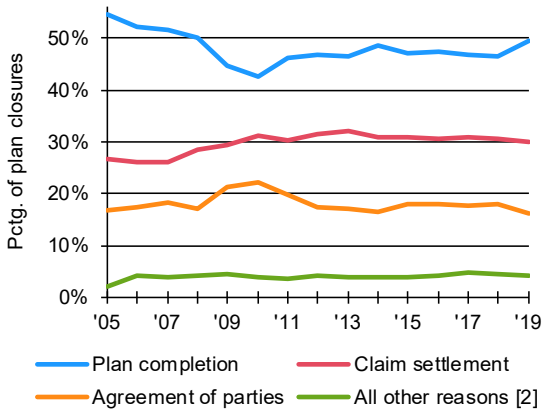
As compared with closures in 2005, the percentage of VR plans closed because of plan completion has decreased, the percentage closed because of claim settlement has increased and the percentage closed because of agreement of the parties is about the same. But these trends have been largely stable since 2011.

- The proportion of VR plans closed because they were completed reached a low-point of 43 percent in 2010, but returned to 49 percent in 2014 and reached 50 percent in 2019 (Figure 4.7).
- The proportion of plans closed by claim settlement rose from 27 percent to 32 percent between 2005 and 2013 but decreased to 30 percent in 2019.
- The increased proportion of VR plans closed because of claim settlement is consistent with the increase in the percentage of paid indemnity claims with settlements (Figure 3.2).
- The proportion of plans closed by agreement of the parties reached a high-point of 22 percent in 2010, settled to a range of 17 to 18 percent for 2012 to 2018 and dipped to 16 percent in 2019.
- A return to work is reported for most participants who complete their plans (97 percent for 2019) but for only a minority of those who do not (whose plans close for any other reason) (25 percent). More than one possible reason exists for this connection between reported plan completion and return to work.[40]
- Plan costs vary by reason for closure (Figure 4.8). For 2019 closures, the highest average plan costs were for plans closed with a settlement ($12,040), and the lowest were for completed plans ($6,520). This variation occurs mainly because of differences in the type and duration of services provided.[41]

[40] Completing a plan may lead to job placement, or job placement may lead the QRC to deem the plan completed. Also, a worker's employment may be less likely to be reported if the plan closes for reasons other than completion (e.g., claim settlement or agreement of the parties).

[41] This is shown by separate DLI analysis.

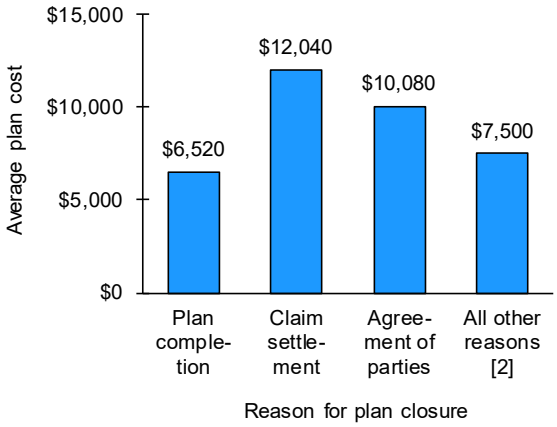
Figure 4.7 Reason for plan closure, plan-closure years 2005-2019 [1]



Plan-closure year	Plan completion	Claim settlement	Agreement of parties	All other reasons [2]
2005	54.5%	26.7%	16.8%	2.0%
2010	42.7	31.2	22.2	3.8
2015	47.2	30.9	18.0	3.9
2016	47.4	30.5	17.9	4.2
2017	46.7	30.8	17.6	4.8
2018	46.6	30.7	18.1	4.6
2019	49.5	30.0	16.3	4.2

1. Developed statistics from DLI data. The statistics by plan-closure year begin with 2005 to allow the data concerned, which begins with injury year 1998, to be sufficiently mature. Plan-closure years start in October and end in September of the indicated year. See Appendix C.
2. "All other reasons" includes closures due to decision-and-orders and, starting with forms filed after July 2005, closures due to inability to locate the employee, death of the employee or QRC withdrawal. Closures for these reasons through July 2005 were coded (by the QRC) as due to decision-and-orders or agreement of the parties.

Figure 4.8 Plan cost by reason for plan closure, plan-closure year 2019 [1]



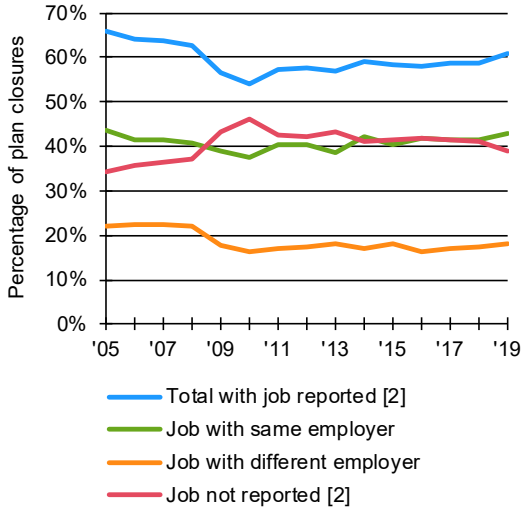
1. Plan costs were adjusted to 2018 wage levels according to the worker's date of injury. Plan-closure year 2019 started on Oct. 1, 2018 and ended on Sep. 30, 2019.
2. See note 2 in Figure 4.7.

Return-to-work status

The goal of VR is to return injured workers to suitable gainful employment. Return to work is affected by many factors, including VR services, the job market, injury severity, worker job skills and education, availability of job modifications and claim litigation. The estimated percentage of VR participants with a job reported at plan closure was lower in 2019 than in 2005 but above the low-point in 2010.[42]

- The percentage of VR participants with a job reported at plan closure fell from 66 percent in 2005 to 61 percent in 2019. This was mainly due to a decline in the percentage with a job at a different employer, from 22 to 18 percent.
- The percentage of participants with a job reported at plan closure closely parallels the percentage of plans closed because of completion (Figure 4.7). This is expected since, as indicated on the previous page, a job is reported at closure for almost all who complete their plans but for only a minority of others. Again, there is more than one possible reason for the correlation between plan completion and having a job reported at plan closure.[43]
- The percentage of participants with a job reported at plan closure reached a low point, at 54 percent, for 2010 plan closures and has mostly recovered in the following years. This may be partly due to the Great Recession. However, this is uncertain because of the previously described interplay among reported job placement, plan completion and plan closure by reason of claim settlement.
- For plan closures in 2019, the average cost of VR services for participants returning to work with their pre-injury employer ($5,900) was less than half the cost of workers going to a different employer ($12,130) and less than the service cost for workers not returning to work at plan closure ($10,560).

Figure 4.9 Return-to-work status, plan-closure years 2005-2019 [1]



Plan-closure year	Job reported [2]			Job not reported [2]
	With same employer	With different employer	Total with job reported	
2005	43.7%	22.1%	65.9%	34.1%
2010	37.6	16.3	53.9	46.1
2015	40.3	18.1	58.4	41.6
2016	41.8	16.3	58.2	41.8
2017	41.5	17.1	58.6	41.4
2018	41.5	17.4	58.9	41.1
2019	42.8	18.2	61.0	39.0

1. Developed statistics from DLI data. The statistics by plan-closure year begin with 2005 to allow the data concerned, which begins with injury year 1998, to be sufficiently mature. Plan-closure years start in October and end in September of the indicated year. See Appendix C.
2. See note 42 in text.

[42] The term "reported" is used to emphasize that the available information about whether the VR participant has a job at plan closure is what the QRC reports to DLI. Especially where the plan closes for reasons other than completion (for example, claim settlement), the participant may have a job without this being known and reported by the QRC. Also, employment status changes over time.

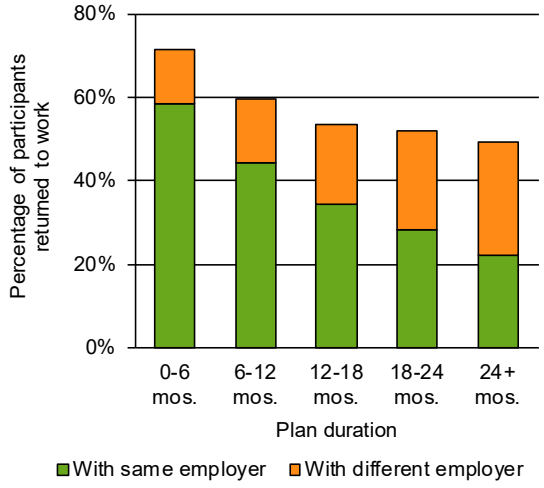
[43] See note 40.

Return-to-work status and plan duration

The percentage of VR participants with a reported return to work at plan closure decreases with plan duration.

- For plan closures in 2017 to 2019 combined, the percentage of participants who returned to work ranged from 71 percent for plans lasting no more than six months to 49 percent for plans lasting 24 months or more.
- The percentage of participants returning to their pre-injury employer ranged from 58 percent for the shortest plans to 22 percent for the longest plans.
- The percentage of participants finding a job with a different employer ranged from 13 percent for the shortest plans to 27 percent for the longest plans.

Figure 4.10 Return-to-work status by plan duration, plan-closure years 2017-2019 combined [1]



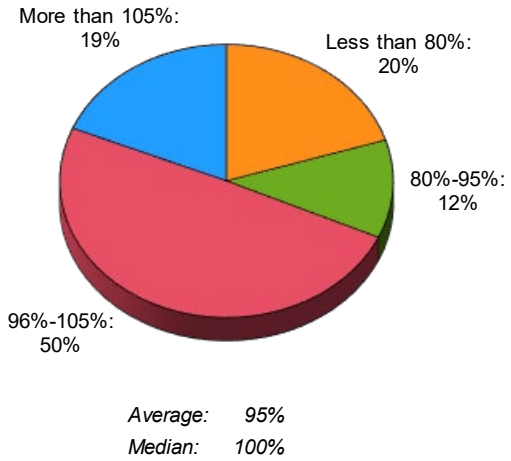
1. Data from DLI.
2. Plan-closure years start in October and end in September of the indicated year.

Return-to-work wages: distribution

For VR participants returning to work, the return-to-work wage on average is slightly less than the pre-injury wage, but this varies widely.

- For plan closures in 2017 to 2019 combined, 68 percent of VR participants returning to work earned more than 95 percent of their pre-injury wage, but 20 percent earned less than 80 percent of their pre-injury wage.
- Return-to-work wage recovery was related to injury severity as measured by PPD rating. For plan closures in 2017 to 2019 combined, workers without a PPD or a settlement agreement[44] had an average wage ratio of 98 percent of their pre-injury wage, while workers with PPD ratings of 20 percent or higher had an average wage ratio of 87 percent.
- Average return-to-work wage rates also vary with plan duration. For 2017 to 2019 closures, the average return-to-work wage ratio was 98 percent for VR plans of fewer than 12 months of duration, 94 percent for plans between 12 and 18 months, and 87 percent for plans with longer service durations.

Figure 4.11 Ratio of return-to-work wage to pre-injury wage for participants returning to work, plan-closure years 2017-2019 combined [1]



1. Data from DLI.
2. Plan-closure years start in October and end in September of the indicated year.

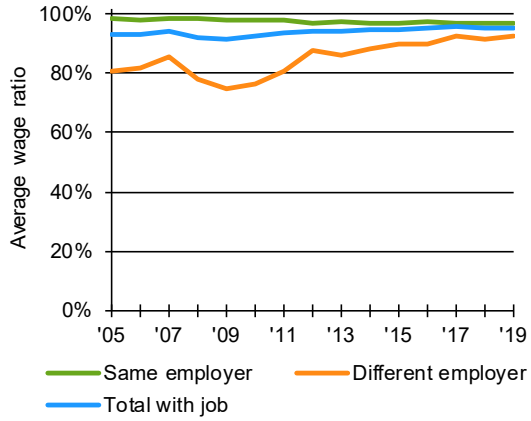
[44] Injured workers with settlements are excluded from this group because PPD benefits are often in dispute where settlements occur.

Return-to-work wages: trend

Among VR participants returning to work at plan completion, the ratio of the return-to-work wage to the pre-injury wage changed little between 2005 and 2019 for those returning to their pre-injury employer. For workers going to a different employer, the ratio declined in 2008 and 2009 but recovered in later years, reaching new high values.

- For workers returning to their pre-injury employer, the average wage ratio was 97 to 98 percent from 2005 to 2019.
- For workers going to a different employer, the wage ratio stood at 92 percent for closures in 2019; this was 12 percentage points higher than in 2005 and 17 percentage points higher than the low-point of 75 percent reached in 2009.
- The dip in the wage ratio for 2008 to 2011 for those going to a different employer suggests an effect of the Great Recession.

Figure 4.12 Average ratio of return-to-work wage to pre-injury wage by employer type, plan-closure years 2005-2019 [1]



Plan-closure year	Average ratio of return-to-work wage to pre-injury wage		
	Same employer	Different employer	Total with job
2005	98.4%	80.6%	93.0%
2009	98.1	74.8	91.7
2015	96.8	90.1	94.8
2016	97.5	89.7	95.4
2017	96.8	92.5	95.6
2018	96.9	91.4	95.2
2019	96.7	92.5	95.5

1. Developed statistics from DLI data. The statistics by plan-closure year begin with 2005 to allow the data concerned, which begins with injury year 1998, to be sufficiently mature. Years start in October and end in September of the year number. See Appendix C.

5

Disputes and DLI dispute resolution

This chapter presents data concerning workers' compensation disputes and DLI dispute resolution. Workers' Compensation System Reports through 2016 also included data on dispute resolution at OAH. In March 2018, OAH implemented a new court case-management system (C-Track). In August 2020, DLI is implementing a new workers' compensation data system (Campus[45]). These systems replace the one DLI and OAH had previously shared. Because of the separate systems, this report, like last year's, excludes data concerning OAH dispute-resolution activities. As DLI and OAH work together to enhance data-sharing between the two new systems, future Workers' Compensation System Reports may also include OAH dispute-resolution statistics.

Some statistics in this chapter are by year of injury; these are "developed" statistics,[46] which in some instances are not yet sufficiently stable for publication for the most recent injury years and are therefore not reported for those years in those instances. Statistics on dispute-resolution timelines are by the year the dispute was filed; sometimes these statistics are not given for the most recent years, to allow enough time for the resolution process to play out. Some statistics are by the year an action occurred and are presented through 2019.

