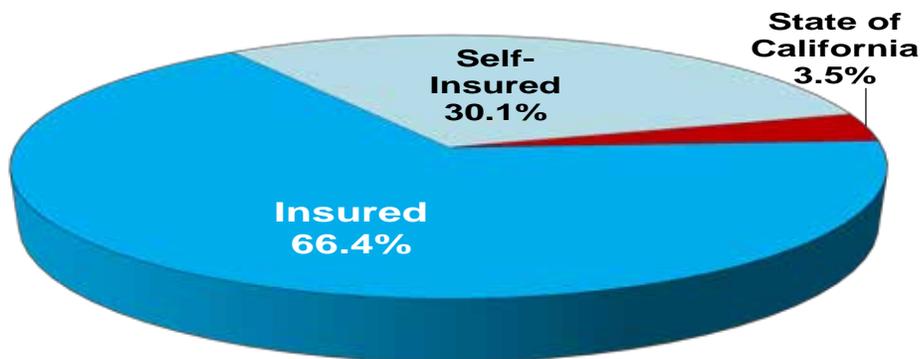


SYSTEM COSTS AND BENEFITS OVERVIEW

The California workers' compensation system covers 15,139,000 employees² working for over 905,581 employers³ in the State. These employees and employers generated a gross domestic product of \$2,311,616,000,000 (\$2.3 trillion) in 2014.⁴ A total of 586,525 occupational injuries and illnesses were reported for 2014,⁵ ranging from minor medical treatment cases to catastrophic injuries and deaths. The total paid cost to employers for workers' compensation in 2014 was \$23.9 billion. (See the box "Systemwide Cost: Paid Dollars for 2014 Calendar Year" on page 38.)

Employers range from small businesses with one or two employees to multinational corporations doing business in the State and the state government itself. Every employer in California must secure its liability for payment of compensation, either by obtaining insurance from an insurer licensed by the Department of Insurance (CDI) or by obtaining a certificate of consent to self-insure from the Department of Industrial Relations (DIR). The only lawful exception is the State, which is legally uninsured. According to Figure 1, based on the claim counts reported to the Workers' Compensation Information System (WCIS), 66.4 percent of injuries occur to employees of insured employers, 30.1 percent of injuries occur to employees of self-insured employers, and 3.5 percent of injuries occur to employees of the State of California.⁶ (For calculations based on claim counts and paid loss data, see the box "Method of Estimating the Workers' Compensation System Size" on pp. 35-36.)

Figure 1: Market Shares Based on Claim Counts Reported to WCIS (2012-2014 average)



Data Source: DWC - WCIS

² NASI Report: Workers' Compensation Benefits, Coverage, and Costs, 2013. August, 2015.

https://www.nasi.org/sites/default/files/research/NASI_Work_Comp_Year_2015.pdf.

³ CHSWC estimates are based on an Employment Development Department report, as above, showing 1,391,273 businesses in 2014. Of these, 971,384 were businesses with 0 to 4 employees. For this estimate, half of those businesses are assumed to have no employees subject to workers' compensation. $1,391,273 - (971,384 / 2) = 905,581$. <http://www.labormarketinfo.edd.ca.gov/Content.asp?pageid=1045>.

⁴ California Department of Finance, Economic Research Unit, http://www.dof.ca.gov/HTML/FS_DATA/LatestEconData/FS_Misc.htm.

⁵ The latest year for which Workers' Compensation Information System (WCIS) reports are reasonably complete. Data are from the Division of Workers' Compensation (DWC) report from the WCIS database, "Workers' Compensation Claims by Market Share," June 8, 2015, http://www.dir.ca.gov/dwc/wcis/WCIS_tables/Table-4/WCIS_Reports-Table-4.html. Due to delayed reporting, the number of claims reported to WCIS for a given year may grow by more than 5 percent between the second and the fourth years after the end of the accident year. Boden, Leslie I. and Al Ozonoff, "Reporting Workers' Compensation Injuries in California: How Many are Missed?" (2008), CHSWC Report.

⁶ WCIS, Table 4, "Workers' Compensation Claims by Market Share," June 8, 2015, http://www.dir.ca.gov/dwc/wcis/WCIS_tables/Table-4/WCIS_Reports-Table-4.html.

SYSTEM COSTS AND BENEFITS OVERVIEW

Method of Estimating the Workers' Compensation System Size

The overall system size is now estimated at 1.5 times the insured sector size. For several years, the generally accepted estimate was 1.25. Beginning in 2008 and with help from the Workers' Compensation Insurance Rating Bureau (WCIRB), the Commission on Health and Safety and Workers' Compensation (CHSWC) estimated the system size at 1.43 times the insured market. This was based on claims counts in the Workers' Compensation Information System (WCIS).¹ In 2011, CHSWC revised that estimate to 1.5 times the insured sector. The revised estimate was based on updated claims data as well as paid loss counts from WCIS.

Claims counts showed a steady decline for all sectors from 2001 to 2011. From 2011 to 2012, the number of claims for both insured and self-insured sectors increased by 2 percent. The State of California experienced no change from 2011 to 2012. From 2012 to 2014, the claims counts for the insured sector averaged 390,000, for the self-insured sector—an increase of 2 percent—while the number of claims for the State sector decreased by almost 22 percent. CHSWC is using a three-year moving average because it blunts the effect of one-time aberrations. The three-year average market shares based on claims counts are 66.4 percent insured, 30.1 percent self-insured, and 3.5 percent state. Using these values, the multiplier for extending insured sector information to the overall system is $100\%/66.4\% = 1.506$ (rounded to system size factor of 1.5).

Table 1: Workers' Compensation Claims (in 000s) by Market Share

Year	Insured		Self-Insured		State of California	
	Number	Market Share (%)	Number	Market Share (%)	Number	Market Share (%)
2012	393.3	66.5	174.2	29.5	23.8	4.0
2013	386.4	66.2	178.6	30.6	18.7	3.2
2014	390.2	66.5	177.8	30.3	18.6	3.2
Average for 3 years		66.4		30.1		3.5

Source: WCIS.

¹ WCIS Database as of June 8, 2015, http://www.dir.ca.gov/dwc/wcis/WCIS_tables/Table-4/WCIS_Reports-Table-4.html.

(continued on the next page)

SYSTEM COSTS AND BENEFITS OVERVIEW

(continued)

Method of Estimating the Workers' Compensation System Size

Based on the convergence of market share measurements from two independent methods, the data convincingly demonstrate that the insured market share is 66-67 percent of the workers' compensation system. Depending on the method of measurement, the self-insured sector is 29 percent or 30 percent and the State sector is 3 percent or 4 percent.

Paid loss data indicate that 67.5 percent of the market is insured, 29.0 percent is self-insured, and 3.5 percent is State. These percentages are stable using 2014 data for insured and private self-insured sectors and either 2013/2014 or 2014/2015 data for the State and public self-insured sector, as shown in Tables 2 and 3. The multiplier for extending insured sector information to the overall system is $100\%/67.5\% = 1.48$ (rounded to system size factor of 1.5).

Table 2: Distribution of Workers' Compensation Paid Costs by Sectors (excluding Administrative Expenses)—using public self-insured and state data for FY 2014-2015

	Indemnity	Medical	Subtotal	% in Total
a. Private Self-Insured ¹ (2014)	\$608,307,148	\$918,409,257		
b. Public Self-Insured ² (2014/2015)	\$1,021,397,246	\$1,102,863,683		
SELF-INSURANCE PLAN (a + b)	\$1,629,704,394	\$2,021,272,940	\$3,650,977,334	29.2%
INSURED (2014)³	\$3,385,878,000	\$5,034,730,000	\$8,420,608,000	67.4%
STATE (2014/2015)⁴	\$179,329,143	\$247,526,430	\$426,855,573	3.4%
Total			\$12,498,440,907	

Table 3: Percent Distribution of Workers' Compensation Paid Costs by Sectors (excluding Administrative Expenses)—using public self-insured and state data for FY 2013-2014

	Indemnity	Medical	Subtotal	% in Total
a. Private Self-Insured ¹ (2014)	\$608,307,148	\$918,409,257		
b. Public Self-Insured ² (2013/2014)	\$938,210,927	\$1,086,439,359		
SELF-INSURANCE PLAN (a + b)	\$1,546,518,075	\$2,004,848,616	\$3,551,366,691	28.6%
INSURED (2014)³	\$3,385,878,000	\$5,034,730,000	\$8,420,608,000	67.8%
STATE (2013/2014)⁴	\$175,663,927	\$269,624,724	\$445,288,651	3.6%
Total			\$12,417,263,342	

¹ Private Statewide Summary, <http://www.dir.ca.gov/osip/StatewideTotals.html>.

² Public Statewide Summary, <http://www.dir.ca.gov/osip/StatewideTotals.html>.

³ WCIRB, 2014 Losses and Expenses Report, Exhibit 18.1, Released June 30, 2015. http://www.wcirb.com/sites/default/files/documents/2014_ca_workers_compensation_losses_and_expenses_report.pdf.

⁴ Cost Information, <http://www.calhr.ca.gov/state-hr-professionals/Pages/workers-compensation-program.aspx>.

SYSTEM COSTS AND BENEFITS OVERVIEW

Workers' compensation is generally a no-fault system that provides statutory benefits for occupational injuries or illnesses. Benefits consist of medical treatment, temporary disability (TD) payments, permanent disability (PD) payments, return-to-work assistance, and death benefits. The overall amounts paid in each of these categories systemwide are shown in Tables 4 and 5. These figures are based on insurer-paid amounts multiplied by 1.5 to include estimated amounts paid by self-insured employers and the State.

Systemwide Cost: Paid Dollars for 2014 Calendar Year

Table 4: A Claim Counts-Based Estimate of Workers' Compensation System Size (Million \$)

	<i>Insured</i>	<i>Self-Insured and the State*</i>	<i>All Employers</i>
Indemnity*	\$3,386	\$1,693	\$5,079
Medical*	\$5,035	\$2,517	\$7,552
Changes to Total Reserves	\$2,900	\$1,450	\$4,350
Insurer Pre-Tax Underwriting Profit/Loss	-\$699	N/A	-\$699
Expenses (see Table below: Breakdown of Expenses)	\$5,783	\$1,864	\$7,647
TOTAL for 2014	\$16,405	\$7,524	\$23,929

*Include CIGA payments

Source for Insured figures in Tables 4 and 5 is WCIRB Losses and Expenses report released in June, 2015. Self-insured and state expenses are calculated by CHSWC using 0.50 multiplier for equivalent cost components. The equivalent expense components are estimated as in the Table 5:

Table 5: Breakdown of Expenses (Million \$)

	<i>Insured</i>	<i>Self-Insured and State</i>	<i>All Employers</i>
<i>Loss Adjustment Expense</i>	\$2,909	\$1,455	\$4,364
<i>Commissions and Brokerage</i>	\$1,185	N/A	\$1,185
<i>Other Acquisition Expenses</i>	\$577	N/A	\$577
<i>General Expenses</i>	\$819	\$410	\$1,229
<i>Premium and Other Taxes</i>	\$293	N/A	\$293
Total	\$5,783	\$1,864	\$7,647

Estimate of Workers' Compensation System Size Based on Written Premium

Another way to calculate systemwide costs for employers is by using written premium.