Major findings

- The overall dispute rate showed a large increase from 1998 to 2008, but has leveled off since 2008. The rates of particular types of disputes have followed a similar pattern. For injury year 2016, 20.9 percent of filed indemnity claims are projected to have at least one dispute of any type (Figure 5.1).
- Claimant attorney involvement has increased substantially since 1998.[47] The percentage of paid indemnity claims with a claimant attorney rose from 16.8 percent for injury year 1998 to a projected 24.1 percent for 2016, a 43-percent increase (Figure 5.2).[48]
- Total claimant attorney fees are estimated at $50 million for injury year 2016.[49] On a paid basis, claimant attorney fees accounted for an estimated 3.2 percent of total workers' compensation system cost for 2018.
- The rate of denial of filed indemnity claims was 14.6 for 2018. This was substantially above the rates of 12.2 to 12.5 percent for 2007 through 2011. This increase is accounted for by an increase in claims denied and without payment, as opposed to claims denied but with payment (Figure 5.3).

(For the following material, background is provided on pages 44-47.)

- At the Department of Labor and Industry (DLI):
  - Between 1998 and 2019, the certification rate for medical and vocational rehabilitation disputes combined dropped from 69 to 46 percent (Figure 5.5).[50] A majority of noncertifications of medical and rehabilitation disputes occur because the issues have been resolved (Figures 5.6 and 5.7).

[45] "Campus" stands for "Claims Access and Management Platform User System."

[46] See "Developed statistics" on p. 1.

[47] A claimant attorney is deemed to be involved if there are claimant attorney fees of any type.

[48] See note 13 on p. 10.

[49] This figure counts all types of attorney fees.

[50] See description of DLI dispute certification process on p. 45.

- About 31 percent of certified medical disputes and 26 percent of certified rehabilitation disputes were referred to OAH in 2019 (Figure 5.8).
- About 59 percent of the dispute-resolution proceedings for 2017 to 2019 were mediations; the remaining 41 percent were administrative conferences (Figure 5.9).
- About 86 percent of resolutions for 2017 to 2019 were by agreement — most of these by informal intervention but a significant number (22 percent of DLI resolutions) by agreement via conference or mediation. The remaining 14 percent of resolutions were decision-and-orders (Figure 5.12).
- For medical and rehabilitation requests received in 2018, the median times from the request to a decision-and-order (where this occurred) were 63 and 36 days, respectively. The time interval for medical requests was substantially higher than the low-point reached in 2013, though about the same as 2006 to 2011. The interval for rehabilitation requests was substantially below 2013, reflecting DLI's response to the 2013 law change requiring that most rehabilitation conferences be scheduled within 21 days of the request (Figures 5.13 to 5.15).
- For mediation requests received in 2016 to 2018 where the mediation produced agreement, the final resolution document was an award on stipulation in 93 to 95 percent of cases. This represents an increase from 15 percent for 2006. It reflects DLI's increased emphasis on mediating complex, litigated cases (Figure 5.16).
- For mediation requests in 2018 that ended with an award on stipulation, the median time from the request to the stipulation award was 112 days, about the same as for the prior seven years The largest component of this time (50 days at the median) was the time between issue resolution (typically on the day of the mediation or shortly thereafter) and the filing by the attorneys of a stipulation for settlement at OAH for approval via a stipulation award (which typically occurs in two or three days) (Figures 5.17 to 5.19).

Background

The following basic information is necessary for understanding the figures in this chapter. See the glossary in Appendix A for more detail.

Types of disputes

Most disputes in Minnesota's workers' compensation system concern one or more of the three types of benefits and services the system provides: monetary benefits; medical services; and vocational rehabilitation services.

The injured worker and the insurer may disagree about whether the benefit or service should be provided, the level at which it should be provided or how long it should continue. Often the disagreement is about whether the worker's claimed injury, medical condition or disability is work-related (see "primary liability" and "causation" in Appendix A). Disputes may also occur about payment for a service already provided. Payment disputes typically involve a medical or vocational rehabilitation provider and the insurer, and may also involve the injured worker.

These disputes are typically filed by the injured worker and dealt with by DLI and OAH in the following ways.

Claim petition disputes — Disputes about primary liability and monetary benefit issues are typically filed on a claim petition, which triggers a formal hearing or settlement conference at OAH. Some medical and vocational rehabilitation disputes are also filed on claim petitions.

Discontinuance disputes — Discontinuance disputes are disputes about the discontinuance of wage-loss benefits. They are most often initiated when the claimant requests an administrative conference (usually by phone) in response to the insurer's declared intention to discontinue temporary total or temporary partial benefits. These disputes may also be presented on the *Employee's Objection to Discontinuance* form or the insurer's petition to discontinue benefits, either of which leads to a hearing at OAH.

Medical request disputes — Medical disputes are usually filed on a *Medical Request* form,

which triggers an administrative conference at DLI or OAH if DLI certifies the dispute.

Rehabilitation request disputes — Vocational rehabilitation disputes are usually filed on a *Rehabilitation Request* form, which leads to an administrative conference at DLI (or in some circumstances OAH) if DLI certifies the dispute.

Disputes also occur over other types of issues, such as attorney fees and the apportionment of liability among different employers, insurers and other payers (including the Special Compensation Fund).

Dispute resolution

Depending on the nature of the dispute, the form on which it is filed and the wishes of the parties, dispute resolution may be facilitated by a dispute-resolution specialist at DLI or by a judge at OAH. Administrative decisions from DLI or OAH can be appealed by requesting a *de novo* hearing at OAH; decisions from an OAH hearing can be appealed to the Workers' Compensation Court of Appeals and then to the Minnesota Supreme Court.

Dispute resolution at DLI

DLI carries out a variety of dispute-resolution activities.

Informal intervention — Through informal intervention, DLI provides information and assistance to the claim parties and communicates with them to resolve potential and actual disputes at an early stage and/or determine whether a dispute should be certified (see below). Informal intervention is often initiated when a party, usually a claimant, medical provider or vocational rehabilitation provider, contacts DLI because they have had difficulty obtaining a workers' compensation benefit or service or payment for it. Resolution through informal intervention may occur before, during or after the dispute certification process.

Dispute certification — In a medical or vocational rehabilitation dispute, DLI must certify that a dispute exists and that informal intervention did not resolve the dispute before an attorney may charge for services.[51] The certification process is triggered by either a certification request or a medical or rehabilitation request. DLI specialists attempt to resolve the dispute informally during the certification process.

Mediation — If the parties agree to participate, a DLI specialist conducts a mediation to seek agreement on the issues. Any type of dispute is eligible. A DLI mediation agreement is usually incorporated into a stipulation for settlement and submitted to OAH for approval via an award on stipulation; occasionally the mediation agreement is recorded in a "mediation award" issued by DLI.

Administrative conference — DLI conducts administrative conferences on medical or vocational rehabilitation (VR) issues presented on a medical or rehabilitation request unless it has referred the issues to OAH or the issues have otherwise been resolved. DLI refers medical disputes other than those over fee levels to OAH if they involve more than $7,500 at the time of dispute filing, and it may refer medical or VR disputes for other reasons.[52] The DLI specialist usually attempts to bring the parties to agreement during the conference. If agreement is reached, the specialist issues an "order on agreement." If agreement is not reached, the specialist issues a "decision-and-order." A party may appeal a DLI decision-and-order or order on agreement by requesting a *de novo* hearing at OAH.

Dispute resolution at OAH

OAH performs the following dispute-resolution activities.

Mediation — If the parties agree to participate, OAH offers mediation to seek agreement on the issues. Any type of dispute is eligible. An OAH mediation agreement is usually recorded in a stipulation for settlement and submitted to an

[51] Minnesota Statutes §176.081, subd. 1(c).

[52] Minnesota Statutes §176.106. The 2005 Legislature increased the monetary limit on DLI jurisdiction in medical disputes from $1,500 to $7,500. The 2013 Legislature removed this limit for disputes over medical fees, effective May 17, 2013. Also, DLI usually refers medical disputes to OAH if surgery is involved, and it may refer medical or VR disputes if litigation is pending at OAH or the issues are unusually complex. Primary liability disputes are outside of administrative conference jurisdiction and must be filed on a claim petition, which leads to a settlement conference or hearing at OAH.

OAH judge for approval via an award on stipulation, but the agreement is sometimes recorded in a "mediation award" issued by an OAH judge.

Settlement conference — OAH conducts settlement conferences in litigated cases to achieve a negotiated settlement, where possible, without a formal hearing. If achieved, the settlement typically takes the form of a stipulation for settlement. A stipulation for settlement is approved by an OAH judge; it may be incorporated into a mediation award or "award on stipulation," usually the latter.

Administrative conference — With some exceptions, OAH conducts administrative conferences on issues presented on a medical or rehabilitation request that have been referred from DLI (see above). In some cases, medical and rehabilitation request disputes referred from DLI are heard in a formal hearing (see below). OAH also conducts administrative conferences where requested by the claimant in a dispute about discontinuance of wage-loss benefits.[53] If agreement is not reached at the conference, the OAH judge issues a decision-and-order. A party may appeal an OAH decision-and-order by requesting a *de novo* formal hearing at OAH.

Formal hearing — OAH conducts formal hearings on disputes presented on claim petitions and other petitions where resolution through a settlement conference is not possible. OAH also conducts hearings on other issues, such as medical request disputes involving surgery; medical or rehabilitation request disputes that have complex legal issues or have been joined with other disputes by an order for consolidation; discontinuance disputes where the parties have requested a hearing; and disputes about miscellaneous issues such as attorney fees. OAH also conducts *de novo* hearings when a party files a request for hearing to appeal an administrative-conference decision-and-order from DLI or OAH. If the parties do not reach agreement, the judge issues a "findings-and-order."

Dispute resolution by the parties

Often the parties in a dispute reach agreement outside of the dispute-resolution process at DLI or OAH, although this is often spurred by DLI or OAH initiatives, such as the scheduling of proceedings. Sometimes the party initiating a dispute or an appeal of a decision-and-order withdraws the dispute or the appeal. Sometimes the parties agree informally, sometimes without notifying DLI or OAH. Often they settle by means of a stipulation for settlement, which may be reached while the dispute is at DLI or OAH. The stipulation for settlement is usually incorporated into an award on stipulation issued by an OAH judge. An award on stipulation may occur in any type of dispute, but occurs most commonly in claim petition disputes.

Dispute resolution in the Union Construction Workers' Compensation Program

The 1995 workers' compensation law change authorized employers and employees, through collective bargaining agreements, to establish certain obligations and procedures relating to workers' compensation in their workplaces.[54] These obligations and procedures may include (among others) alternative dispute resolution. If a collective bargaining agreement meets conditions in the law, the agreement must be recognized as valid and binding by DLI, OAH, the Workers' Compensation Court of Appeals (WCCA) and the Minnesota Supreme Court. The Union Construction Workers' Compensation Program (UCWCP) was created under this process and has been operating since 1997; it includes alternative dispute resolution as one of its features.

The UCWCP aims to provide efficient and non-adversarial dispute resolution, quality medical and rehabilitative care, prompt payment of appropriate indemnity benefits[55] and prompt and safe return to union work, with the goal of minimizing losses for employers and employees.

The UCWCP dispute-resolution process features four steps: intervention, facilitation, mediation and arbitration. An arbitrator's decision is binding but may be appealed to the WCCA. Other features of UCWCP are an exclusive medical provider network, an exclusive rehabilitation consultant network and a neutral medical examiner panel.

[53] Minnesota Statutes §176.239.

[54] Minnesota Statutes §176.1812.

[55] The indemnity benefits provided must be those in Minnesota law.

For 2014 to 2018, an annual average of 291 paid indemnity claims were involved in UCWCP. This accounted for about 13 percent of all paid indemnity claims in the construction industry for that period.[56]

[56] More information is available at www.ucwcp.com.

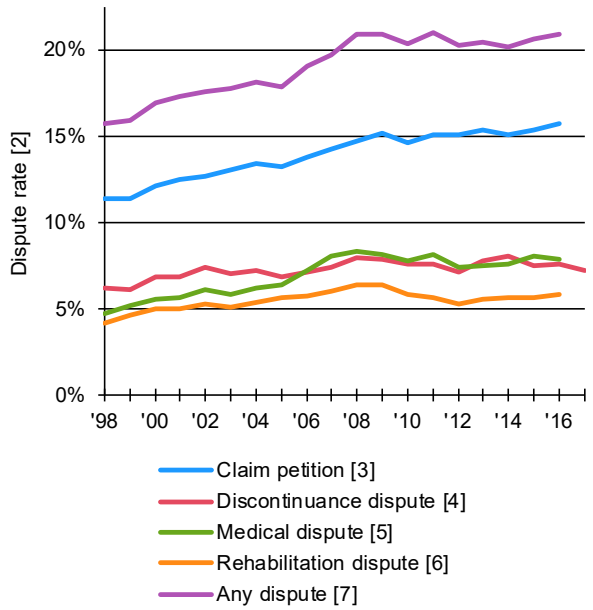
Dispute rates

The overall dispute rate showed a large increase from 1998 to 2008, but has leveled off since 2008. The rates of particular types of disputes have followed a similar pattern.

- The overall dispute rate (the percentage of filed indemnity claims with any dispute) was 20.9 percent for 2016.[57]
- Among rates of particular types of disputes, the claim petition rate was highest, at 15.7 percent for 2016.
- All dispute rates showed substantial increases between 1998 and 2008:
  - the overall dispute rate rose 5.1 percentage points (33 percent);[58]
  - the rate of claim petitions rose 3.3 percentage points (29 percent);
  - the rate of discontinuance disputes rose 1.8 points (29 percent);
  - the rate of medical disputes rose 3.6 points (76 percent); and
  - the rate of rehabilitation disputes rose 2.2 points (53 percent).
- The claim petition rate is the only one that continued to increase after 2008; between that year and 2016, it rose another 1.0 percentage point.

[57] See note 2 in Figure 5.1.
[58] See note 13 on p. 10.