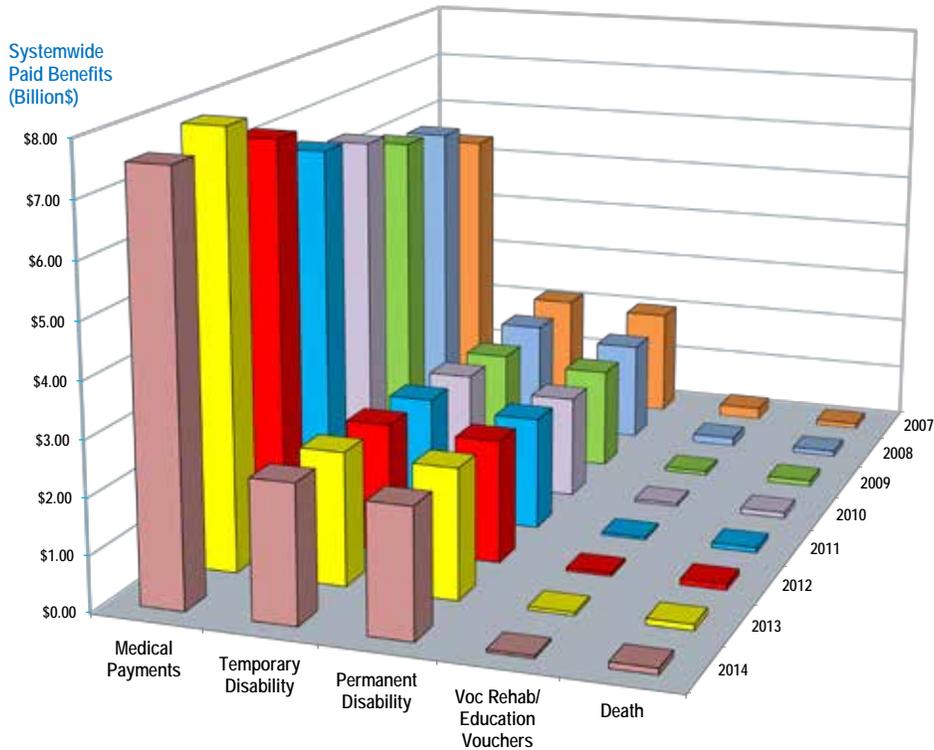
Written premium for insured employers = \$16.4 billion in accident year 2014.⁷

\$16.4 billion * 1.5 = \$24.6 billion systemwide costs for employers.

⁷ WCIRB Report on September 30, 2015, Insurer Experience, released December 15, 2015, Exhibit 1.

SYSTEM COSTS AND BENEFITS OVERVIEW

Figure 2: Systemwide Paid Benefits, by Year and Type of Payment (Billion \$)



* System-wide amounts estimated at 1.5 times the amounts reported by insurers

Data Source: WCIRB

Costs Reached a Crisis in 2003

Both the increases in the costs of workers' compensation benefits and changes in the workers' compensation insurance industry were factors contributing to a workers' compensation crisis that peaked in 2003.

The total costs of the California workers' compensation system more than tripled, growing from \$7.8 billion in 1997 to \$29.0 billion in 2003.⁸ Medical costs, which are the largest single category of workers' compensation costs, rose most sharply, from \$2.6 billion in 1997 to \$7.1 billion in 2003. The rate of increase in medical cost per workers' compensation claim far exceeded the rate of increase in the consumer price index for medical care. Other contributing factors to the increased costs were the increases to the TD and PD benefits that began phasing into effect in 2003 following Assembly Bill (AB) 749 enacted in 2002 and the expansion of workers' compensation liability.

The crisis propelled reforms enacted in 2003 and 2004 which reduced the cost of benefits and at least initially accomplished control of medical costs and a decrease in the cost of workers' compensation insurance. Within several years, the average rate for workers' compensation insurance fell by over 65 percent. These reforms included the following provisions:

⁸ The total cost of the workers' compensation figures consists of medical care payments and wage replacement benefits to injured workers, along with administrative expenses and adjustments to reserves, as calculated by CHSWC based on insurer data from WCIRB. *Annual Reports*, San Francisco: WCIRB, 1998, 2004.

SYSTEM COSTS AND BENEFITS OVERVIEW

- Evidence-based medical treatment guidelines.
- Utilization review of medical treatment, systematically applying the guidelines.
- New fee schedule for inpatient hospital, hospital outpatient departments, and ambulatory surgery centers based on the medical fee plus 20 percent.
- Employer control of medical care through medical provider networks (MPNs).
- PD rating based on the AMA *Guides* prescribed by 2004 legislation, implemented by a Permanent Disability Rating Schedule (PDRS) revision effective January 1, 2005.

Impact of 2003 and 2004 Reforms

The reforms of 2003 and 2004 cut PD benefits by over 50 percent and initially reduced medical costs. However, medical costs began to increase again shortly after the 2004 reforms, and the cost of insurance in recent years has begun to rise once more. The following trends in medical costs and the cost of insurance were noted:

- Paid medical costs increased by over 20 percent from 2007 to 2011, and the average medical cost per claim also grew by over 50 percent from 2005 to 2011. In addition to the increased medical costs, workers' compensation medical treatment disputes took a very long time to resolve, and the medical provider network system was criticized for not providing sufficient access to care for injured workers.
- The average premium rate dropped every year from the second half of 2003 to 2009, when it was \$2.10, a decrease of almost 67 percent from the second half of 2003. From 2009 to the second half of 2012, the average premium rate increased by 23 percent, from \$2.10 per \$100 of payroll to \$2.59 per \$100 of payroll, correspondingly, and approximately by 12 percent above the average rate of \$2.32 per \$100 of payroll charged for 2011.

Workers' Compensation Reforms: Changes to the California System

California made significant legislative reforms in the workers' compensation system with the enactment of Senate Bill (SB) 863 in September 2012. The goal of the reform was to improve benefits for injured workers while reducing costs. SB 863 generally makes changes to: the measurement of permanent disability; the compensation for permanent disability; the physician fee schedule; the process to resolve disputes over appropriate medical treatment, medical fees, and billing and collections; the means of ensuring self-insurance program solvency and the methods of securing the payment of compensation by self-insurance; and certain other aspects of the workers' compensation system.

Many of the provisions of SB 863 were supported by CHSWC research and recommendations. For a summary of the key provisions of the reforms, please see the "Special Report: 2012 Workers' Compensation Reforms" in the 2012 CHSWC Annual Report. For a summary of past reforms, please see the "System Costs and Benefits Overview" section in the 2011 CHSWC Annual Report.

The Workers' Compensation Insurance Rating Bureau's (WCIRB's) prospective evaluation of SB 863 indicated significant savings from the reforms. WCIRB's estimates from its November 2015 retrospective evaluation of SB 863 indicate total annual savings of \$770 million per year, an increase of \$570 million over the previous estimates.⁹ The key reasons for the increase include the addition of savings attributed to the reduction in medical severity as well as decreases in costs attributed to RBRVS. In particular, WCIRB estimates a 5 percent decrease in ultimate medical cost per indemnity claim as a result of reductions in medical utilization levels resulting from various medical components of SB 863, including IMR.¹⁰ WCIRB is also retrospectively estimating \$300 million less in costs from the adoption of RBRVS.

⁹ Senate Bill No. 863 WCIRB Cost Monitoring Report—2015 Retrospective Evaluation
http://www.wcirb.com/sites/default/files/documents/sb_863_cost_monitoring_report_2015_retrospective_evaluation.pdf.

¹⁰ Ibid.

SYSTEM COSTS AND BENEFITS OVERVIEW

Table 6, that was reproduced from WCIRB's November 2015 evaluation, summarizes WCIRB's estimates using various cost categories.

Table 6: WCIRB's November 2015 Evaluation of Senate Bill (SB) 863 Cost Impact *

Estimated Annual Reform Impact					
	WCIRB Prospective Evaluation		November 2015 Retrospective Evaluation		
	Total Cost Impact (\$ millions)	Total % Impact	Preliminary Impact on Cost Savings**	Adjusted Cost Impact*** (\$ millions)	Adjusted Total % Impact
Indemnity Cost Components					
Changes to Weekly PD Min & Max	+\$650	+3.4%	=	—	—
SJDB Benefits	(\$10)	-0.1%	TBD	—	—
Replacement of FEC Factor	+\$550	+2.9%	=	—	—
Elimination of PD Add-ons	(\$170)	-0.9%	TBD	—	—
Three-Tiered Weekly PD Benefits	(\$100)	-0.5%	TBD	—	—
Ogilvie Decision	(\$210)	-1.1%	-	(\$130)	-0.7%
Med and LAE Cost Components					
Liens	(\$480)	-2.5%	=	—	—
Surgical Implant Hardware	(\$110)	-0.6%	+	(\$140)	-0.7%
ASC Fees	(\$80)	-0.4%	=	—	—
IMR—Impact of Frictional Costs	(\$180)	-0.9%	-	+\$70	+0.4%
IMR—Impact of TD Duration	(\$210)	-1.1%	-	—	—
MPN Strengthening	(\$190)	-1.0%	=	—	—
IBR	N/A	N/A	+	—	—
RBRVS Fee Schedule	+\$340	+1.8%	+	(\$10)	-0.1%
Indemnity Claim Frequency	Small Increase	—	=	—	—
Indemnity Severities (Incl. Trend)	Increases	—	=	—	—
Medical Severities (Incl. Trend)	Increases	—	+	(\$520)	-2.7%
ALAE and ULAE Severities	Signif. Decline	—	-	—	—
TOTAL ESTIMATE—ALL ITEMS	(\$200)	-1.1%		(\$770)****	-4.1%

Data Source: WCIRB

* Senate Bill No. 863 WCIRB Cost Monitoring Report—2015 Retrospective Evaluation (Table 1, p. 3).

http://www.wcirb.com/sites/default/files/documents/sb_863_cost_monitoring_report_2015_retrospective_evaluation.pdf

** A "+" implies additional savings above those prospectively estimated by the WCIRB, a "-" implies less savings (or additional costs), and a "=" implies savings (or cost) estimates generally consistent with prospective estimates. "TBD" implies that it is too early to retrospectively evaluate the cost component at this time.