Figure 5.1 Incidence of disputes, injury years 1998-2017 [1]



Injury year	Dispute rate [2]				
	Claim petition [3]	Discon-tinuance dispute [4]	Medical dispute [5]	Rehabili-tation dispute [6]	Any dispute [7]
1998	11.4%	6.2%	4.7%	4.2%	15.7%
2008	14.7	8.0	8.3	6.4	20.9
2012	15.1	7.2	7.4	5.3	20.2
2013	15.4	7.8	7.5	5.5	20.4
2014	15.1	8.0	7.6	5.7	20.1
2015	15.4	7.5	8.0	5.7	20.6
2016	15.7	7.6	7.9	5.9	20.9
2017		7.3			

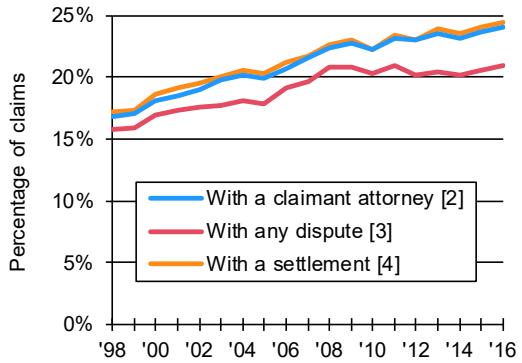
1. Developed statistics from DLI data (see Appendix C).
2. The discontinuance dispute rate is not shown for 2018, and the other dispute rates are not shown for 2017 and 2018, because the estimates are not sufficiently stable for the years concerned.
3. Percentage of filed indemnity claims with at least one claim petition. (Filed indemnity claims are claims for indemnity benefits, whether ultimately paid or not.)
4. Percentage of paid wage-loss claims with at least one discontinuance dispute.
5. Percentage of paid indemnity claims with at least one medical dispute certification request or medical request.
6. Percentage of paid indemnity claims with at least one rehabilitation dispute certification request or rehabilitation request.
7. Percentage of filed indemnity claims with at least one dispute of any type.

Claimant attorney involvement

Claimant attorney involvement has increased substantially since 1998. The percentage of claims with claimant attorney involvement has followed the percentage of claims with settlements and to a lesser degree the percentage with disputes.

- The percentage of paid indemnity claims with claimant attorney involvement rose from 16.8 percent for injury year 1998 to a projected 24.1 percent for 2016.[59] This is a 43-percent increase.[60]
- The rate of increase of claimant attorney involvement seems to have decreased since 2009.
- The rate of claimant attorney involvement has followed a nearly identical trend to the percentage of claims with settlements.[61]
- The rate of claimant attorney involvement (along with the percentage of claims with a settlement) exceeded the overall dispute rate for the entire period shown.[62]
  - ➢ While the rate of claimant attorney involvement rose with the dispute rate through 2008, it continued rising after that time while the dispute rate levelled off.
- Total claimant attorney fees are projected to be $50 million for injury year 2016.[63] On a paid basis, claimant attorney fees accounted for an estimated 3.2 percent of total workers' compensation system cost for 2018.[64]
- DLI does not track defense attorney involvement; however, outside data indicates that among Minnesota claims from 2016 with at least seven days of disability at three years of maturity, 26 percent had defense attorney involvement.[65]

Figure 5.2 Percentages of indemnity claims with claimant attorney involvement, with any dispute and with a settlement, injury years 1998-2016 [1]



Injury year	Percentage of claims [1] With claimant attorney [2]	With any dispute [3]	With settle-ment [4]
1998	16.8%	15.7%	17.2%
2004	20.2	18.1	20.6
2009	22.8	20.9	23.0
2012	23.0	20.2	23.0
2013	23.5	20.4	23.9
2014	23.1	20.1	23.5
2015	23.6	20.6	24.0
2016	24.1	20.9	24.4

1. Statistics for 2017 and 2018 are not shown because they are not yet sufficiently stable for those years.
2. Developed statistics from DLI data (see Appendix C). A claimant attorney is deemed to be involved if claimant attorney fees of any type are reported. This percentage is relative to the number of paid indemnity claims.
3. From Figure 5.1. This percentage is relative to the number of filed indemnity claiims.
4. From Figure 3.2. This percentage is relative to the number of paid indemnity claims.

[59] See note 1 in Figure 5.2.

[60] See note 13 on p. 10.

[61] Some claims have claimant attorney involvement without a settlement, and vice-versa. Among paid indemnity claims that closed from 2014-2016, 1.4 percent had claimant attorney involvement without a settlement and 1.2 percent had a settlement without claimant attorney involvement.

[62] Among paid indemnity claims that closed from 2014-2016, 5.5 percent had claimant attorney involvement without a dispute and 2.0 percent had a dispute without claimant attorney involvement.

[63] This figure counts all types of claimant attorney fees. The figure is given for injury year 2016 because the estimates for 2017 and 2018 are not yet sufficiently stable.

[64] This percentage was calculated with techniques similar to those for Figure 2.8 to reduce the effects of annual fluctuations in total system cost.

[65] Workers' Compensation Research Institute (WCRI), *CompScope benchmarks for Minnesota, 20th edition,* April 2020, p. 26. The WCRI data also indicates that for claims from 2013 to 2016 with at least seven days of disability at three years of maturity, 24 to 26 percent had claimant attorney involvement (p. 122). In contrast with the WCRI data, the DLI data in Figure 5.2 pertains generally to claims with three or more days of disability developed to essentially full maturity.

Claim denials

Denials of primary liability are of interest because they frequently generate disputes. The denial rate has varied widely during the past 20 years.

- The rate of denial of filed indemnity claims stood at 14.6 percent for 2018, in a decrease from the high-point of 16.9 percent for 2015. The years 2014 through 2016 were about as high as the previous high years of 2003 and 2004, and substantially above the low period of 2007 through 2011.

- The changes in the overall denial rate since 2011 are virtually all accounted for by changes in claims denied and without payment, as opposed to claims denied but with payment.[66]

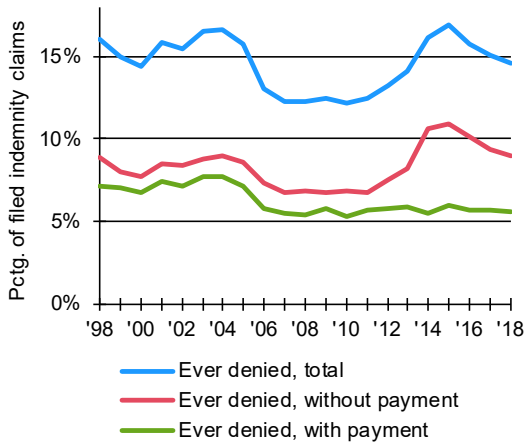
  - ➢ From 2011 to 2018, the percentage of filed indemnity claims ever denied but *with payment* changed little, varying 5.5 to 6.0 percent. However, the percentage ever denied and *without payment* rose from 6.7 to 10.9 percent and then fell back to 9.0 percent during the same period.

- Among filed indemnity claims with denials, the percentage with payment ranged from 44 to 47 percent from 1998 through 2011 but dropped to 34 to 39 percent for 2014 through 2018.[67]

  - ➢ This reflects the fact that the trends in denied claims paid and denied claims not paid moved in parallel through 2011 but diverged thereafter.

- The decrease in the denial rate between 2004 and 2007 coincided with an enhancement in DLI's denial review process initiated in November 2005.[68]

Figure 5.3 Filed indemnity claim denial rates, injury years 1998-2018 [1]



Injury year	Percentage of filed indemnity claims ever denied: Without payment	With payment	Total	Pctg. of denied filed indemnity claims ever paid
1998	8.9%	7.2%	16.1%	44.6%
2004	9.0	7.7	16.7	46.2
2007	6.8	5.5	12.3	44.6
2011	6.7	5.7	12.4	45.8
2014	10.7	5.5	16.1	33.9
2015	10.9	6.0	16.9	35.3
2016	10.1	5.6	15.8	35.8
2017	9.4	5.6	15.0	37.5
2018	9.0	5.6	14.6	38.5

1. Developed statistics from DLI data (see Appendix C). Filed indemnity claims are claims for indemnity benefits, including claims paid and claims never paid. Denied claims include claims denied and never paid, claims denied but eventually paid and claims initially paid but later denied.

[66] See note 1 in Figure 5.3.

[67] These claims include cases denied but then paid and cases paid but then denied.

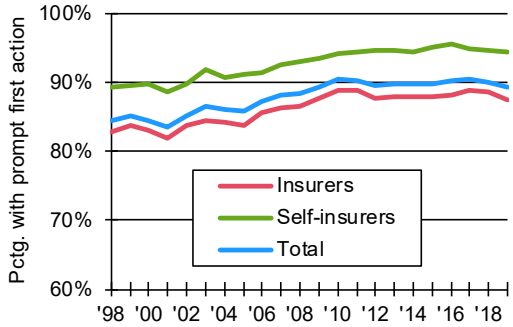
[68] In this enhancement, still in effect, DLI requires insurers to indicate their reasons for claim denials in a manner compliant with statute and rule. The pronounced decrease in the denial rate between 2004 and 2007 suggests insurers may have been refraining from making some denials they otherwise would have made, believing those denials might not withstand DLI scrutiny. See "DLI primary liability determination review process," in *COMPACT,* August 2006, available from DLI Research and Statistics, 651-284-5025.

Prompt first action

Insurers must either begin payment on a wage-loss claim or deny the claim within 14 days of when the employer knows of the injury.[69] This "prompt first action" is important not only for the sake of the injured worker, but also because it makes disputes less likely. The prompt-first-action rate increased from 1998 through 2009 but has levelled off since.

- The fiscal year 2019 prompt-first-action rate was 89 percent overall, about five percentage points higher than in 1998 but about the same as in 2009.
- Both insurers and self-insurers exhibited a levelling-off after 2009 or 2010.
- The rate was higher for self-insurers than for insurers by 5 to 8 percentage points for the period shown.
- The rates for insures and self-insurers fell somewhat in the most recent two or three years after peaking in 2017 and 2016, respectively.
- In compliance with statute[70] and to improve workers' compensation system performance, DLI publishes the annual *Prompt First Action Report on Workers' Compensation Claims,* which indicates the prompt-first-action rates of individual insurers, self-insurers and the overall system.[71]

Figure 5.4 Percentage of lost-time claims with prompt first action, fiscal claim-receipt years 1998-2019 [1]



Fiscal year of claim receipt	Insurers	Self-insurers	Total
1998	82.8%	89.2%	84.4%
2005	83.6	91.2	85.7
2009	87.7	93.4	89.3
2010	88.9	94.2	90.3
2015	87.9	95.1	89.8
2016	88.2	95.4	90.1
2017	88.9	94.8	90.5
2018	88.5	94.5	90.0
2019	87.4	94.4	89.2

1. Computed from DLI data by DLI Compliance, Records and Training. See DLI, 2019 *Prompt First Action Report on Workers' Compensation Claims*. Fiscal claim-receipt year means the fiscal year in which DLI received the claim. Fiscal years end on June 30 of the indicated year.

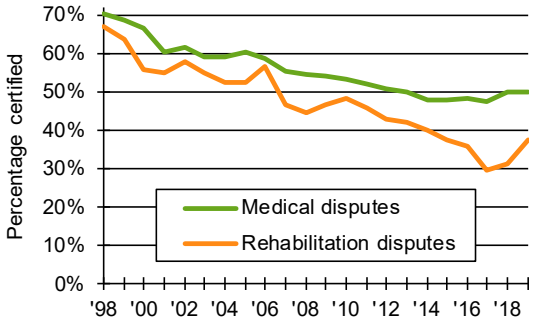
[69] Minnesota Statutes §176.221.
[70] Minnesota Statutes §176.223.
[71] The report is available at www.dli.mn.gov/business/workers-compensation/work-comp-prompt-first-action-report-workers-compensation-claims.

Certification of medical and rehabilitation disputes at DLI

The percentages of medical and rehabilitation disputes certified at DLI have fallen substantially since 1998.

- Between 1998 and 2019, the percentage certified fell from 70 percent to 50 percent for medical disputes and from 67 percent to 37 percent for rehabilitation disputes.
  - All of the decrease had occurred by 2013 for medical disputes and by 2015 for rehabilitation disputes.
  - For rehabilitation disputes, the percentage certified reached a low-point of 30 percent in 2017 before returning to 37 percent by 2019.
- The proportion of disputes certified was higher among medical disputes than among rehabilitation disputes for the entire period shown; the difference has widened since 2010.

Figure 5.5 Percentage of disputes certified at DLI, 1998-2019 [1]



Year of certification decision	Percentage certified		
	Medical disputes	Rehabilitation disputes	Total
1998	70%	67%	69%
2007	55	47	53
2013	50	42	48
2015	48	37	45
2016	48	36	45
2017	47	30	42
2018	50	31	45
2019	50	37	46

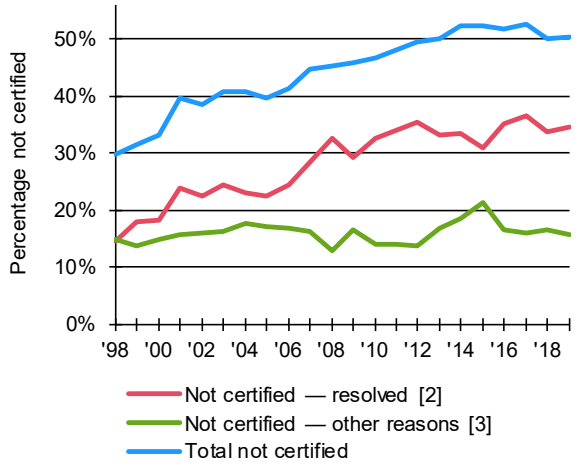
1. Data from DLI. The dispute certification process is triggered by the filing of a dispute certification request or a medical or rehabilitation request. Disputes as counted here include the filing of a certification request or a medical or rehabilitation request. The 1998 data only includes July through December.

Reason for noncertification at DLI: medical disputes

The increase in noncertification of medical disputes since 1998 has resulted entirely from an increase in the percentage not certified because the issues were resolved.

- From 1998 to 2019, the percentage of medical disputes (see note 1 in Figure 5.6) not certified because the issues were resolved rose from 15 to 35 percent, while the percentage not certified for other reasons changed by only one point rising from 15 to 16 percent (see note 3 in Figure 5.6).
- Among *noncertified* medical disputes, the percentage not certified because they were resolved stood at 69 percent for 2019 as compared with 49 percent for 1998.

Figure 5.6 Reason for noncertification of medical disputes at DLI, 1998-2019 [1]



Year of certification decision	Reason not certified: Resolved [2] Pctg. of all medical disputes	Reason not certified: Resolved [2] Pctg. of non-certified medical disputes	Reason not certified: Other [3] Pctg. of all medical disputes	Reason not certified: Other [3] Pctg. of non-certified medical disputes	Total not certified Pctg. of all medical disputes	Total not certified Pctg. of non-certified medical disputes
1998	15%	49%	15%	51%	30%	100%
2005	23	57	17	43	40	100
2012	36	72	14	28	49	100
2013	33	66	17	34	50	100
2015	31	59	21	41	52	100
2016	35	68	17	32	52	100
2017	37	70	16	30	53	100
2018	34	67	17	33	50	100
2019	35	69	16	31	50	100

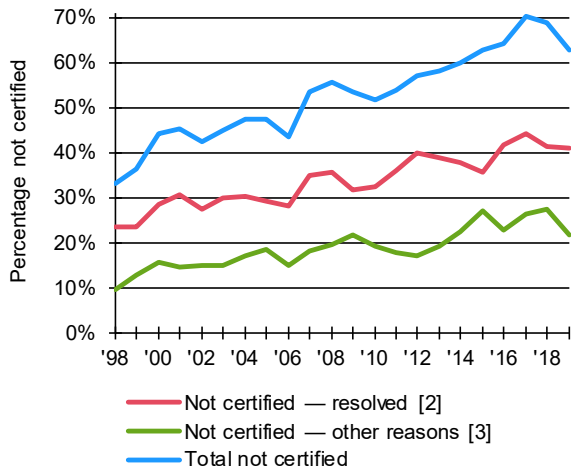
1. Data from DLI. The medical dispute certification process is triggered by the filing of a dispute certification request for medical issues or a medical request. Medical disputes as counted here include the filing of a certification request for medical issues or a medical request. The 1998 data only includes July through December.
2. The resolution here could be the result of efforts by a DLI specialist or of the insurer indicating that it intended from the start to pay for the services as requested.
3. Other reasons for noncertification include the following: the insurer needs additional time or information to decide its position; the same issues are already scheduled for a proceeding at DLI or OAH; the injured worker's claim is subject to the provisions of a collective bargaining "carve-out" agreement (Minnesota Statutes §176.1812) and an administrative conference is currently deemed unnecessary; or a medical issue hasn't previously been submitted to the internal dispute-resolution procedure of a certified managed care plan.

Reason for noncertification at DLI: rehabilitation disputes

In contrast with medical disputes, the increase in noncertification of rehabilitation disputes since 1998 has resulted from increases in both the percentage not certified because the issues were resolved and the percentage not certified for other reasons.

- From 1998 to 2019, the percentage of rehabilitation disputes (see note 1 in Figure 5.7) not certified because the issues were resolved rose from 24 to 41 percent. These disputes accounted for 71 percent of *noncertified* rehabilitation disputes in 1998 and 65 percent in 2019.
- During the same period, the percentage of rehabilitation disputes not certified for other reasons (see note 3 in Figure 5.7) rose from 10 to 22 percent. These disputes accounted for 29 percent of *noncertified* rehabilitation disputes in 1998 and 35 percent in 2019.

Figure 5.7 Reason for noncertification of rehabilitation disputes at DLI, 1998-2019 [1]



Year of certification decision	Reason not certified: Resolved [2] Pctg. of all rehab. disputes	Resolved [2] Pctg. of non-certified rehab. disputes	Other [3] Pctg. of all rehab. disputes	Other [3] Pctg. of non-certified rehab. disputes	Total not certified Pctg. of all rehab. disputes	Total not certified Pctg. of non-certified rehab. disputes
1998	24%	71%	10%	29%	33%	100%
2005	29	61	18	39	48	100
2012	40	70	17	30	57	100
2014	38	63	22	37	60	100
2015	36	57	27	43	63	100
2016	42	65	23	35	64	100
2017	44	63	26	37	70	100
2018	41	60	28	40	69	100
2019	41	65	22	35	63	100

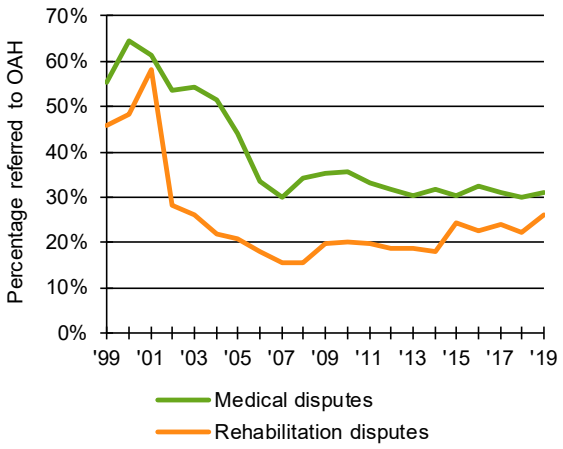
1. Data from DLI. The rehabilitation dispute certification process is triggered by the filing of a dispute certification request for rehabilitation issues or a rehabilitation request. Rehabilitation disputes as counted here include the filing of a certification request for rehabilitation issues or a rehabilitation request. The 1998 data only includes July through December.
2. The resolution here could be the result of efforts by a DLI specialist or of the insurer indicating it intended from the start to pay for the services as requested.
3. Other reasons for noncertification include the following: the insurer needs additional time or information to decide its position; the same issues are already scheduled for a proceeding at DLI or OAH; or the injured worker's claim is subject to the provisions of a collective bargaining "carve-out" agreement (Minnesota Statutes §176.1812) and an administrative conference is currently deemed unnecessary.

DLI referrals to OAH

DLI referrals to OAH are far less frequent currently than in the early 2000s.

- The referral rate for medical disputes fell from a high of 64 percent in 2000 to 30 percent in 2007 and ranged from 30 to 32 percent for 2012 through 2019.
- The referral rate for rehabilitation disputes fell from a high of 58 percent in 2001 to 16 percent in 2007 and 2008; after remaining steady at 18 to 20 percent for 2009 to 2014, it increased to a range of 22 to 26 percent for 2015 to 2019. The reason for this is uncertain.[72]
- The referral rate is higher for medical disputes than for rehabilitation disputes; this is at least partly because two types of medical disputes are automatically referred: those of more than $7,500 (unless they concern the amount of payment for services) and those involving surgery.[73]

Figure 5.8 Percentage of DLI-certified disputes referred to OAH, 1999-2019 [1]



Year of certification decision	Percentage referred to OAH: Certified medical disputes	Certified rehabilitation disputes	Total
1999	55%	46%	52%
2001	61	58	60
2007	30	16	24
2010	36	20	30
2015	30	24	28
2016	32	22	28
2017	31	24	28
2018	30	22	27
2019	31	26	29

1. Data from DLI. Data not available before 1999.

[72] One possible explanation is related to the 2013 law change requiring rehabilitation conferences to be held within 21 days of the rehabilitation request (unless the only issue is the amount of payment for services already provided or there is good cause) (see Appendix B). For rehabilitation requests in which the insurer is requesting a termination of rehabilitation services, there is often a concurrent discontinuance dispute at OAH. If the rehabilitation dispute at DLI is being dealt with more quickly than previously, the discontinuance dispute is more likely to still be in progress, so the rehabilitation dispute is more likely to be referred to OAH to be combined with the discontinuance dispute. However, this law change took effect Oct. 1, 2013, and DLI's more rapid scheduling of rehabilitation conferences was evident in 2014 (see Figure 5.12), but the increase in the referral rate in Figure 5.8 is not apparent until 2015.

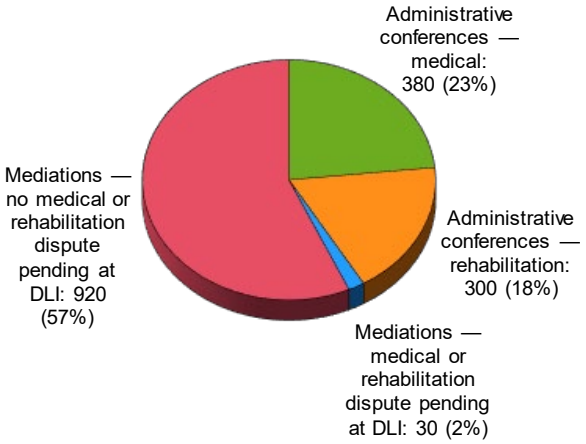
[73] See p. 45 and note 52.

Dispute resolution proceedings at DLI

Mediations account for a majority of dispute-resolution proceedings at DLI. With most DLI mediations, there are no medical or rehabilitation disputes pending at DLI.

- For 2017 to 2019, mediations accounted for 59 percent of DLI proceedings. In 97 percent of DLI mediations (or 57 percent of DLI proceedings), there were no medical or rehabilitation disputes pending at DLI. This is because most DLI mediations are on claim petition issues.[74]
- Administrative conferences on medical issues accounted for 23 percent of DLI proceedings, while conferences on rehabilitation issues accounted for another 18 percent.
- For 2017 to 2019, 86 percent of DLI mediations (with and without disputes pending at DLI) resulted in agreement. From 2002 to 2019, this percentage ranged from 78 to 93 percent. In most of these cases, the resolution document is an award on stipulation (issued by OAH); for some, it is a mediation award (issued by DLI).

Figure 5.9 Mediations and administrative conferences at DLI, 2017-2019 average [1]



1. Data from DLI. Numbers rounded to nearest 10.

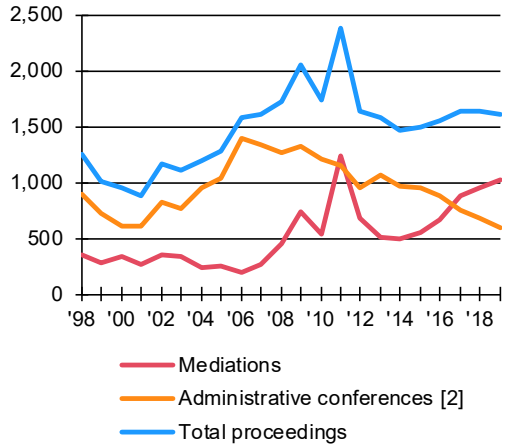
[74] This is the experience of the DLI Alternative Dispute Resolution unit; the DLI data system does not track this information.

Dispute resolution proceedings at DLI: trends

While the total number of proceedings at DLI has increased since 1998, the numbers of mediations and administrative conferences have shown very different trends.

- From 1998 to 2019:
  - mediations nearly tripled, increasing by 660;
  - administrative conferences fell by 300, or one-third; and
  - total mediations and conferences increased by 360.
- A turning point occurred in 2006 in the relative numbers of mediations and conferences. From 2006 to 2019, mediations rose by 830 while conferences fell by 800. This occurred because of an increased DLI emphasis on mediation and other early dispute-resolution activities.
- The number of mediations fluctuated significantly between 2008 and 2013.

Figure 5.10 Mediations and administrative conferences at DLI, 1998-2019 [1]



Year of proceeding	Mediations	Administrative conferences [2]	Total proceedings
1998	360	890	1,250
2001	270	610	880
2006	190	1,390	1,580
2011	1,240	1,140	2,380
2015	540	960	1,500
2016	660	880	1,550
2017	880	750	1,630
2018	950	690	1,640
2019	1,020	590	1,610

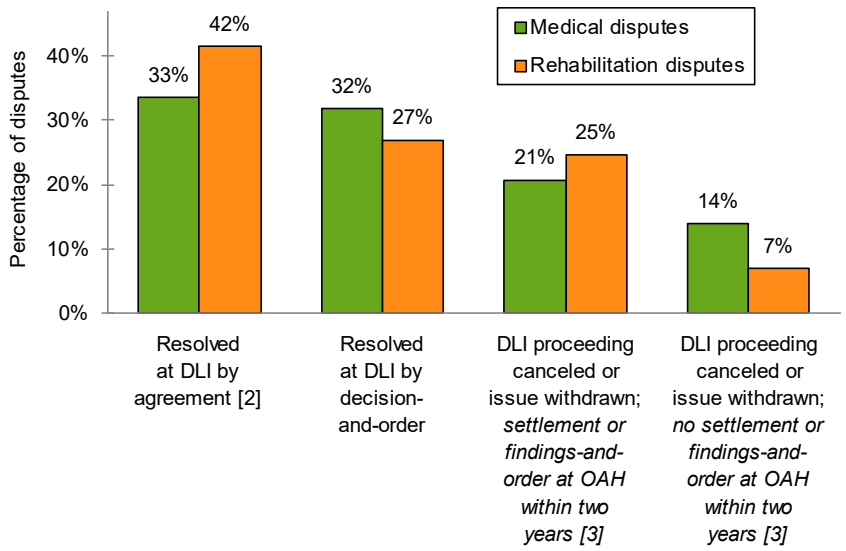
1. Data from DLI. Numbers rounded to nearest 10.
2. Includes conferences where agreement was reached.

Outcomes of DLI-certified disputes not referred to OAH

Among DLI-certified medical and rehabilitation disputes that are not referred to OAH, a majority are resolved at DLI by agreement or by decision-and-order.

- For 2017 to 2019 combined:
  - 33 percent of medical disputes were resolved by agreement at DLI (see note 2 in Figure 5.11) and another 32 percent by DLI decision-and-order; and
  - 42 percent of rehabilitation disputes were resolved by agreement at DLI and another 27 percent by DLI decision-and-order.
- For about 35 percent of medical disputes and 32 percent of rehabilitation disputes, the DLI outcome was a cancellation of a scheduled proceeding or withdrawal of the dispute. In a majority of these cases, there was a settlement (award on stipulation) or findings-and-order at OAH within two years. This was more likely for rehabilitation disputes (25 percent of all outcomes) than for medical disputes (21 percent).
- Overall, the main difference between medical and rehabilitation disputes was that rehabilitation disputes were more likely to be resolved by agreement at DLI or settlement or findings-and-order (usually settlement) at OAH (with two years), and less likely to be resolved by DLI decision-and-order.