*** Reflects the total impact on system costs for components for which the WCIRB has enough information to make a revised estimate. Amounts not shown imply total cost impacts equal to the prospective estimates.

**** The total estimate of \$770 million in retrospective savings includes savings on provisions that did not change from prospective estimates and are represented by dashes in the last two columns.

SYSTEM COSTS AND BENEFITS OVERVIEW

Costs of Workers' Compensation in California

Employers pay the cost of workers' compensation either by paying premiums for workers' compensation insurance or by self-insuring with the consent of the Department of Industrial Relations (DIR). Only the State of California can be legally uninsured as an employer. The cost to insured employers is measured in terms of premium. Premium is measured before discounts that are given for deductibles because there are no adequate data on amounts paid in deductibles by employers. The cost to self-insured employers is measured mostly by incurred claims, similar to the analysis of insurance company losses and expenses. These two aspects of employer cost are discussed in the following pages, and the loss and expense analysis for insurers appears later in this section.

Costs Paid by Insured Employers

In 2014, workers' compensation insurers' earned premium totaled \$16.2 billion paid by California employers.¹¹

The cost of workers' compensation insurance in California has undergone dramatic changes in the past ten years due to a combination of factors.

When workers' compensation premiums were deregulated beginning in 1995, insurers competed by lowering premium rates, in many instances below their actual costs. Costs also increased beyond the amounts foreseen when premiums were determined and collected. Many insurers drew on their reserves to make up the difference, and several insurers became insolvent. Subsequently, the surviving insurers charged higher premium rates in order to meet costs.

The California workers' compensation legislative reforms in the early 2000s, which were developed to control medical costs, update indemnity benefits and improve the assessment of PD, had significant impact on insurance costs.

These reforms reduced workers' compensation costs in California, but the cost of insurance began to increase again after 2009. However the cost of \$2.97 per \$100 of payroll in 2014 was still 53 percent below the second half of 2003 peak of \$6.29 per \$100 of payroll.¹²

¹¹ "2014 California's Workers' Compensation Losses and Expenses." WCIRB—June 30, 2015. Note that earned premium is not identical to written premium. The two measurements are related, and the choice of which measurement to use depends on the purpose.

¹² WCIRB Report on September 30, 2015, Insurer Experience, released December 15, 2015, Exhibit 2.

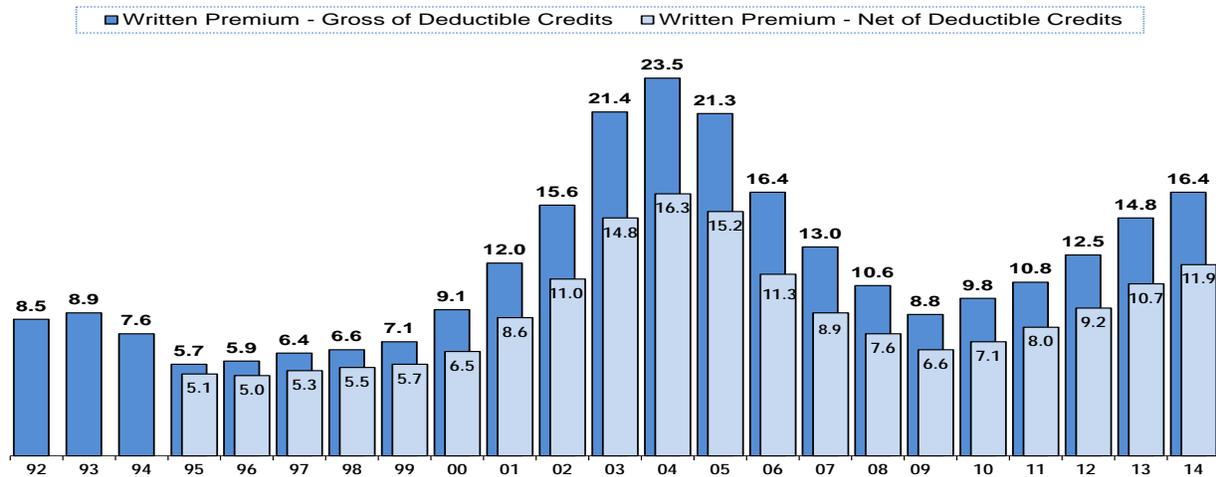
SYSTEM COSTS AND BENEFITS OVERVIEW

Workers' Compensation Written Premium

WCIRB defines written premium as the premium an insurer expects to earn over the policy period.

As shown in Figure 3, workers' compensation written premium has undergone dramatic changes since 1992. Written premium averaged \$8.7 billion per year in 1992 and 1993, decreased 36 percent from 1993 to 1995, increased slightly in the latter part of the 1990s, more than tripled from 1999 through 2004, and experienced a significant decline of over 60 percent from 2004 to 2009. From 2009 to 2014, there was a 86 percent increase in written premium.

Figure 3: Workers' Compensation Written Premium, as of September 30, 2015 (Billion \$)

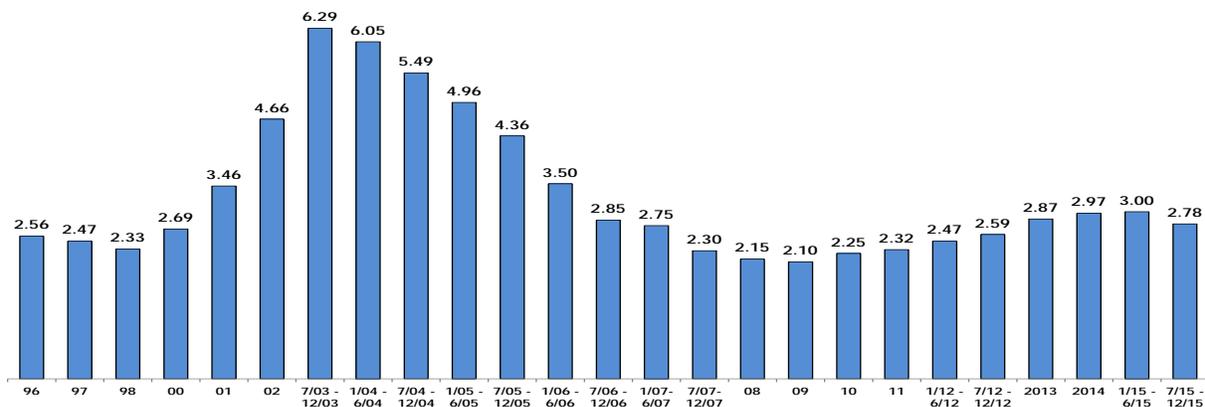


Source: WCIRB Report on September 30, 2015 Insurer Experience, released December 15, 2015, Exhibit 1

Workers' Compensation Average Premium Rate

Figure 4 shows the average workers' compensation premium rate per \$100 of payroll. The average stabilized during the late 1990s and then rose significantly beginning in 2000, until the second half of 2003. However, the average premium rate dropped every year from the second half of 2003 to 2009, when it was \$2.10, a decrease of almost 67 percent. From 2009 to the first half of 2015, the average premium rate increased by almost 43 percent, and then decreased by 7 percent from the first to second half of 2015.

Figure 4: Average Workers' Compensation Insurer Rate per \$100 of Payroll, as of September 30, 2015 (Dollar \$)



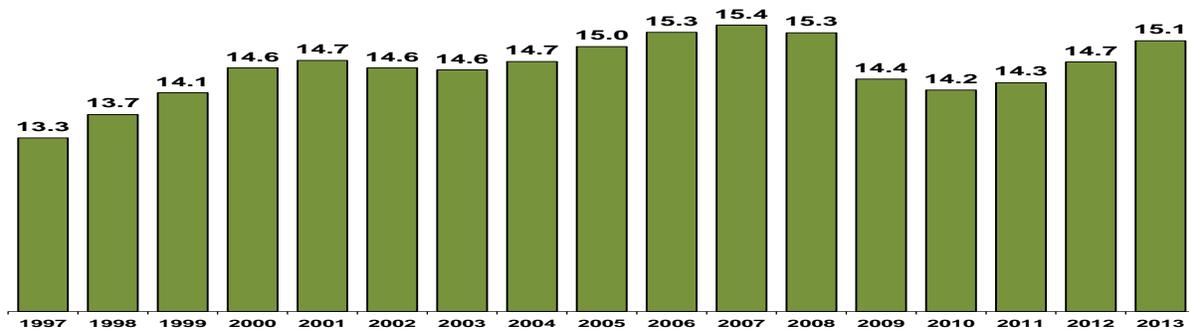
Source: WCIRB Summary of September 30, 2015 Insurer Experience Report, released September 15, 2015, Exhibit 2

SYSTEM COSTS AND BENEFITS OVERVIEW

Workers Covered by Workers' Compensation Insurance

The estimated number of California workers covered by workers' compensation insurance grew by about 10.5 percent from 13.3 million in 1996 to 14.7 million in 2001. From 2001 to 2005, the number of covered workers in California stabilized, averaging about 14.7 million per year. The estimated number of California workers covered by workers' compensation insurance grew by about 6 percent from 2003 to 2007, decreased by 8 percent from 2007 to 2010, and then increased again by about 6 percent from 2010 to 2013.¹³

Figure 5: Estimated Number of Workers Covered by Workers' Compensation Insurance in California (Millions)

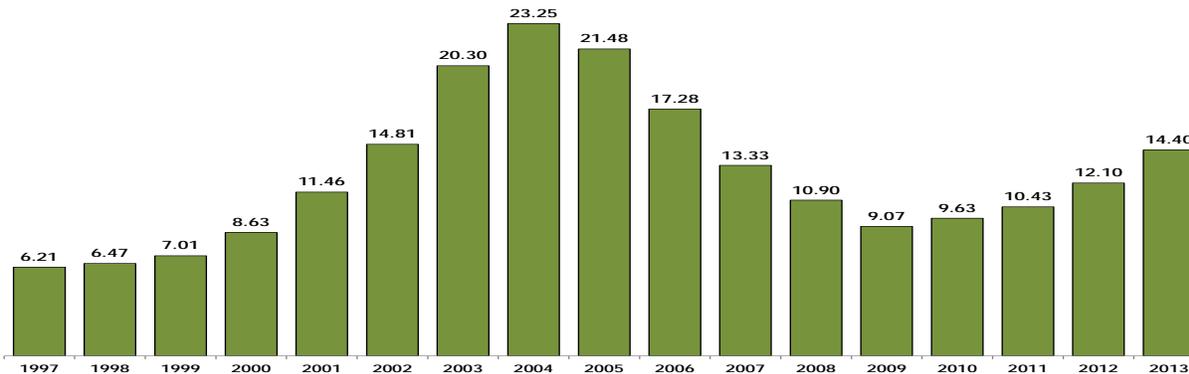


Data Source: National Academy of Social Insurance (NASI)

Total Earned Premium

WCIRB defines the earned premium as the portion of a premium earned by the insurer for policy coverage already provided.