Figure 5.11 Outcomes of DLI-certified disputes not referred to OAH, 2017-2019 average [1]



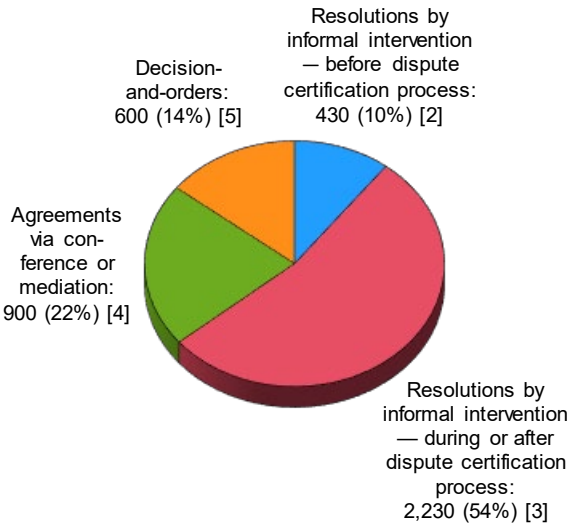
1. Data from DLI.
2. Since this figure is limited to DLI-certified disputes not referred to OAH, it excludes most DLI mediation agreements — specifically, those on issues other than a medical or rehabilitation dispute at DLI (see Figure 5.9). The "agreement" category here includes (in declining order of frequency) instances of conference canceled because of prior issue resolution, conference held and issues resolved without DLI written agreement, conference held and issues resolved with DLI written agreement, mediation held and issues resolved without DLI written agreement, conference or mediation held with issues resolved with a DLI mediation award and issues resolved prior to conference by DLI intervention. Where an agreement is reached without a DLI document, the agreement is often incorporated in an award on stipulation at OAH.
3. The canceled DLI proceeding may be an administrative conference or mediation. "Withdrawn" means the dispute was withdrawn at DLI (not necessarily OAH). This category also includes DLI mediations held with no agreement and cases where the dispute parties no longer respond to DLI communications. An OAH findings-and-order may occur in these disputes because they may be consolidated with other OAH disputes.

Dispute resolutions at DLI

About 86 percent of dispute resolutions at DLI are by agreement, and most of these are through informal intervention.

- For 2017 to 2019 combined, 64 percent of DLI dispute resolutions were by informal intervention; most of these (54 percent of resolutions at DLI) were during or after the dispute certification process.
- Another 22 percent of DLI resolutions were agreements via conference or mediation.
- The remaining 14 percent took the form of decision-and-orders.

Figure 5.12 Dispute resolutions at DLI, 2017-2019 average [1]



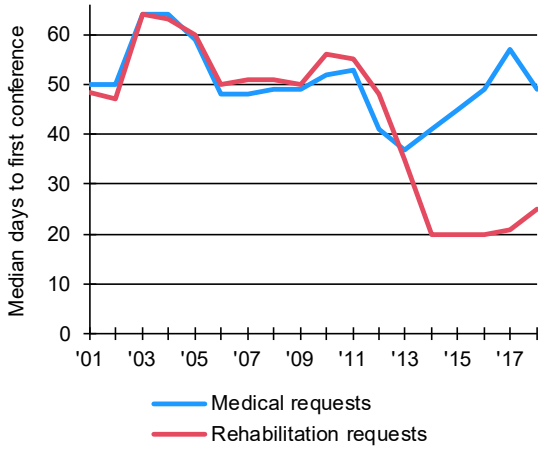
1. Data from DLI. Numbers rounded to nearest 10.
2. These resolutions are accomplished by a DLI specialist via phone, walk-in contact or correspondence before a dispute certification request, medical request or rehabilitation request has been submittted.
3. These resolutions are accomplished by a DLI specialist via phone, walk-in contact or correspondence after a dispute certification request, medical request or rehabilitation request has been submittted. If the resolution occurs during the dispute certification process, a dispute is not certified. If if occurs after that process, this means a dispute has been certified.
4. These include mediation awards and other agreements from conference or mediation. All DLI mediation agreements are counted here, including those on issues other than medical and rehabilitation disputes at DLI (see Figure 5.9).
5. Virtually all decision-and-orders are via administrative conference. Since 2010, nonconference decision-and-orders have numbered at most one a year.

Time to first conference for medical and rehabilitation requests at DLI

The times from medical and rehabilitation requests to the first scheduled conference at DLI have followed widely divergent paths in the past five years.

- For medical requests, the median time from the request to the first scheduled conference dropped from 53 days in 2011 to 37 days in 2013, but ended the period shown at 49 days in 2018 after a peak in 2017.
- For rehabilitation requests, the median time dropped from 55 days in 2011 to 20 to 21 days for 2014 to 2017 and then increased to 25 days in 2018.
  - These decreases in 2013 and 2014 were in response to the 2013 law change requiring rehabilitation conferences to take place within 21 days of the request (unless the only issue is the amount of payment for services already provided or there is good cause).[75]
- The median time to first conference had been fairly stable for both medical and rehabilitation requests from 2006 through 2011.
- Prior to the 2013 law change, the median time to first conference was about the same for medical and rehabilitation requests.

Figure 5.13 Median time from request to first scheduled conference for medical and rehabilitation requests at DLI, request-receipt years 2001-2018 [1]



Year request received	Median days from request to first scheduled conference: Medical requests	Median days from request to first scheduled conference: Rehabilitation requests
2001	50	49
2003	64	64
2006	48	50
2011	53	55
2013	37	35
2014	41	20
2015	45	20
2016	49	20
2017	57	21
2018	49	25

1. DLI data. Disputes with both medical and rehabilitation requests are counted with both medical request disputes and rehabilitation request disputes if the two requests were no more than 10 days apart. Years prior to 2001 are unavailable.

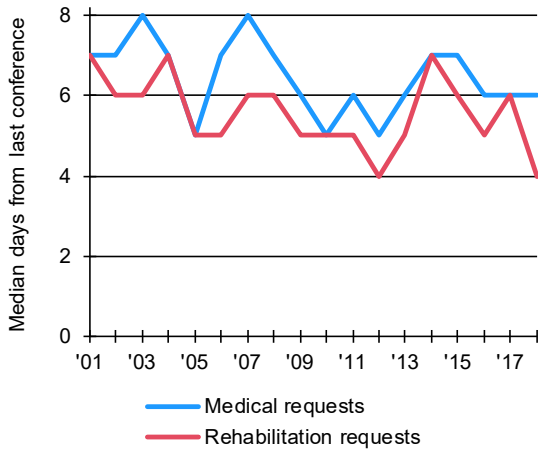
[75] See Appendix B.

Time from conference to decision-and-order for medical and rehabilitation requests at DLI

The median time from conference to decision-and-order at DLI was most recently less than a week for both medical and rehabilitation requests.

- The median times for 2016 to 2018 were six days for medical and four to six days for rehabilitation requests.
- For the period shown, the median time for medical requests was the same as or more than the time for rehabilitation requests.
- There does not seem to be an overall trend in these numbers since 2005.

Figure 5.14 Median time from last scheduled conference to decision-and-order for medical and rehabilitation requests at DLI, request-receipt years 2001-2018 [1]



Year request received	Median days from last scheduled conference to decision-and-order: Medical requests	Median days from last scheduled conference to decision-and-order: Rehabilitation requests
2001	7	7
2006	7	5
2011	6	5
2014	7	7
2015	7	6
2016	6	5
2017	6	6
2018	6	4

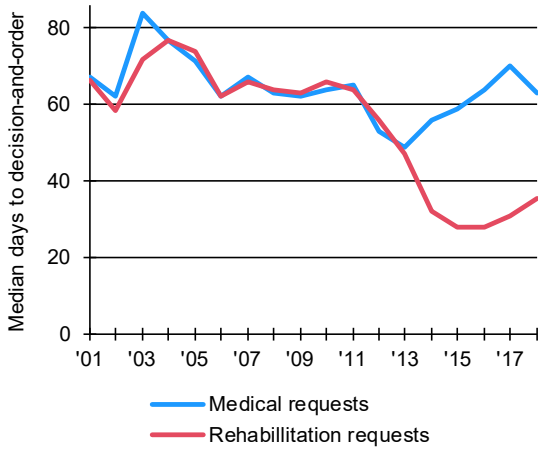
1. DLI data. Disputes with both medical and rehabilitation requests are counted with both medical request disputes and rehabilitation request disputes if the two requests were no more than 10 days apart. Years prior to 2001 are unavailable.

Time from request to decision-and-order for medical and rehabilitation requests at DLI

The times from medical and rehabilitation requests to a related decision-and-order at DLI have followed very different paths in the past five years.

- For medical requests, the median time from the request to decision-and-order dropped from 65 days in 2011 to 49 days in 2013, but increased thereafter, posting a value of 63 days for 2018, not much different from 2001.
- For rehabilitation requests, the median time dropped from 64 days in 2011 to a range of 28 to 32 days for 2014 through 2017 but increased to 36 days for 2018.
  - ➢ The decreases after 2012 resulted from the faster scheduling of rehabilitation conferences in response to the 2013 law change (Figure 5.13).[76]
- The median time to decision-and-order had been fairly stable for both medical and rehabilitation requests from 2006 through 2011.
- The median time to decision-and-order was about the same for medical and rehabilitation requests from 2004 through 2013.
- These trends reflect the trends in the time to the first scheduled conference and from the last scheduled conference to decision-and-order (Figures 5.13 and 5.14); they also partly reflect re-sets for some conferences.[77] For 2016 to 2018, conference re-sets occurred for 18 percent of medical requests and 11 percent of rehabilitation requests; in these cases, the median times between the first and last scheduled conferences were 44 and 30 days, respectively.
- The time from request to decision-and-order varies around the median. For 2016 through 2018, at the 75th percentile, the times were 84 and 46 days for medical and rehabilitation requests, respectively; at the 90th percentile, the times were 110 and 64 days, respectively.

Figure 5.15 Median time from request to decision-and-order for medical and rehabilitation requests at DLI, request-receipt years 2001-2018[1]



Year request received	Median days from request to decision-and-order: Medical requests	Median days from request to decision-and-order: Rehabilitation requests
2001	67	67
2004	77	77
2006	62	62
2011	65	64
2013	49	47
2014	56	32
2015	59	28
2016	64	28
2017	70	31
2018	63	36

1. DLI data. Disputes with both medical and rehabilitation requests are counted with both medical request disputes and rehabilitation request disputes if the two requests were no more than 10 days apart. Years prior to 2001 are unavailable.

[76] See Appendix B.

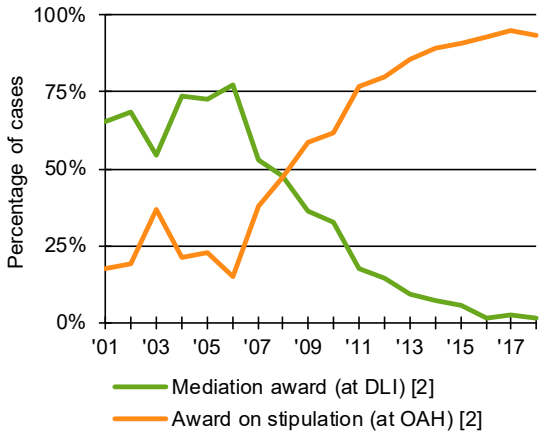
[77] A conference can be re-set only upon showing of good cause (Minnesota Rules part 1415.3700, subp. 6).

Mediation awards and awards on stipulation resulting from mediations at DLI

During the past several years, DLI mediations have shifted toward litigated disputes with complex issues. Reflecting this, the resolution document where agreement is reached is currently almost always an award on stipulation (at OAH) rather than a mediation award (at DLI).

- In cases where a DLI mediation has produced agreement, the percentage of cases where the resolution document was a mediation award (at DLI) dropped from 77 percent in 2006 to just 1 to 2 percent for 2016 to 2018. During the same period, the percentage with an award on stipulation (at OAH) increased from 15 to 93 to 95 percent.[78]

Figure 5.16 Mediation awards and awards on stipulation where DLI mediation has produced agreement, mediation-request-receipt years 2001-2018 [1]



Year mediation request received	Where mediation has produced agreement, percentage of cases with — Mediation award (at DLI) [2]	Award on stipulation (at OAH) [2]
2001	66%	17%
2006	77	15
2014	7	89
2015	6	91
2016	1	93
2017	2	95
2018	1	94

1. DLI data. Years prior to 2001 are unavailable.
2. Cases with both a mediation award and an award on stipulation are counted with the cases with mediation awards. Cases with both types of award ranged from 2 to 7 percent of the total from 2001 to 2010 and from 0 to 1 percent from 2011 to 2018. The percentages for any given year do not add to 100 percent because some cases with a mediation agreement do not show a mediation award or an award on stipulation in the data.

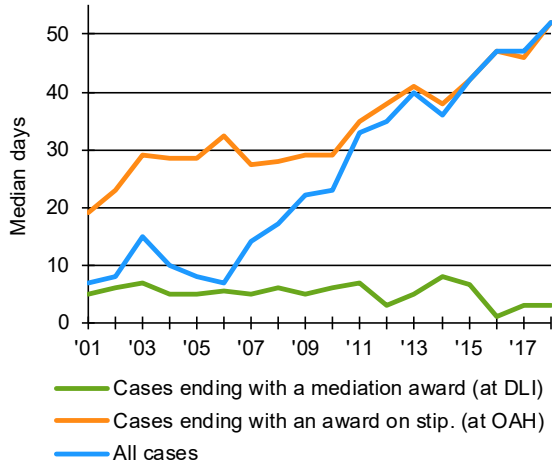
[78] See note 2 in Figure 5.16.

Time from mediation request to first scheduled mediation at DLI

The median time from the mediation request to mediation session has increased during the past several years; this is partly, but not totally, because of the shift in DLI mediations toward more complex cases.

- For cases ending with a mediation award at DLI (the less-complex cases), the median time to first scheduled mediation ranged from three to eight days from 2001 to 2015 but dropped to three days for 2017 and 2018.
- For cases ending with an award on stipulation at OAH (the more-complex cases), the median time to first scheduled mediation was generally somewhat less than 30 days from 2003 to 2010, but increased to 52 days by 2018.
- Partly because of the shift toward more-complex cases (Figure 5.16), the median time to first scheduled mediation for all cases combined rose steeply after 2006. Through 2006, the overall median was close to that for the simpler cases (ending with a mediation award at DLI); from 2011 onward, it was close to the median for the more-complex cases (ending with an award on stipulation at OAH). Since the more-complex cases made up most of all cases after 2011, the trend in the median time for the more-complex cases explains the trend in the median time for all cases combined after 2011.