Figure 6: Workers' Compensation Earned Premium (Billion \$)



Data Source: WCIRB

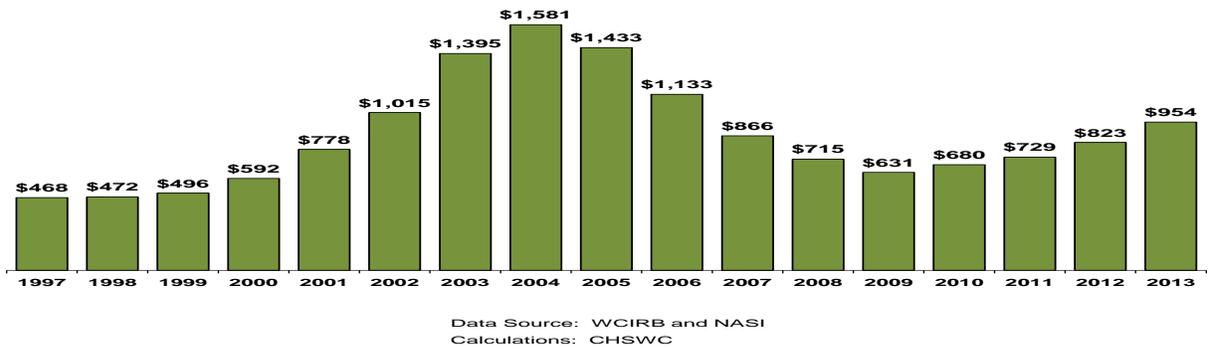
Average Earned Premium per Covered Worker

As shown in Figure 7, the average earned premium per covered worker more than tripled between 1997 and 2004, and then decreased by 60 percent from 2004 to 2009. From 2009 to 2013, the average earned premium per covered worker increased by 51 percent.

¹³ Latest available data in 2015 from NASI Report: Workers' Compensation Benefits, Coverage, and Costs, 2013. August 2015. https://www.nasi.org/sites/default/files/research/NASI_Work_Comp_Year_2015.pdf.

SYSTEM COSTS AND BENEFITS OVERVIEW

Figure 7: Average Earned Premium per Covered Worker



Costs Paid by Self-Insured Private and Public Employers

The permissible alternatives to insurance are private self-insurance, public self-insurance for government entities either individually or in joint power authorities (JPAs), and legally uninsured State government.

The Office of Self-Insurance Plans (OSIP) is a program within the Department of Industrial Relations Director's Office responsible for the oversight, regulation, and administration of the workers' compensation self-insurance marketplace in California. The self-insurance marketplace consists of more than 9,849 employers, employing 4 million workers with a total payroll exceeding \$177 billion. One out of every four California workers is covered by self-insured workers' compensation.

During 2014, OSIP continued to expand on its many initiatives from the previous year designed to streamline its operations, reduce fees to California employers, and increase its accountability, transparency, and commitment to providing the public with a high level of responsive customer service. An example of this was the year-long project to expand a successful E-Filing platform enabling self-insured employers and actuaries to electronically file their required employer's actuarial and financial report.

Another significant accomplishment was the development and implementation of a streamlined process for California employers who wish to become self-insured to accomplish this process in a 'speed-of-business' manner. In 2011, the total time required to complete the private self-insured application process and be issued a certificate of authority to self-insure took nearly nine months. In 2012, this was shortened to four to six months, with additional reductions during 2013 to less than 30 days. In 2014, OSIP successfully worked with private employers and completed this process consistently in less than 14 days. In April 2014, OSIP was able to facilitate and complete this process for a major California employer with more than \$1 billion in revenues and 26,000+ employees in just nine days.

OSIP was able to achieve these and many other significant accomplishments during 2013 while conserving expenditures achieving savings of 30.7 percent in its FY 2013-2014 budget.

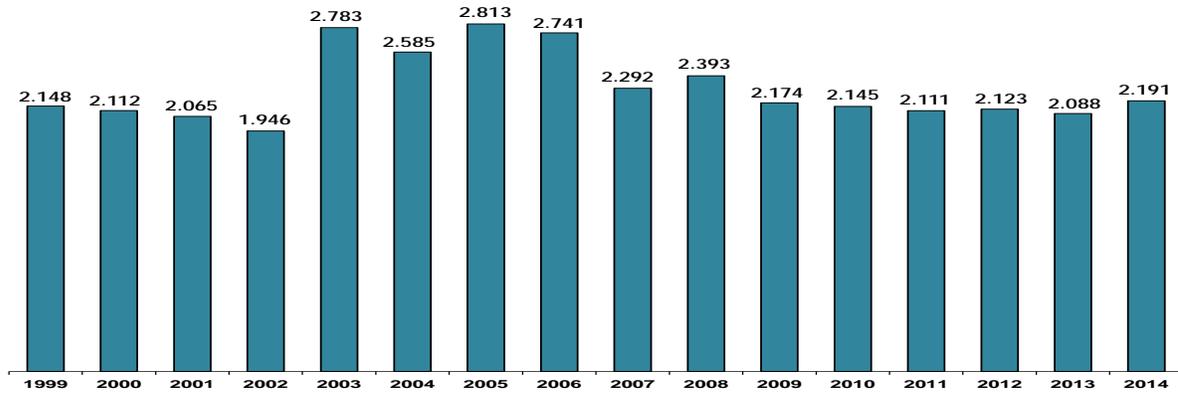
Part of the cost of workers' compensation for self-insured employers can be estimated by the amounts of benefits paid in a given year and by changes in reserves. This method is similar to an analysis done by WCIRB for the insurance industry, but the data for self-insured employers are less comprehensive than for insurers. The most complete estimate of the cost to self-insured employers is still obtained by taking some multiple of the cost to insured employers, excluding the cost elements that only apply to insurance. That multiplier is 0.5 and the estimated cost to self-insured employers and the State for 2014 is \$7.5 billion (see the box "Systemwide Cost: Paid Dollars for 2014 Calendar Year" on p. 37).

SYSTEM COSTS AND BENEFITS OVERVIEW

Private Self-Insured Employers¹⁴

Number of Employees. Figure 8 shows the number of employees working for private self-insured employers between 1999 and 2014. A number of factors may affect the year-to-year changes. One striking comparison is the average cost of insurance per \$100 of payroll for insured employers, as described earlier. When insurance is inexpensive, fewer employers may be attracted to self-insurance, but when insurance becomes more expensive, more employers move to self-insurance.

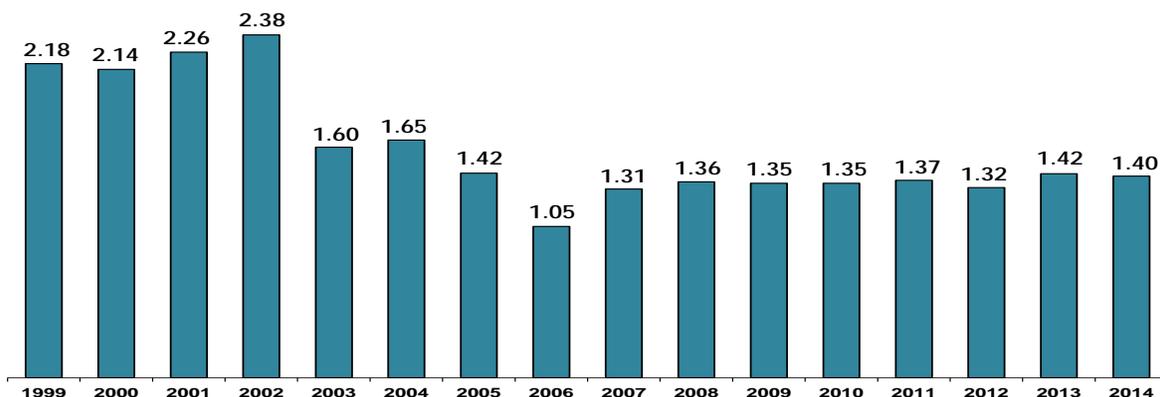
Figure 8: Number of Employees of Private Self-Insured Employers (Millions)



Data Source: DIR Self-Insurance Plans

Indemnity Claims. The rate of indemnity claims per 100 employees of private self-insured employers reflects trends seen throughout the workers' compensation system. The frequency has been declining steadily for years. In addition, the reforms of the early 1990s and of 2003-2004 each produced distinct drops in frequency. Smaller year-to-year variations, including a two-year upward trend from 2000 through 2002, are not correlated with any short-term variations in the insured market.

Figure 9: Number of Indemnity Claims per 100 Employees of Private Self-Insured Employers



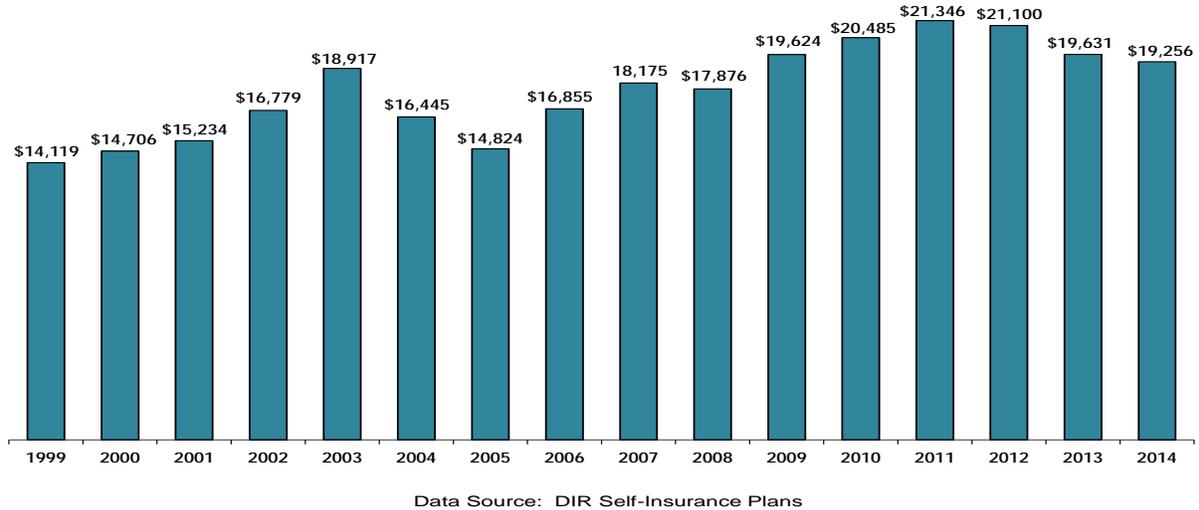
Data Source: DIR Self-Insurance Plans

¹⁴ Data for private self-insured employers are from DIR's Office of Self-Insurance Plans correspondence received by CHSWC in June 2015.

SYSTEM COSTS AND BENEFITS OVERVIEW

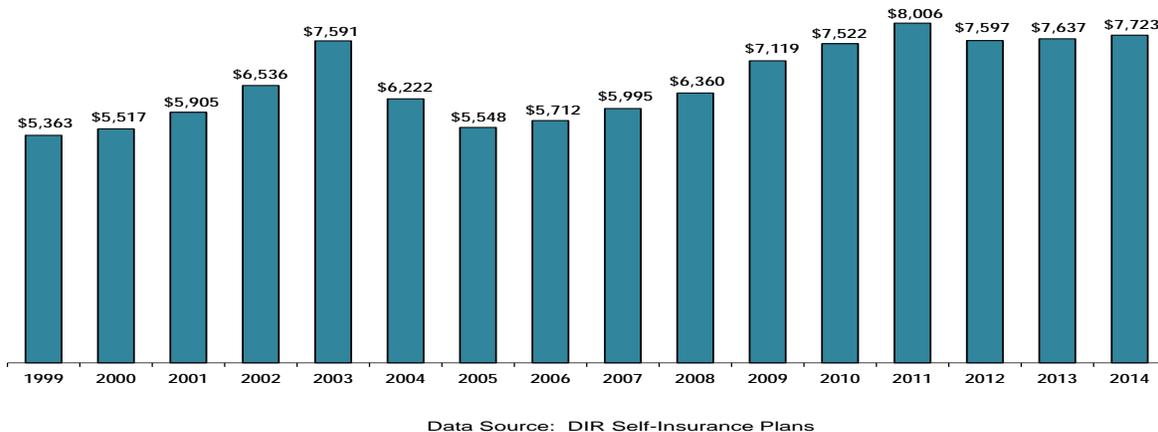
Incurred Cost per Indemnity Claim. Figure 10 shows the incurred cost per indemnity claim for private self-insured employers, which experienced changes similar to the changes for insurance companies. There was a steady rise in the cost per indemnity claim until 2003, when the cost began to drop in response to the reforms of 2003-2004. The upward trend returned in 2006. Although the growth in cost per claim recurred, the starting point for the growth was lower than it would have been without the reforms, and there was a 10 percent decrease in average incurred cost per indemnity claim from 2011 to 2014.

Figure 10: Incurred Cost Per Indemnity Claim of Private Self-Insured Employers



Incurred Cost per Indemnity and Medical Claim. The average cost of all claims, including both indemnity claims and medical-only claims, is naturally lower than the average cost of indemnity claims. Although it is lower, it shows a pattern similar to the trends for indemnity claims, except for a slight increase from 2012 to 2014.

Figure 11: Incurred Cost per Claim, Indemnity and Medical of Private Self-Insured Employers

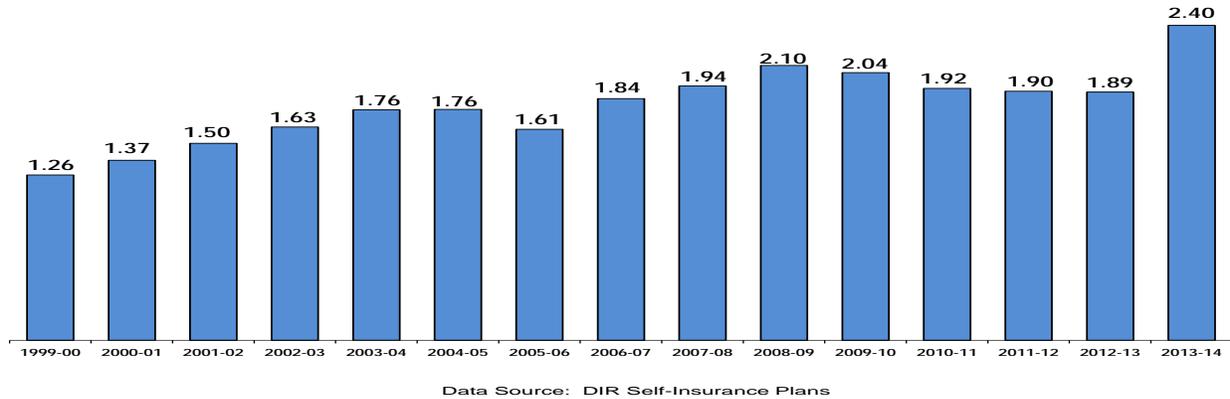


SYSTEM COSTS AND BENEFITS OVERVIEW

Public Self-Insured Employers¹⁵

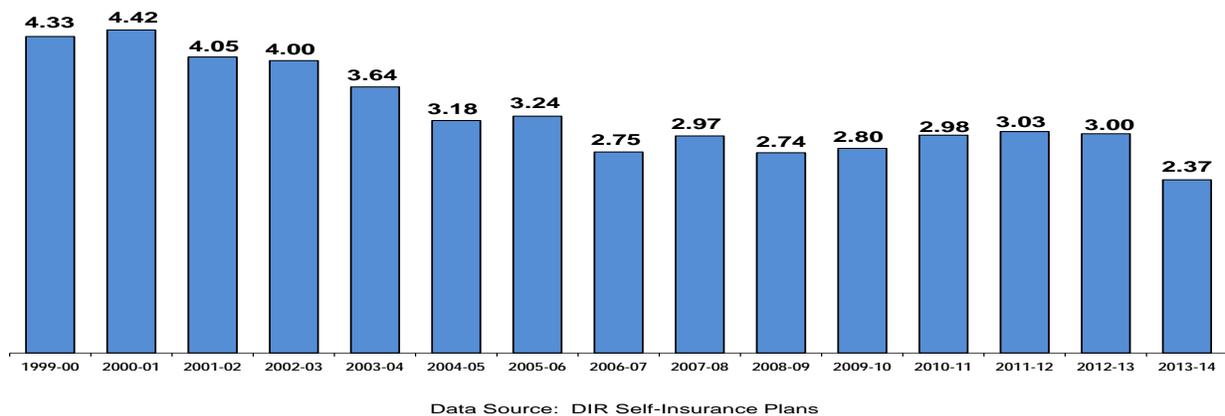
Number of Employees. Figure 12 shows the number of public self-insured employers between fiscal years 1999-2000 and 2013-2014. Between 1999-2000 and 2003-2004, the number of employees working for public self-insured employers grew by 47 percent, then leveled off between 2003-2004 and 2004-2005, declined between 2004-2005 and 2005-2006, increased by 30 percent from 2005-2006 to 2008-2009, and then decreased by about 10 percent from 2009-2010 to 2012-2013. From 2012-2013 to 2013-2014, there was a 27 percent increase in the number of public self-insured employers.

Figure 12: Number of Employees of Public Self-Insured Employers (Millions)



Indemnity Claims. The number of indemnity claims by employees working for public self-insured employers increased slightly from 1999-2000 to 2000-2001. Between 2000-2001 and 2004-2005, the number of indemnity claims by employees decreased by 28 percent and then fluctuated between 2004-2005 and 2008-09. From 2008-2009 to 2011-2012, the number of indemnity claims by employees working for public self-insured employers increased by 10.5 percent, and then decreased again by 22 percent from 2011-2012 to 2013-2014.

Figure 13: Number of Indemnity Claims per 100 Employees of Public Self-Insured Employers

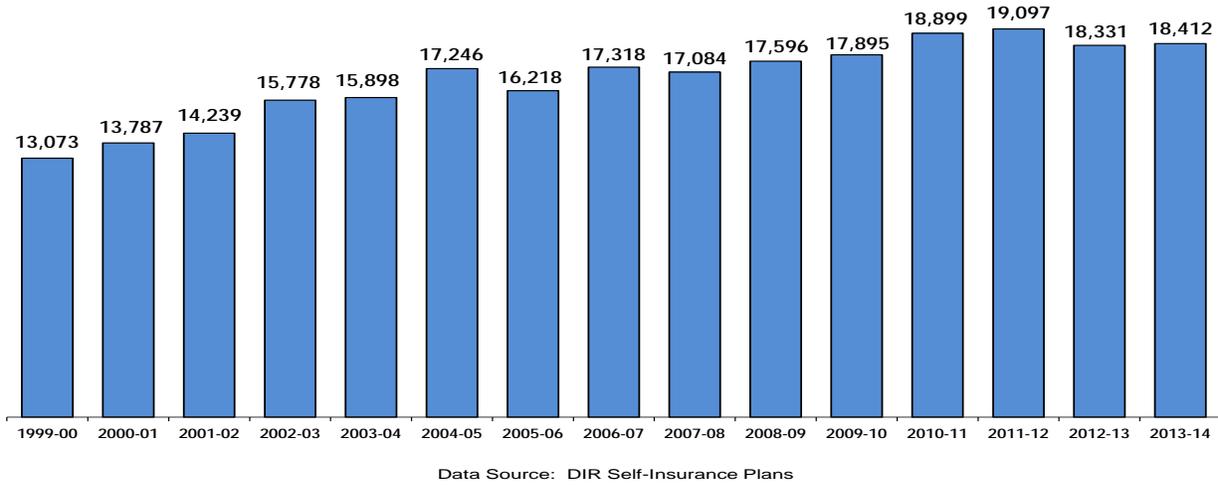


¹⁵ Data for Public Self-Insured Employers are from DIR's Office of Self-Insurance Plans correspondence received by CHSWC in December 2015.