Figure 5.17 Median time from mediation request to first scheduled mediation for mediation requests at DLI, request-receipt years 2001-2018 [1]



Year request received	Median days from mediation request to first scheduled mediation: Cases ending with a mediation award (at DLI) [2,3]	Cases ending with an award on stipulation (at OAH) [2,3]	All cases [3]
2001	5	19	7
2003	7	29	15
2006	6	33	7
2010	6	29	23
2014	8	38	36
2015	7	42	42
2016	1	47	47
2017	3	46	47
2018	3	52	52

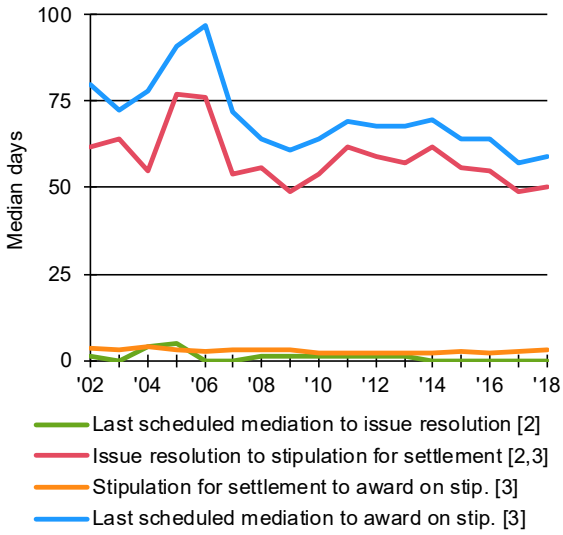
1. DLI data. Years prior to 2001 are unavailable.
2. Cases with both a mediation award and an award on stipulation are counted among cases with a mediation award.
3. "All cases" includes cases with neither a mediation award nor an award on stipulation. This is why it is possible, as it happens, for the median days for all cases for 2017 to be greater than both the median for cases with a mediation award and the median for cases with an award on stipulation.

Timelines after mediations at DLI that end with an award on stipulation

In considering timelines after DLI mediations, this page focuses on cases ending with an award on stipulation (at OAH) because they have constituted the vast majority of DLI mediation cases for the past several years. In these cases, currently, the award on stipulation typically occurs about two months after the mediation. Most of that time consists of the time taken by the parties' attorneys to file a stipulation for settlement with OAH after resolution has been reached.

- At the median, resolution of the issues has been achieved the day of the mediation or the day after for all years from 2002 to 2018 except 2004 and 2005. DLI involvement in the process is concluded when the issues are resolved.
- For 2017 and 2018, the median time from issue resolution to the filing of the stipulation for settlement at OAH was 49 or 50 days. This was at the level of previous low-point reached in 2009.
- The median time from the filing of the stipulation for settlement to the issuing of an award on stipulation by an OAH judge was two or three days from 2005 to 2018.
- The overall result of these timelines was that the median time from the last scheduled mediation to the award on stipulation was 57 or 59 days for 2017 and 2018, the lowest for the period shown.

Figure 5.18 Timelines after mediation for mediation requests at DLI that end with an award on stipulation (at OAH), request-receipt years 2002-2018 [1]



Year request received	Median days from — Last scheduled mediation to issue resolution [2]	Issue resolution to stipulation for settlement [2,3]	Stipulation for settlement to award on stipulation [3]	Last scheduled mediation to award on stipulation [3]
2002	1	62	4	80
2006	0	76	3	97
2007	0	54	3	72
2009	1	49	3	61
2014	0	62	2	70
2015	0	56	3	64
2016	0	55	2	64
2017	0	49	3	57
2018	0	50	3	59

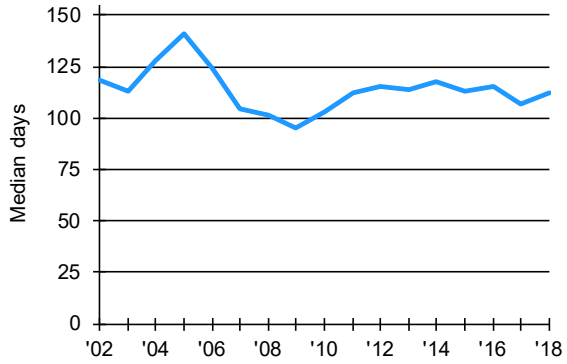
1. DLI data. Years prior to 2002 are unavailable.
2. Issue resolution may occur in the mediation or afterward via communication among the parties (and sometimes DLI). If the resolution occurs after the mediation, DLI is notified and records it.
3. A stipulation for settlement is written by attorneys for the parties after issue resolution and is submitted to OAH for approval via an award on stipulation.

Time from mediation request to award on stipulation for mediations at DLI that end with an award on stipulation

For DLI mediations that end with an award on stipulation at OAH, the total time from the mediation request to the award on stipulation has been, at the median, between three-and-a-half and four months for the past eight years.

- For mediation requests received from 2011 to 2018, the median total time to the award on stipulation ranged from 107 to 118 days.
- High and low points occurred in 2005 (141 days) and 2009 (96 days).
- This timeline reflects the timelines in Figures 5.16 and 5.17. It also reflects the fact that some mediations have re-sets. For 2016 to 2018, 12 percent of mediations had re-sets for a median of 33 days.
- The time from request to award on stipulation varies around the median. For 2016 through 2018, at the 75th and 90th percentiles, the times were 143 and 193 days, respectively.

Figure 5.19 Median time from mediation request to award on stipulation for mediation requests at DLI that end with an award on stipulation (at OAH), request-receipt years 2002-2018 [1]



Year request received	Median days from mediation request to award on stipulation
2002	119
2005	141
2007	105
2009	96
2014	118
2015	113
2016	115
2017	107
2018	112

1. DLI data. Cases with both a mediation award and an award on stipulation are excluded. The timelines here reflect timelines in Figures 5.17 and 5.18. Years prior to 2002 are unavailable.

Appendix A

Glossary

The following terms are used in this report.[79]

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 data.

Administrative conference — An expedited, informal proceeding where parties present and discuss viewpoints in a dispute. With some exceptions, administrative conferences are conducted on medical and vocational rehabilitation disputes presented on a medical or rehabilitation request;[80] they are also conducted on disputes about discontinuance of wage-loss benefits presented by a claimant's request for administrative conference. Medical and rehabilitation conferences are conducted at either the Department of Labor and Industry (DLI) or the Office of Administrative Hearings (OAH) depending on whether DLI has referred the issues concerned to OAH.[81] Discontinuance conferences are conducted at OAH. If agreement is achieved at the conference, an "order on agreement" is issued, which is binding unless appealed. If agreement is not achieved, the DLI specialist or OAH judge issues a "decision-and-order," also binding unless appealed. A party may appeal a DLI or OAH decision-and-order or order on agreement by requesting a *de novo* hearing at OAH.

Ambulatory Surgical Center Payment System (ASCPS) — Minnesota's payment system for workers' compensation ambulatory surgical center facility services provided on or after Oct. 1, 2018. It is based on Medicare's ASCPS. Payment depends on the procedures performed, and under statute is 320 percent of the Medicare level.

Assigned Risk Plan (ARP) — Minnesota's workers' compensation insurer of last resort, which insures employers unable to insure themselves in the voluntary market. The ARP is necessary because all non-exempt 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 Department of Commerce sets the ARP premium rates, which are different from the voluntary market rates.

Causation — The issue of whether the medical condition or disability for which the employee requests benefits or services was caused by an admitted injury (one for which the insurer or employer has admitted primary liability). An insurer denying benefits or services on the basis of causation is claiming the medical condition or disability in question did not arise from the admitted work injury.

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

Cost-of-living adjustment — An annual adjustment of temporary total disability, temporary partial disability, permanent total

[79] These definitions are only intended to help the reader understand the material presented in this report. They are not intended to be legally definitive or exhaustive.

[80] As indicated on p. 46, some issues presented on a medical or rehabilitation request are heard in a formal hearing at the Office of Administrative Hearings rather than in an administrative conference.

[81] See discussion of DLI administrative conferences on p. 45 (including note 52) for types of medical and vocational rehabilitation disputes referred to OAH.

disability or dependents' benefits computed from the annual change in the statewide average weekly wage (SAWW).[82] 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. For injuries from Oct. 1, 1995, through Sept. 30, 2013, the cost-of-living adjustment was limited to 2 percent a year and was delayed until the fourth anniversary of the injury. For injuries on or after Oct. 1, 2013, the cost-of-living adjustment is limited to 3 percent a year and delayed until the third anniversary of the injury.

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 percentage of the worker's gross pre-injury wage and are paid for a specified period of time, depending on the dependents concerned.

Developed statistics — Estimates of the values of claim statistics (for example, number of claims, average claim cost, dispute rate, vocational rehabilitation participation rate) at a given claim maturity. Developed statistics are relevant for accident year, policy year, injury year and vocational rehabilitation plan-closure year data.[83] They are obtained by applying development factors, based on historical rates of development of the statistic in question, to tabulated numbers.

Development — The change over time in a claim statistic (for example, number or cost of claims) for a particular accident year, policy year, injury year or vocational rehabilitation (VR) plan-closure year.[84] The reported numbers 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.

Diagnosis-related group (DRG) payment system — Minnesota's payment system for workers' compensation hospital inpatient facility services, effective for services provided on or after Jan. 1, 2016. It is based on Medicare's Inpatient Prospective Payment System (IPPS). In IPPS, a hospitalization is categorized – on the basis of principal diagnosis and primary treatment performed – into a Diagnosis-Related Group (DRG) and payment is then determined mainly from the DRG. For hospitals that are not Medicare-designated Critical Access Hospitals, Minnesota's DRG system provides for payment at 200 percent of the Medicare level, not to exceed the charged amount, or 75 percent of charges in catastrophic (high-cost) cases. For non-Critical Access Hospitals, payment is 100 percent of charges. As of Oct. 1, 2019, the threshold for catastrophic cases was total charges of $209,336.

Under the DRG system, a set of requirements regarding bill payment and denial takes effect when certain conditions are met. These conditions are that (1) the hospital submits its charges to the insurer electronically, (2) a DRG applies to the hospitalization, and (3) the total charges in the case are less than the threshold for payment under the catastrophic provision. When these conditions are met, the insurer (1) must not require an itemization of charges or additional documentation to support a bill and (2) must, within 30 days of receipt, either pay the bill (with no reductions based on line-item review) or deny the entire bill on the basis that the condition for which the person is in the hospital is not work-related or that the hospitalization is not reasonably required. Under certain conditions, the insurer may do a post-payment audit with line-item review.

Discontinuance dispute — A dispute about the discontinuance of wage-loss benefits, most often initiated when the claimant requests an administrative conference (usually by phone) in response to the insurer's declared intention to discontinue temporary total or temporary partial disability benefits. The conference is conducted at the Office of Administrative Hearings (OAH). A discontinuance dispute may also be presented on the *Employee's Objection to Discontinuance* for or the insurer's petition to discontinue benefits, either of which triggers a hearing at OAH.

Discontinuance of wage-loss benefits — The insurer may propose to discontinue wage-loss benefits (temporary total, temporary partial or unadjudicated permanent total disability) if it

[82] The SAWW is calculated according to Minnesota Statutes §176.011. The annual benefit adjustment is as provided in Minnesota Statutes §176.645.

[83] See note 84.

[84] Development occurs in VR plan-closure year data because a claim may have more than one VR plan and the plan-closure year statistics are computed for all plans combined, categorized by the closure year of the last plan.

believes one of the legal conditions for discontinuance have been met. See "Notice of Intention to Discontinue," "Request for Administrative Conference," "Objection to Discontinuance" and "petition to discontinue benefits."

Dispute certification — A process required by statute in which, in a medical or rehabilitation dispute, the Department of Labor and Industry (DLI) must certify that a dispute exists and that informal intervention did not resolve the dispute before an attorney may charge for services.[85] The certification process is triggered by either a certification request or a medical or rehabilitation request. DLI specialists attempt to resolve the dispute informally during the certification process.

Employee's Objection to Discontinuance — A form by which the injured worker requests a formal hearing to contest a discontinuance of wage-loss benefits (temporary total, temporary partial or permanent total disability) proposed by the insurer by means of a *Notice of Intention to Discontinue Workers' Compensation Benefits* form or a petition to discontinue benefits. The hearing is conducted at the Office of Administrative Hearings.

Employee's Request for Administrative Conference — A form by which the injured worker requests an administrative conference to contest a discontinuance of wage-loss benefits (temporary total, temporary partial or permanent total disability) proposed by the insurer on the *Notice of Intention to Discontinue Workers' Compensation Benefits* form. Requests for a discontinuance conference are usually done by phone.

Experience modification factor — A factor computed by an insurer to modify an employer's premium on the basis of the employer's recent loss experience relative to the overall experience for all employers in the same payroll class. For statistical reliability reasons, the "mod" more closely reflects the employer's own experience for larger employers than for smaller employers.

Full-time-equivalent covered employment — An estimate of the number of full-time employees who would work the same total number of hours during a year as the actual workers' compensation covered employees, some of whom work part-time or overtime. 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, conducted at the Office of Administrative Hearings (OAH). After the hearing, the judge issues a "findings-and-order," which is binding unless appealed to the Workers' Compensation Court of Appeals. OAH conducts formal hearings on disputes presented on claim petitions and other petitions where resolution through a settlement conference is not possible. OAH also conducts hearings on some discontinuance disputes (those presented on an *Employee's Objection to Discontinuance* form or a petition to discontinue benefits), disputes referred by the Department of Labor and Industry (DLI) because they do not seem amenable to less formal resolution, disputes about proposed surgery[86] and disputes about miscellaneous issues such as attorney fees. Finally, OAH conducts *de novo* formal hearings when requested by a party to an administrative-conference decision-and-order from DLI or OAH or a nonconference decision-and-order from DLI.