SYSTEM COSTS AND BENEFITS OVERVIEW

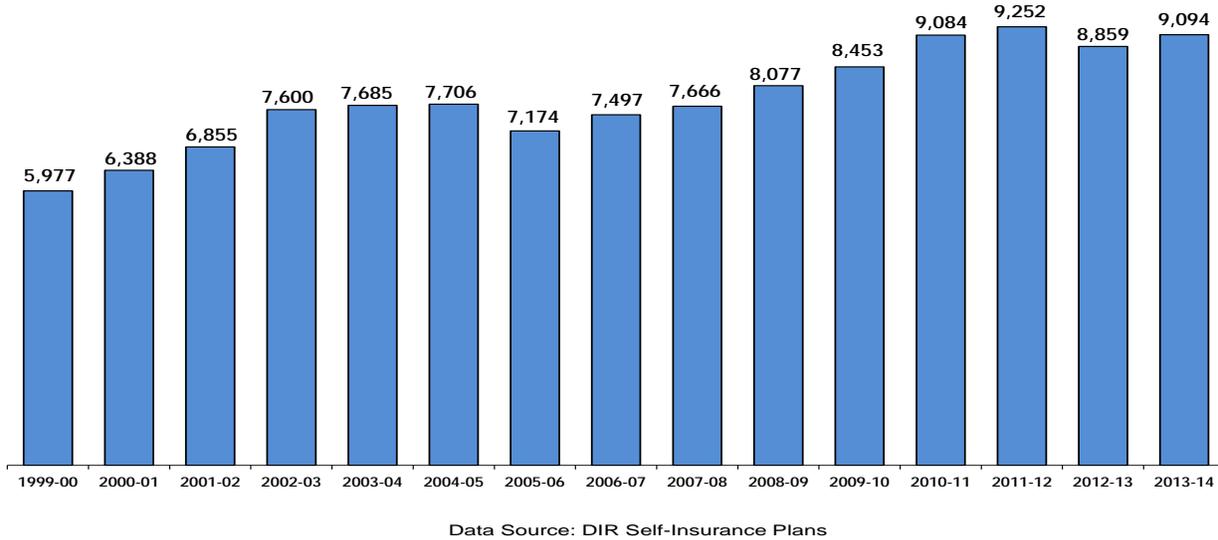
Incurred Cost per Claim. Figure 14 shows the incurred cost per indemnity claim for public self-insured employers. Between 1999-2000 and 2013-2014, the incurred cost per indemnity claim increased overall by 41 percent from \$13,073 to \$18,412.

Figure 14: Incurred Cost per Indemnity Claim of Public Self-Insured Employers (in \$)



Incurred Cost per Indemnity and Medical Claim Figure 15 shows the incurred cost per indemnity and medical claim for public self-insured employers. Between 1999-2000 and 2013-2014, the incurred cost per indemnity and medical claim increased overall by 52 percent from \$5,977 to \$9,094.

Figure 15: Incurred Cost per Claim—Indemnity and Medical—Public Self-Insured Employers (in \$)



SYSTEM COSTS AND BENEFITS OVERVIEW

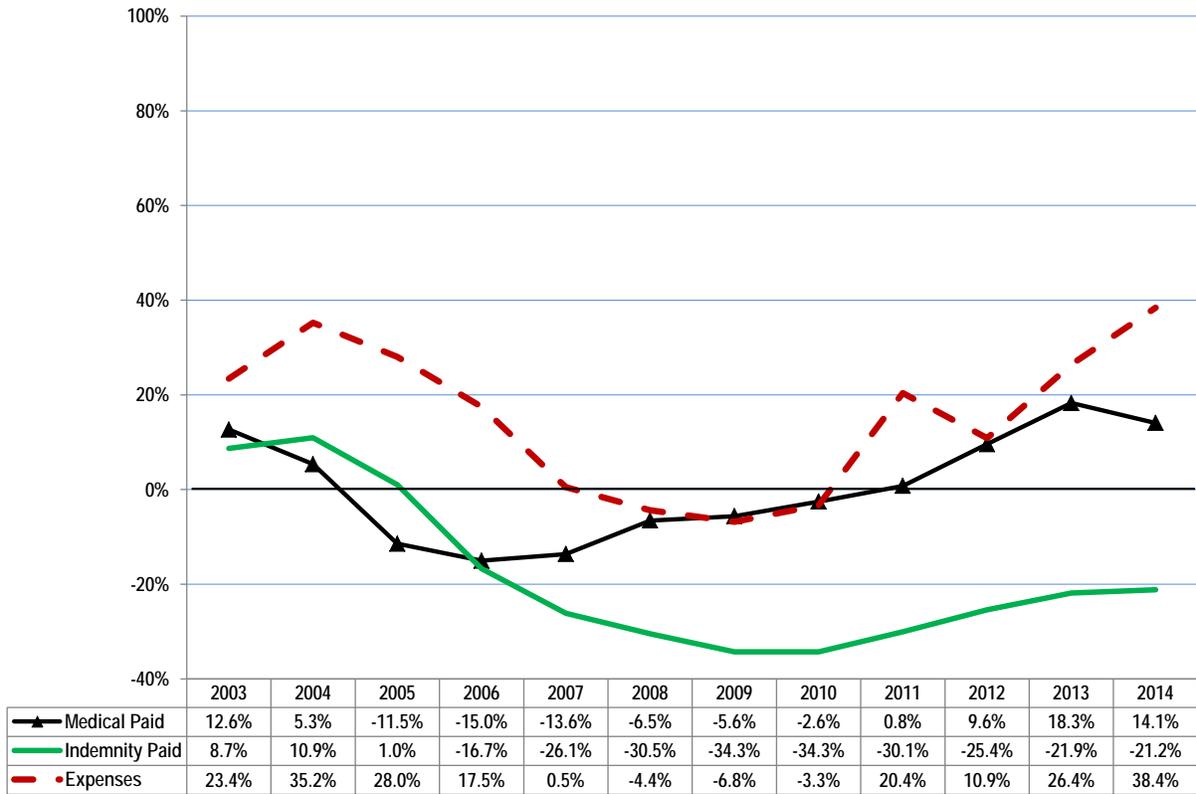
Workers' Compensation System Expenditures: Indemnity and Medical Benefits

Overall Costs

Methodology for Estimating. The estimated percentages of total system costs are based on insured employer costs provided by WCIRB. The assumption is that these data apply also to self-insureds. Since self-insured employers and the State are estimated to account for 33.6 percent of total California workers' compensation claims, the total system costs are calculated by increasing WCIRB data for insured employers to reflect that proportion.

Growth of Workers' Compensation Costs

Figure 16: Workers' Compensation Costs: Percent Change by Year Compared with 2002



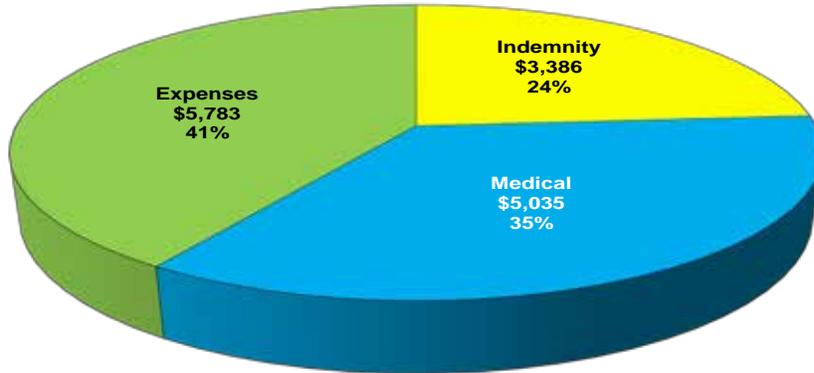
Data Source: WCIRB

SYSTEM COSTS AND BENEFITS OVERVIEW

Distribution of Workers' Compensation Costs by Type.

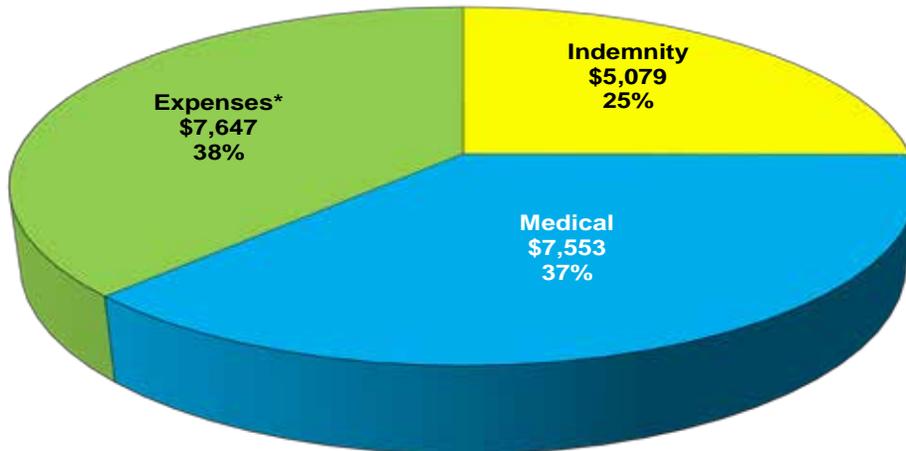
Figures 17 and 18 show the distribution of workers' compensation paid costs for insured employers and systemwide.

Figure 17: Estimated Distribution of Insured Employers' Workers' Compensation Paid Costs, 2014 (Million \$)



Data Source: WCIRB

Figure 18: Estimated Distribution of Systemwide Workers' Compensation Paid Costs, 2014 (Million \$)



* The distribution shown in this chart includes both insured and self-insured employers' costs. For insured costs, Expenses include allocated loss adjustment expenses, unallocated loss adjustment expenses, commissions and brokerage, other acquisition expenses, and premium taxes. Self-insured employers would not encounter some of those types of expenses.

Please note that Insurer Pre-Tax Underwriting losses (\$699 million in 2014) were excluded from the chart since they were not a component of both insured and self-insured costs.

Data Source: WCIRB with calculations by CHSWC

SYSTEM COSTS AND BENEFITS OVERVIEW

Indemnity Benefits

WCIRB provided data for the cost of indemnity benefits paid by insured employers. Assuming that insured employers comprise approximately 66.4 percent of total California workers' compensation claims, estimated indemnity benefits are shown in Table 7 for the total system, insured employers, self-insured employers, and the State of California.

Table 7: Systemwide Estimated Costs of Paid Indemnity Benefits

Systemwide Indemnity Benefits (Thousand \$)	2013	2014	Change
Temporary Disability	\$2,391,908	\$2,471,274	\$79,366
Permanent Total Disability	\$196,833	\$184,659	-\$12,174
Permanent Partial Disability	\$2,137,169	\$2,124,120	-\$13,049
Death	\$109,184	\$111,525	\$2,341
Funeral Expenses	\$3,420	\$3,195	-\$225
Life Pensions	\$139,746	\$139,164	-\$582
Voc Rehab/Non-transferable Education Voucher	\$55,839	\$44,879	-\$10,961
Total	\$5,034,098	\$5,078,816	\$44,718
Paid by Insured Employers			
Indemnity Benefits (Thousand \$)	2013	2014	Change
Temporary Disability *	\$1,594,605	\$1,647,516	\$52,911
Permanent Total Disability *	\$131,222	\$123,106	-\$8,116
Permanent Partial Disability *	\$1,424,779	\$1,416,080	-\$8,699
Death *	\$72,789	\$74,350	\$1,561
Funeral Expenses	\$2,280	\$2,130	-\$150
Life Pensions	\$93,164	\$92,776	-\$388
Voc Rehab/Non-transferable Education Voucher *	\$37,226	\$29,919	-\$7,307
Total	\$3,356,065	\$3,385,877	\$29,812
Paid by Self-Insured Employers and the State**			
Indemnity Benefits (Thousand \$)	2013	2014	Change
Temporary Disability	\$797,303	\$823,758	\$26,456
Permanent Total Disability	\$65,611	\$61,553	-\$4,058
Permanent Partial Disability	\$712,390	\$708,040	-\$4,350
Death	\$36,395	\$37,175	\$780
Funeral Expenses	\$1,140	\$1,065	-\$75
Life Pensions	\$46,582	\$46,388	-\$194
Voc Rehab/Non-transferable Education Voucher	\$18,613	\$14,960	-\$3,653
Total	\$1,678,033	\$1,692,939	\$14,906

Sources: Calculated by CHSWC, based on data from WCIRB

* Single Sum Settlement and Other Indemnity payments have been allocated to the benefit categories.

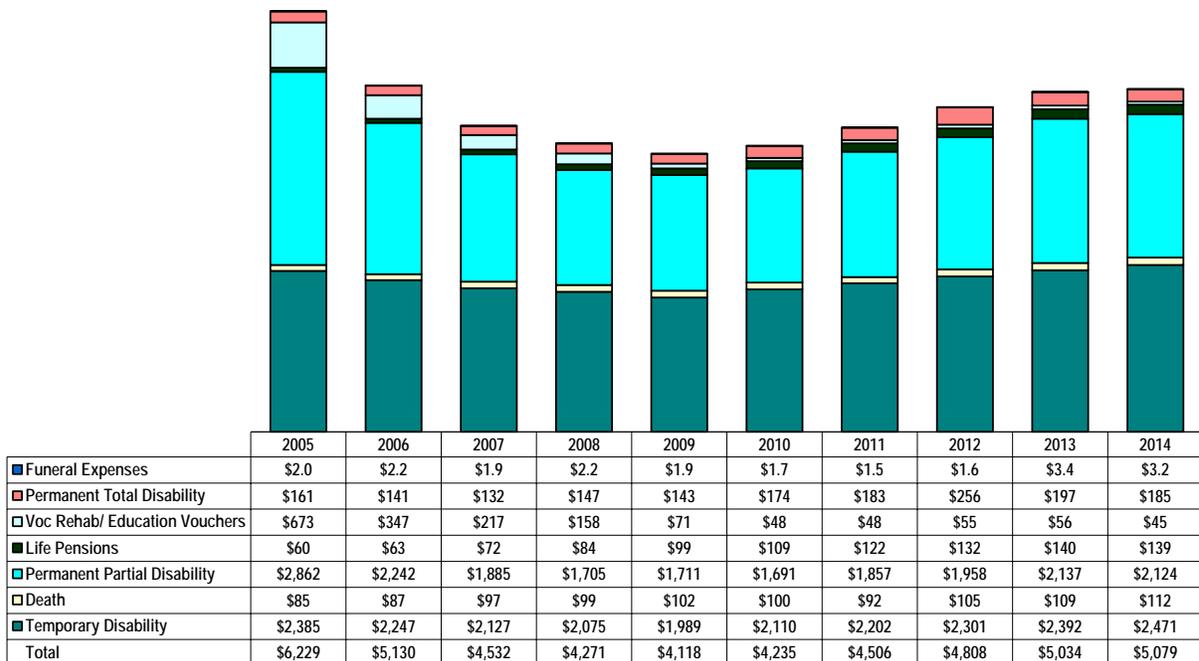
** Figures estimated based on insured employers' costs. Self-insured employers and the State of California are estimated to comprise 33.6 percent of all California workers' compensation claims.

SYSTEM COSTS AND BENEFITS OVERVIEW

Trends in Paid Indemnity Benefits.

The estimated systemwide paid indemnity benefits for the past several years are displayed in Figure 19. After the reforms of 2003 -2004, paid indemnity benefits decreased steadily by 34 percent from 2005 to 2009, when they dropped to below the 2001 levels (\$5 billion). However, from 2009 to 2014, there was a 23 percent increase in total paid indemnity benefits. After the reforms, payments for permanent partial disability, which peaked in 2004 to \$2.9 billion had one of the biggest declines: 42 percent, from 2004 to 2010. From 2010 to 2014, payments for permanent partial disability increased by 26 percent. The TD benefits steadily declined from 2005 to 2009 (17 percent) despite the TD benefit increases of AB 749 and the impact of the two-year limit not taking effect until April 2006. From 2009 to 2014, the TD benefits increased by 24 percent.

Figure 19: Workers' Compensation Paid Indemnity Benefit by Type Systemwide Estimated Costs (Million \$)



Data Source: WCIRB
Calculations: CHSWC

Supplemental Job Displacement Benefits Costs

The reforms of 2003 eliminated vocational rehabilitation (VR) for injuries arising on or after January 1, 2004, and replaced it with a supplemental job displacement benefit (SJDB). The VR statutes were repealed as of January 1, 2009. Consequently, the expenditures for VR decreased rapidly, as the remaining pre-2004 cases were addressed. SJDB expenditures were made, but at a much lower level.

Supplemental Job Displacement Benefit Vouchers

Assembly Bill (AB) 227 (Vargas, 2003) created a system of non-transferable educational vouchers effective for injuries that occurred on or after January 1, 2004. WCIRB's estimate of the cost of education vouchers is based on information compiled from its most current Permanent Disability Claim Survey. In total, 18.3 percent of accident year 2004 PD claims involved education vouchers, and the average cost of the education vouchers was approximately \$5,900. For the 2005 accident year, at first survey level, 20.7

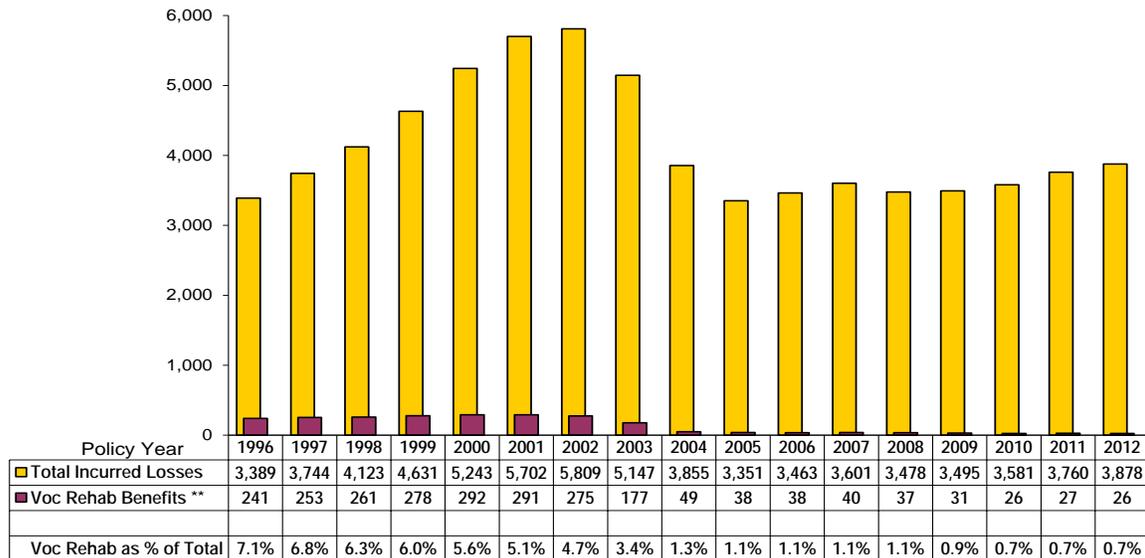
SYSTEM COSTS AND BENEFITS OVERVIEW

percent of sampled PD claims were reported as involving education vouchers, with an estimated average cost of approximately \$5,600. SB 863 (De León 2012) revises the SJDB for injuries that occurred on or after January 1, 2013, while preserving the concept of a voucher for education or training for an injured worker who does not have an opportunity to return to work for the at-injury employer.

Vocational Rehabilitation and Supplemental Job Displacement Benefit Vouchers (SJDB) Incurred Costs

AB 227, enacted in 2003, in combination with clean-up language in SB 899 enacted in 2004, repealed the workers' compensation VR benefit for dates of injury on or after January 1, 2004. VR benefits were available only to eligible workers injured before 2004 and were available only through December 31, 2008. VR has essentially ended, although some litigation continues over the wind-up of VR under particular circumstances. Figure 20 presents the most recent data available through 2012 on VR costs, including SJDB vouchers (non-transferable education vouchers) beginning in policy year 2003. Effective with injuries that occurred on or after January 1, 2013, Labor Code Section 4658.5 was modified, and Labor Code Section 4658.7, which modified the system of supplemental job displacement benefits, was created by Senate Bill 863 (2012).

Figure 20: Vocational Rehabilitation Benefits* and SJDB Voucher Costs as Percent of Total Incurred Losses, WCIRB First Report Level (Million \$)



* The Vocational Rehabilitation statutes are repealed entirely effective January 1, 2009, and replaced with Supplemental Job Displacement Benefits.