Hospital Outpatient Fee Schedule (HOFS) — Minnesota's payment system for certain workers' compensation hospital outpatient facility services, effective for services provided on or after Oct. 1, 2018. It is based primarily on those portions of Medicare's Outpatient Prospective Payment System (OPPS) that relate to major surgical procedures and emergency department (ED) visits. For cases with major procedures, payment is based on the procedure regardless of other services provided. For cases with ED or clinic visits and no major procedures, payment is based on the ED or clinic visit and other services provided. Under statute, DLI has determined payment levels relative to Medicare so as to produce the same overall payment amounts as under the prior system, separately for small and large hospitals (those with up to 100 beds and more than 100 beds, respectively). As calculated by DLI, small hospitals are reimbursed at 472 percent of the Medicare rate and large hospitals at 251 percent,

[85] Minnesota Statutes §176.081, subd. 1(c).

[86] Minnesota Rules part 1420.2150, subp. 1 provides for expedited hearings on not-yet-provided-surgery issues.

respectively. For cases with ED or clinic visits and not major procedures, these percentages apply to the ED or clinic visit only.

Indemnity benefit — A benefit to the injured or ill worker or survivors to compensate for wage loss, functional impairment or death. Indemnity benefits include temporary total disability, temporary partial disability, permanent partial disability and permanent total disability benefits; supplementary benefits; dependents' benefits; and, in insurance industry accounting, vocational rehabilitation benefits.

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 temporary total or temporary partial disability benefits, which are paid on most of these claims. Indemnity claims typically include medical costs in addition to 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.

Intervention — An instance in which the Department of Labor and Industry provides information or assistance to prevent a potential dispute from developing into an actual one or communicates with the parties (outside of a conference or mediation) to resolve a dispute and/or determine whether a dispute should be certified. A dispute resolution through intervention may occur before, during or after the dispute certification process. (This is different from the intervention process in which an interested person or entity not originally involved in the dispute becomes a party to the dispute.)

Mediation — A voluntary, informal proceeding to facilitate agreement among the parties in a dispute. A mediation occurs at the Department of Labor and Industry (DLI) or the Office of Administrative Hearings (OAH) (or with a private mediator) 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. If agreement is reached in a DLI mediation, the specialist formally records its terms in a "mediation award" or the parties incorporate the agreement into a stipulation for settlement and submit it to OAH for an award on stipulation. If agreement is reached in an OAH mediation, the parties usually file a stipulation for settlement which the OAH judge incorporates into an award on stipulation. However, sometimes an agreement from an OAH mediation is recorded in a mediation award issued by the OAH judge. Mediations also occur outside of DLI and OAH; when such a mediation produces agreement, the agreement is usually incorporated into a stipulation for settlement and submitted to OAH for an award on stipulation.

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. Workers' compensation covers the costs of all reasonable and necessary medical services related to the injury or illness, subject to maximums established in law.

Medical dispute — A dispute about a medical issue, such as choice of providers, nature and timing of treatments or appropriate payments to providers.

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 (DLI) in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by DLI or to an administrative conference at DLI or the Office of Administrative Hearings (see administrative conference).

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 about claims, premium and losses from insurers, and annually produces pure premium rates.

Nonconference decision and order — A decision issued by the Department of Labor and Industry, without an administrative conference, in a dispute for which it has administrative conference authority (see "administrative conference"). The decision is binding unless a dispute party requests a formal hearing at the Office of Administrative Hearings.

Notice of Intention to Discontinue Workers' Compensation Benefits (NOID) — A form by which the insurer informs the worker of its intention to discontinue temporary total, temporary partial or unadjudicated permanent total disability benefits. In contrast with a petition to discontinue benefits, the NOID brings about benefit termination if the worker does not contest it.

Office of Administrative Hearings (OAH) — An executive branch body that conducts hearings in administrative law cases. One section is responsible for workers' compensation cases; it conducts administrative conferences, mediations, settlement conferences and 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. 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, but were raised in the 2000 law change for injuries on or after Oct. 1, 2000 and in the 2018 law change for injuries on or after Oct. 1, 2018. The PPD benefit is paid after temporary total disability (TTD) benefits have 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. For injuries on or after Oct. 1, 2000, the PPD benefit may be paid in this manner or as a lump sum, computed with a discount rate not to exceed 5 percent.

Permanent total disability (PTD) — A wage-replacement benefit paid if the worker sustains a severe work-related injury specified in law or 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 Oct. 1, 1995, the worker has a PPD rating of at least 13 to 17 percent, depending on age and education. The benefit is equal to two-thirds 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 Oct. 1, 1995, weekly benefits are subject to a minimum of 65 percent of the statewide average weekly wage. The maximum weekly benefit amount is indicated in Appendix B. For injuries from Oct. 1, 1995, to Sept. 30, 2018, benefits end at age 67 under a rebuttable presumption of retirement. For injuries on or after Oct. 1, 2018, benefits end at age 72 or, if the injury is after age 67, after five years of benefits have been paid. Cost-of-living adjustments are described in this appendix.

Petition to discontinue benefits — A document by which the insurer requests a formal hearing to allow a discontinuance of wage-loss benefits (temporary total disability, temporary partial disability or unadjudicated permanent total disability). The hearing is conducted at the Office of Administrative Hearings.

Policy year — The year of initiation of the insurance policy covering the accident or condition that caused the worker's 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 includes claims and costs for injuries occurring in two different calendar years.

Primary liability — The overall liability of the insurer for any costs associated with an injury once the injury is determined to be compensable. An insurer may deny primary liability (deny the injury is compensable) if it has reason to believe the injury did not arise out of and in the course of employment or is not covered under Minnesota's workers' compensation law.

Pure premium — A measure of expected indemnity and medical losses, equal to the sum, over all insurance classes, of payroll multiplied by the class-specific pure premium rates,

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.

Pure premium rates — Rates of expected indemnity and medical losses a year per $100 of covered payroll, also referred to as "loss costs." Pure premium rates are determined annually by the Minnesota Workers' Compensation Insurers Association (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. From 2015 to 2019, the MWCIA has gradually increased the maturity level of the losses reflected in the pure premium rates.

Rehabilitation Request — A form by which a party to a vocational rehabilitation dispute requests assistance from the Department of Labor and Industry (DLI) in resolving the dispute. The request may lead to mediation or other efforts toward informal resolution by DLI or to an administrative conference, usually at DLI but occasionally at the Office of Administrative Hearings (see administrative conference).

Reserves — Funds that an insurer or self-insurer sets aside to pay expected future claim costs.

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. To do so, the employer or employer group must meet financial requirements and be approved by the Department of Commerce.

Settlement conference — A proceeding conducted at the Office of Administrative Hearings to achieve a negotiated settlement, where possible, without a formal hearing. If achieved, the settlement typically takes the form of a "stipulation for settlement" (see "settlement benefits").

Settlement benefits — Indemnity and medical benefits specified in a "stipulation for settlement," which states the terms of settlement of a claim among the affected parties. A stipulation usually occurs in the context of a dispute, but not always. The stipulation may be reached independently by the parties or in a settlement conference or associated preparatory activities. It may be incorporated into a mediation award or an "award on stipulation," usually the latter, which is approved by a judge at the Office of Administrative Hearings. The stipulation usually includes an agreement by the claimant to release the employer and insurer from future liability for the claim other than for medical treatment. Settlement benefits are usually paid in a lump sum.

Special Compensation Fund (SCF) — A fund within the Department of Labor and Industry (DLI) that pays, among other things, 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.) The SCF also funds workers' compensation functions at DLI, the nonfederal portion of the cost of DLI's Minnesota OSHA compliance functions, the workers' compensation portion of the Office of Administrative Hearings, the Workers' Compensation Court of Appeals and workers' compensation functions at the Department of Commerce. Revenues come primarily from an assessment on insurers (passed on to employers through a premium surcharge) and self-insured employers.

Statewide average weekly wage (SAWW) — The average wage used by insurers and the Department of Labor and Industry to adjust certain workers' compensation benefits. This report uses the SAWW to adjust average benefit amounts for different years so they are all expressed in constant (2018) wage dollars. The

SAWW, from the Department of Employment and Economic Development, is the average weekly wage of nonfederal workers covered under unemployment insurance.

Supplementary benefits — Additional benefits paid to certain workers receiving temporary total disability (TTD) or permanent total disability (PTD) benefits for injuries prior to October 1995. These benefits are equal to the difference between 65 percent of the statewide average weekly wage and the TTD or PTD benefit. The Special Compensation Fund reimburses insurers (and self-insured employers) for supplementary benefit payments. Supplementary benefits were repealed for injuries on or after Oct. 1, 1995.

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. (The benefit is not payable for the first three calendar days of total or partial disability unless the disability lasts, continuously or intermittently, for at least 10 days.) The benefit is equal to two-thirds of the difference between the worker's gross pre-injury wage and 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 from Oct. 1, 1992, through Sep. 30, 2018, 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). For injuries on or after Oct. 1, 2018, benefits are limited to a total of 275 weeks and to the first 450 weeks after the injury (with an exception for approved retraining). The maximum weekly benefit amount is indicated in Appendix B. An additional limit is that the weekly TPD benefit plus the employee's weekly wage earned while receiving TPD benefits may not exceed 500 percent of the SAWW. Cost-of-living adjustments are described in this appendix.

Temporary total disability (TTD) — A wage-replacement benefit paid if the worker is unable to work because of a work-related injury or illness. (The benefit is not payable for the first three calendar days of total or partial disability unless the disability lasts, continuously or intermittently, for at least 10 days.) The benefit is equal to two-thirds 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 the employee returns to work; the employee withdraws from the labor market; the employee fails to diligently search for work within his or her physical restrictions; the employee is released to work without physical restrictions from the injury; the employee refuses an appropriate offer of employment; 90 days have passed after the employee has reached maximum medical improvement or completed an approved retraining plan; or the employee fails to cooperate with an approved vocational rehabilitation plan or with certain procedures in the development of such a plan. TTD also stops, for injuries on or after Oct. 1, 1995, after 104 weeks of TTD have been paid, or for injuries on or after Oct. 1, 2008, after 130 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.

Vocational rehabilitation (VR) dispute — A dispute about a VR issue, such as whether the employee should be evaluated for VR eligibility, whether he or she is eligible, whether certain VR plan provisions are appropriate or whether the employee is cooperating with the plan.

Vocational rehabilitation (VR) plan — A plan for VR services developed by a qualified rehabilitation consultant (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 VR services. It is filed with the Department of Labor and Industry 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.

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 Court of Appeals (WCCA) — An executive branch body that hears appeals of workers' compensation findings-and-orders from the Office of Administrative Hearings. WCCA decisions may be appealed to the Minnesota Supreme Court.

Workers' Compensation Reinsurance Association (WCRA) **—** A nonprofit entity created by law to provide reinsurance to workers' compensation insurers (including self-insurers) 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.

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

Some workers' compensation law changes enacted since 1998 are relevant for this report. This appendix summarizes those law changes. Law changes that do not significantly affect the trends in this report are not considered.

2000 law change

The following provisions took effect for injuries on or after Oct. 1, 2000.

Temporary total disability (TTD) minimum benefit — The minimum weekly TTD benefit was raised from $104 to $130, not to exceed the employee's pre-injury wage.

Temporary total disability (TTD), temporary partial disability (TPD) and permanent total disability (PTD) maximum benefit — The maximum weekly TTD, TPD and PTD benefit was raised from $615 to $750. (This maximum was raised again in 2008 and 2013; see below.)

Permanent partial disability (PPD) benefits — Benefit amounts were raised for all impairment ratings. At the time, DLI estimated that this would increase overall PPD benefits by 14 percent. In addition, the PPD award may be paid as a lump sum, computed with a discount rate not to exceed 5 percent. Previously, PPD benefits were only payable in installments at the same interval and amount as the employee's temporary total disability benefits.

Death cases — A $60,000 minimum total benefit was established for dependency benefits. In death cases with no dependents, a $60,000 payment to the estate of the deceased was established and the $25,000 payment to the Special Compensation Fund was eliminated. The burial allowance was increased from $7,500 to $15,000.

2005 law change

The following provision took effect for medical request disputes filed on or after May 26, 2005.

Jurisdiction in medical disputes — The monetary limit on DLI jurisdiction in medical disputes was raised from $1,500 to $7,500.

2008 law change

The following provisions took effect for injuries on or after Oct. 1, 2008.

Temporary total disability (TTD), temporary partial disability (TPD) and permanent total disability (PTD) maximum benefit — The maximum weekly TTD, TPD and PTD benefit was raised from $750 to $850. (This maximum was raised again in 2013; see below.)

Temporary total disability (TTD) duration limit — The limit on the total number of weeks of TTD benefits was raised from 104 to 130. (An exception to the duration limit is available for approved retraining.)

2011 law change

The following provisions took effect Aug. 1, 2011.

Scheduling of proceedings at the Office of Administrative Hearings (OAH) — OAH must schedule a settlement conference to occur within 180 days of the filing of a claim petition, and within 45 days of the filing of a petition to discontinue benefits, objection to discontinuance or request for *de novo* hearing. If settlement is not reached, OAH must schedule a hearing to occur no more than 90 days after the scheduled settlement conference, or sooner if statute

requires an expedited hearing on the issues concerned.

2013 law change

The following provisions took effect for injuries on or after Oct. 1, 2013.[87]

Temporary total disability (TTD), temporary partial disability (TPD) and permanent total disability (PTD) maximum benefit — The maximum weekly TTD, TPD and PTD benefit was raised from $850 to 102 percent of the statewide average weekly wage (SAWW). The SAWW in effect for injuries in each year beginning Oct. 1 is the SAWW reflecting wages paid during the year ending the prior Dec. 31.

Cost-of-living adjustment of temporary total disability (TTD), temporary partial disability (TPD), permanent total disability (PTD) and dependents' benefits — The maximum annual adjustment was raised from 2 percent to 3 percent and the date of the first adjustment was moved from the fourth anniversary of the injury to the third anniversary.

Contingent claimant attorney fees — The maximum contingent claimant attorney fee is 20 percent of the first $130,000 of compensation awarded to the injured worker, with a cap of $26,000 in contingent fees. Previously, the maximum was 25 percent of the first $4,000 of compensation and 20 percent of the next $60,000, with a cap of $13,000 in contingent fees.

Scheduling of administrative conferences in rehabilitation disputes — In rehabilitation request disputes, except where the dispute is about payment for services already provided or there is good cause, an administrative conference must be scheduled to occur within 21 days of when the request was received.

The following provision took effect for medical request disputes filed on or after May 17, 2013.

Jurisdiction in medical disputes — The monetary limit on DLI jurisdiction in medical disputes does not apply where the dispute is about the amount of payment for medical services, articles or supplies.

2015 law change

The following provision took effect for inpatient hospital services provided on or after Jan. 1, 2016.

Diagnosis-Related Group (DRG) System for hospital inpatient services — Minnesota changed its system for paying for workers' compensation hospital inpatient facility services from a charge-based system to one based on Medicare's Inpatient Prospective Payment System (IPPS). This system is often called a "DRG" system because payment is based primarily on the diagnosis-related group, which categorizes the major diagnosis and principal procedures performed. For non-catastrophic cases at non-Critical-Access hospitals, the payment is 200 percent of the Medicare level, not to exceed the charged amount. DLI estimated that in its first year, the new system reduced inpatient hospital cost by 9 to 16 percent, total medical cost by 1.3 to 2.3 percent and total workers' compensation system cost by 0.5 to 0.8 percent relative to what they would otherwise have been.[88]

Minnesota's DRG statute also has a set of provisions regarding bill payment and denial.[89]

2018 law change

The following provisions took effect for injuries on or after Oct. 1, 2018.

Temporary partial disability (TPD) duration limit — The maximum duration TPD benefits was raised from 225 to 275 weeks, not to extend beyond 450 weeks after injury.

PPD benefit schedule — The PPD benefit schedule raised by a uniform 5 percent for all impairment ratings.

Retirement age for permanent total disability (PTD) benefits — The PTD "retirement age," at which PTD benefits cease, was raised from 65 to 67 or the point where five years of those benefits

[87] Other statutory changes have occurred since 2013 (other than the 2015 change regarding inpatient hospital payments described below), but they do not significantly affect the trends in this report.

[88] DLI, *Minnesota Workers' Compensation DRG Evaluation Report,* January 2018, pp. 25-27.

[89] See Glossary (Appendix A) for details.

have been paid, whichever is later. In addition, the provision allowing the injured worker to rebut the presumption of retirement (and consequent benefit cessation) was removed.

DLI estimated that these three benefit increases would raise total indemnity cost by 2.0 percent and total workers' compensation system cost by 0.6 percent relative to what they otherwise would have been.

The following provisions took effect for medical services provided on or after Oct. 1, 2018.

Ambulatory Surgical Center Payment System (ASCPS) — Payment for ambulatory surgical center (ASC) facility services was set at 320 percent of the amount that would be paid under the Medicare ASCPS. DLI estimated that this would reduce payments to ASCs by 20 percent, total medical cost by 2.1 percent and total workers' compensation system cost by 0.7 percent relative to what they otherwise would have been.

Hospital Outpatient Fee Schedule (HOFS) — Payment for certain hospital outpatient facility services was changed to be based on portions of Medicare's Outpatient Prospective Payment System (OPPS) that relate to major surgical procedures and emergency department (ED) visits. As provided by statute, DLI set the payment levels under the new system, separately for small and large hospitals (those with up to 100 beds and with more than 100 beds, respectively), so that estimated outpatient payments would be the same under the old and new systems.[90]

[90] See Glossary (Appendix A) for details.

Appendix C

Data sources and estimation procedures

This appendix describes data sources and estimation procedures for those figures where additional detail is needed. Two general procedures are used in many places in the report: (1) "development" of statistics to incorporate the effects of claim maturation beyond the most current data and (2) adjustment of benefit and cost data for wage growth to achieve comparability over time. After a general description of these procedures, additional detail for individual figures is provided as necessary. See Appendix A for definitions of terms.

Developed statistics — Many statistics in this report are by accident year or policy year (insurance data) or by injury year or vocational rehabilitation (VR) plan-closure year (Department of Labor and Industry (DLI) data). For any given accident, policy, injury or VR plan-closure year, these statistics grow, or "develop," over time because of claim maturation and reporting lags.[91] This affects a range of statistics, including claims, costs, dispute rates, attorney fees and others. Statistics from the DLI database develop constantly as the data is updated from insurer reports received daily. With the insurance data, insurers submit annual reports to the Minnesota Workers' Compensation Insurers Association (MWCIA) giving updates about prior accident and policy years along with initial data about the most recent year. If the DLI and insurance statistics were reported without adjustment, trend data would give invalid comparisons because the statistics would be progressively less mature from one year to the next, especially for the most recent years.

The MWCIA uses a standard insurance industry technique to produce "developed statistics." In this technique, the reported numbers are adjusted to reflect expected development between the current report and future reports. The adjustment uses "development factors" derived from historical rates of growth (from one report to the next) in the statistic in question. The result is a series of statistics developed to a constant maturity, for example, to a "tenth-report" basis. The developed insurance statistics in this report were computed by DLI Research and Statistics using tabulated numbers and associated development factors from the MWCIA.

Research and Statistics has adapted this technique to DLI data. It tabulates statistics at regular intervals from the DLI database, computes development factors representing historical development for given injury years and then derives developed statistics by applying the development factors to the most recent tabulated statistics. For example, in Figure 2.1, the developed number of paid indemnity claims for injury year 2018 (in the numerator of the indemnity claim rate) is 22,200 (rounded to the nearest hundred). This is equal to the tabulated number as of Oct. 1, 2019, 20,042, multiplied by the appropriate development factor, 1.108. In this manner, the annual numbers in any given time series are developed to a uniform maturity.

The level of maturity to which the numbers in a time series are developed depends on the length of history available on the statistics concerned. The DLI injury year statistics in Chapters 2 and 3 are at a 35-year maturity. In Chapter 4, the injury year statistics are at a 10-year maturity and the VR plan-closure year statistics are at a seven-year maturity. In Chapter 5, the dispute rates by injury year are at 29-year maturity and the rates of attorney involvement and of claim denial by injury year are at 34-year maturity.

[91] Development occurs in VR plan-closure year data because a claim may have more than one VR plan and the plan-closure year statistics are computed for all plans combined, categorized by the closure year of the last plan.

All developed statistics are estimates and are therefore revised each year in light of the most current data. DLI periodically reviews the developed statistics to determine their stability over time and thus their suitability for publication. Through this process, DLI has determined that some of the developed statistics from its own data for the most recent injury years are not sufficiently stable for publication. As a result, some of the injury year trends from DLI data in this report extend only through 2016 or 2017.

Adjustment of cost data for wage growth — For reasons explained in Chapter 1, all costs in this report that are expressed per claim or per vocational rehabilitation plan are adjusted for average wage growth. The cost number for each year is multiplied by the ratio of the 2018 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 represent costs expressed in 2018 wage-dollars.

Figure 2.1 — The developed number of paid indemnity claims for each year is calculated from the DLI database. 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. (The ratio is unavailable for self-insured employers.) The MWCIA, through special tabulations, provides this ratio by injury year for compatibility with the injury year indemnity claims numbers.

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 Employment and Economic Development (DEED) multiplied by 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).[92] Nonfederal UI-covered employment is used because there is no direct data about workers'-compensation-covered employment.

Figure 2.2 — Market-share percentages are taken from undeveloped counts of paid indemnity claims from the DLI database. 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 2.3 — Claim and loss data is from supplementary tables to the MWCIA's *2020 Minnesota Ratemaking Report.* This data comes from insurance company reports on claim and loss experience for individual policies for the voluntary market and the Assigned Risk Plan. The reported losses include paid losses plus case-specific reserves. Data is developed to a 10th-report basis using the development factors in the *Ratemaking Report,* which produces statistics at an average maturity of 10.5 years from the injury date; the statistics are then adjusted for average wage growth.

Figures 2.4 and 2.5 — Figures 2.4 and 2.5 are based on paid losses, because paid losses are more stable from year to year than are paid losses plus case reserves. The data is from financial reports to the MWCIA by voluntary market insurers only. Paid losses are developed to a uniform maturity of 30 years (a "30th-report basis") using development factors computed from year-to-year loss development data supplied by the MWCIA. Payroll data for Figure 2.4 is from insurer reports of policy experience.

Figure 2.6 — The pure premium rate data comes from the MWCIA's *Minnesota Ratemaking Reports* for the years shown. Beginning with 2016, MWCIA has expressed the losses in the pure premium rates at progressively higher levels of maturity. In the *Ratemaking Reports* for those years, the MWCIA indicates the component of change in the pure premium rates that is attributable to this progressively higher maturity level. This component is a positive number because it reflects an increasing maturity level over the period in question. In Figure 2.6, this component is removed from the pure premium rates to produce a uniform maturity level over time.

Figure 2.7 — 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

[92] Because of annual fluctuations caused by sampling variation, a smoothed version of the average-annual-hours trend is used.

voluntary market are obtained from the Department of Commerce. Written premium for the Assigned Risk Plan (ARP) is obtained from AON Risk Services, 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 to reflect that portion of cost for insured employers that falls below deductible limits. Deductible credit data through policy year 2017 is available from the MWCIA. The 2018 figure was estimated by applying the ratio of deductible credits to written premium for the prior two years to the 2018 premium figure. When the actual amount becomes available for 2018, 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 Minnesota Workers' Compensation Reinsurance Association (WCRA). A second component is administrative cost, estimated as 10 percent of pure premium. The final component is the total assessment paid to the Special Compensation Fund (SCF), net of the portion used to pay claims from defaulted self-insurers, since this is already reflected in pure premium.

Total workers' compensation covered payroll is computed as the sum of insured payroll, from the MWCIA, and self-insured payroll, from the WCRA. Insured payroll was not yet available for 2018. This figure was extrapolated from actual figures using the trend in nonfederal UI-covered payroll (from DEED) and the trend in the relative insured and self-insured shares of total pure premium (from the WCRA).

Figure 2.8 — The percentages in this figure were derived from payment year data to avoid significant issues that would arise with injury year (or accident year) data.[93] A major issue is that both paid benefits and total system cost (primarily the latter) vary substantially from year to year, causing major variation in the ratio of the two. Therefore, the percentages in this figure were derived by averaging data over time.

Data about benefits and state agency administrative cost came from DLI, the MWCIA, the Minnesota Insurance Guaranty Association and the Minnesota Self-Insurers' Security Fund. Total system cost was calculated as indicated in connection with Figure 2.7. The percentage of cost going to insurer expenses was calculated as a residual as described below.

Because written premium — the primary element in system cost — relates to policies originating in a given year, it is paid during that year and the year following. Therefore, the ratio of benefits to system cost was computed using system cost for the year prior to the benefit payment year. An analysis of the data reveals that this ratio varies through approximately an 11-year cycle. To minimize annual fluctuation, an average over this cycle was used. To further reduce annual fluctuation, an average of averages was used, corresponding to the 11-year cycles ending with the most recent year and the prior two years. This yielded the ratio 67.2 percent as the ratio of total paid benefits to total system cost.

The indemnity, medical and VR components of the 67.2 percent were then computed using the relative totals of these payments for 2018. VR benefits (counted separately here from indemnity benefits) are not directly available on a payment year basis, so a payment year version of these benefits was estimated from the injury year series used for Figure 4.3.

The portion of total system cost not accounted for by benefit payments, 32.8 percent, was then allocated between state agency administrative expenses and insurer expenses. State agency administrative expenses (using the same numbers as for Figure 3.12) were estimated to account for 2,0 percent of total system cost, leaving an estimated 30.9 percent attributable to insurance expenses (for insurers and self-insurers).

Figure 3.1 — Statistics are derived in the same manner as for Figure 2.3, with one modification. Figure 3.1 presents data by claim type. For permanent total disability (PTD) and death cases, the number of claims and their average cost fluctuate widely from one policy year to the

[93] With injury year data, there would be a significant time-discounting issue in comparing benefits with written premium, because injury year benefits include projected payments to be made several years or sometimes decades after the injury. The ratio of discounted benefits to premium would be quite sensitive to the choice of discount rate, even within a reasonable range. This would be in addition to the issue of accurately projecting total injury year benefits in the first place.

next because of small numbers of cases. Therefore, to produce more meaningful comparisons among claim types, PTD and death claims and losses were estimated by applying respective percentages of claims and losses (relative to the total) during the most recent five years to total claims and losses for 2016.

Figure 3.2 — A modified procedure was used to compute the percentage of indemnity claims with settlement benefits, for the following reason.

In computing developed statistics, historical rates of development are used to project relatively immature data for recent injury years to a greater level of maturity than it has yet attained. The accuracy of the projection depends on the extent to which the immature data for these years will actually develop to the same degree as projected. In general, there is more room for error where relatively little actual development has occurred and the developed statistics contain relatively large projected components.

This is the case with developed statistics relating to claims with settlement benefits for recent injury years. Data about these benefits is usually not established until fairly late in a claim, most commonly after a settlement conference or hearing has occurred at the Office of Administrative Hearings. Consequently, insurers report this data at a later point in the claim than they do most other data. This may impair the reliability of the associated developed statistics for recent injury years.

Therefore, a modified procedure is used to compute the percentage of claims with settlement benefits. The percentages of claims with these benefits for the five most recent injury years (2014 through 2018) were projected from their 2013 values using the growth rate in the percentage of claims with disputes. The latter percentage was used for this projection because the percentage of claims with settlement benefits closely follows the percentage of claims with disputes.

Figures 3.3 and 3.4 — Average benefit duration (Figure 3.3) is computed by dividing the average weekly benefit (Figure 3.4) into the average benefit per claim where it was paid (Figure 3.5) (using developed statistics). This method is used because of issues relating to relatively more frequent under-reporting of duration for longer claims.

Figure 3.14 — Administrative cost is computed to capture that portion of the workers' compensation assessment (see "Special Compensation Fund" in Appendix A) that pays for state administration. Consequently, administrative cost is computed as the total of costs other than workers' compensation benefits that are paid for by the assessment or other revenues with which it is combined, minus those other revenues.

Figure 4.6 through 4.8 and 4.11 — These figures are by vocational rehabilitation plan-closure year beginning with closure year 2005. Since the vocational rehabilitation data is only available beginning with plans filed in 1998, a uniform seven-year window prior to each plan-closure year is used to make the statistics comparable across closure years.

Figure 5.2 — A modified procedure was used to compute the percentage of indemnity claims with claimant attorney fees. The procedure was similar to that described for the percentage of claims with settlement benefits in connection with Figure 3.2 and was employed for the same reason.

Figures 5.13 to 5.19 — To make the statistics comparable over time, a constant observation window of one year from the receipt date of the medical request, rehabilitation request, mediation request or administrative conference request was used. Only events that happened within that window were counted.