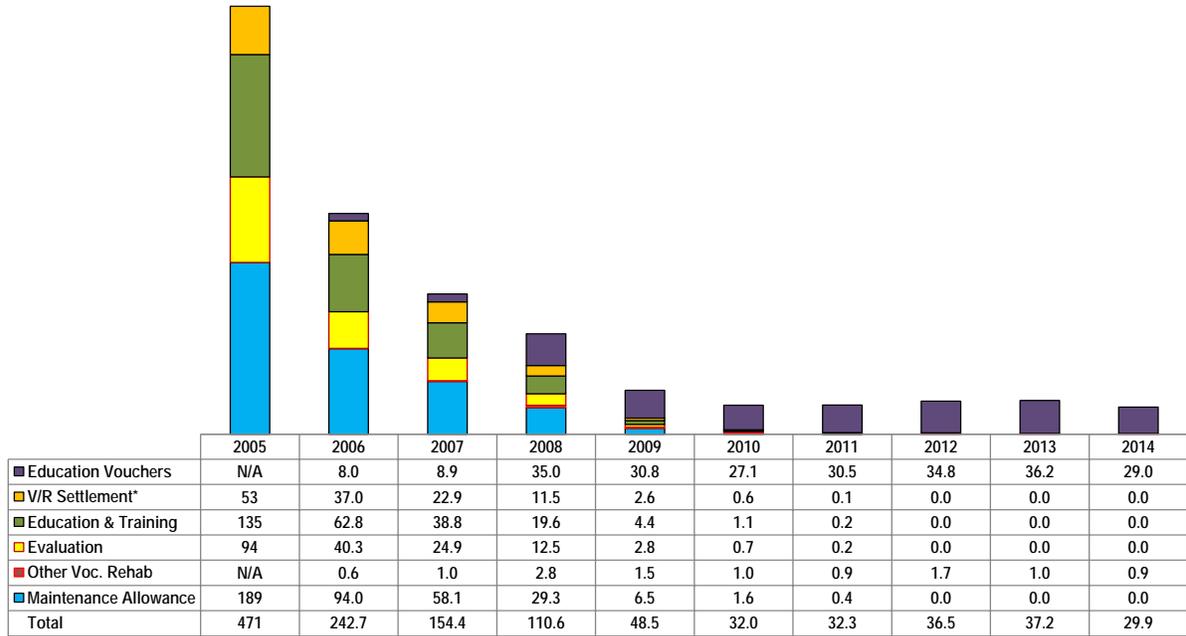
** Policy year 2003 "vocational rehabilitation benefits" contain a mix of vocational rehabilitation costs and non-transferable educational voucher costs. Policy year 2004 and later "vocational rehabilitation benefits" contain mainly non-transferable educational voucher costs.

Data Source: WCIRB

SYSTEM COSTS AND BENEFITS OVERVIEW

Figure 21 shows the amounts paid for each component of the VR benefit, including newly introduced VR settlement and SJDB vouchers for 2005 through 2014.

Figure 21: Paid Vocational Rehabilitation Benefits and SJDB Vouchers for Insured Employers (Million \$)



* Vocational Rehabilitation Settlements were allowed on injuries occurring on or after January 1, 2003, pursuant to Assembly Bill No.749

Data Source: WCIRB

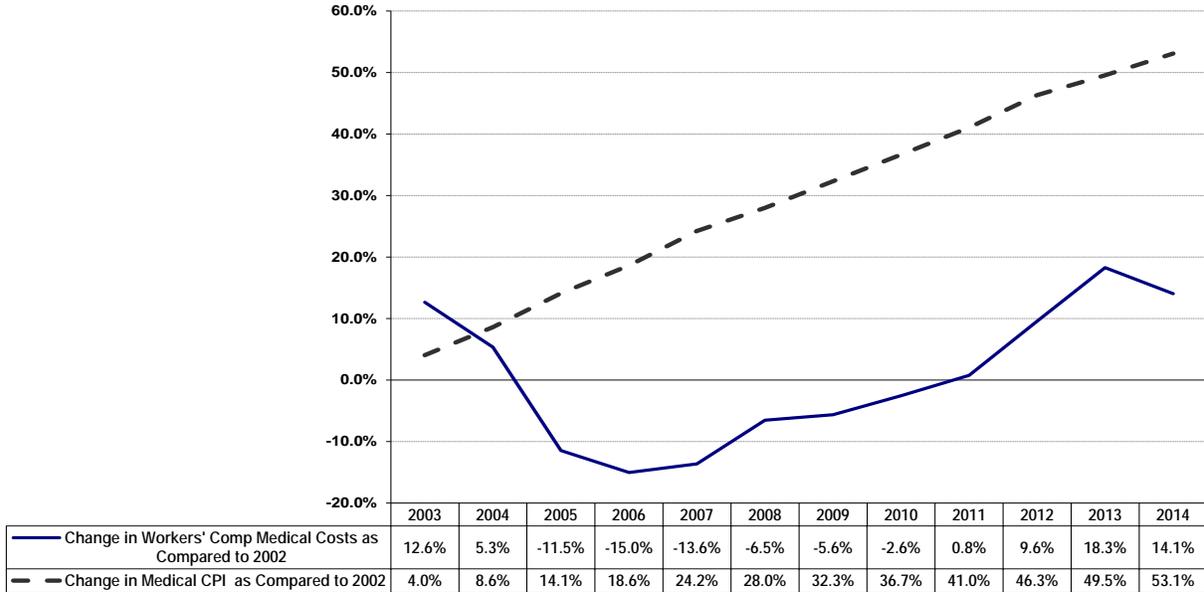
Medical Benefits

Workers' Compensation Medical Costs vs. Medical Inflation

Figure 22 compares the percent growth of California's workers' compensation medical costs paid by insurers and self-insured employers in each consecutive year from 2002 with the percent growth of the medical component of the Consumer Price Index (CPI) in each consecutive year from the same base year. The medical component of the CPI is also known as the "Medical CPI," an economic term used to describe price increases in health care services.

SYSTEM COSTS AND BENEFITS OVERVIEW

Figure 22: Growth of Workers' Compensation Medical Costs Compared with Growth of Medical Inflation (2002 as a base year)



Data Source: WCIRB; Bureau of Labor Statistics

Distribution of Medical Benefits: Where Does the Workers' Compensation Dollar Go?

WCIRB provided data for the cost of medical benefits paid by insured employers. Assuming that insured employers comprise approximately 66 percent of total California workers' compensation claims, estimated medical benefits are shown in Table 8 for the total system, insured employers, self-insured employers, and the State of California.

Method of Estimating the Dollar Amounts by type of Medical Payments for Calendar Year 2013

According to the WCIRB report on 2014 Losses and Expenses¹⁶, the medical payment component amounts for 2014 have been updated to reflect WCIRB's Medical Data Call (MDC), which is based on individual medical transactions and provides additional detail for better segregation of medical payments by the type of services and providers. The WCIRB began collecting MDC data in late 2012, and, as a result, only calendar years (CY) 2013 and 2014 can be shown on this basis. While the WCIRB's report on 2014 Losses and Expenses provides dollar amounts by the type of medical payments for CY 2014, the CY 2013 medical payments by type are available as percentage of total medical payments in Exhibit 1.4 in WCIRB's report. In order to compare the dollar amounts by the type of medical services and providers between CY 2013 and CY 2014, the percent distribution of CY 2013 total medical payments by type provided in Exhibit 1.4 was applied to CY 2013 total medical payments of \$5,221,459,000 for insured sector (estimated systemwide cost is \$7,832 million).

The results of this estimation are reflected in Table 8.

¹⁶ WCIRB 2014 Losses and Expenses Report, Exhibit 1.1, p. 6, and Exhibit 1.4, p. 9:
http://www.wcirb.com/sites/default/files/documents/2014_ca_workers_compensation_losses_and_expenses_report.pdf.

SYSTEM COSTS AND BENEFITS OVERVIEW

Table 8: Systemwide Estimated Costs—Medical Benefits Paid

Systemwide Medical Benefits (Thousand \$)	2013	2014	Change
Physicians	\$2,177,348	\$2,060,553	-\$116,795
Hospital (Inpatient and Outpatient)	\$1,073,010	\$925,977	-\$147,033
Medical Supplies and Equipment	\$391,609	\$369,290	-\$22,320
Pharmacy	\$728,394	\$624,728	-\$103,666
Medical-Legal Evaluation	\$446,435	\$505,386	\$58,951
Payments Made Directly to Patients	\$1,895,390	\$1,808,118	-\$87,272
Medical Cost-Containment Programs*	\$328,952	\$312,590	-\$16,362
Medicare Set-Aside (Medical Payments and Reimbursements)	\$195,805	\$226,764	\$30,959
Capitated Medical	\$23,497	\$15,063	-\$8,434
Other (Med Liens, Dental, Interpreter, and Copy Services)	\$571,750	\$703,626	\$131,876
Total	\$7,832,189	\$7,552,094	-\$280,095
Paid by Insured Employers			
Medical Benefits (Thousand \$)	2013	2014	Change
Physicians	\$1,451,566	\$1,373,702	-\$77,864
Hospital (Inpatient and Outpatient)	\$715,340	\$617,318	-\$98,022
Medical Supplies and Equipment	\$261,073	\$246,193	-\$14,880
Pharmacy	\$485,596	\$416,485	-\$69,111
Medical-Legal Evaluation	\$297,623	\$336,924	\$39,301
Payments Made Directly to Patients	\$1,263,593	\$1,205,412	-\$58,181
Medical Cost-Containment Programs*	\$219,301	\$208,393	-\$10,908
Medicare Set-Aside (Medical Payments and Reimbursements)	\$130,536	\$151,176	\$20,640
Capitated Medical	\$15,664	\$10,042	-\$5,622
Other (Med Liens, Dental, Interpreter, and Copy Services)	\$381,167	\$469,084	\$87,917
Total	\$5,221,459	\$5,034,729	-\$186,730
Paid by Self-Insured Employers**			
Medical Benefits (Thousand \$)	2013	2014	Change
Physicians	\$725,783	\$686,851	-\$38,932
Hospital (Inpatient and Outpatient)	\$357,670	\$308,659	-\$49,011
Medical Supplies and Equipment	\$130,536	\$123,097	-\$7,440
Pharmacy	\$242,798	\$208,243	-\$34,555
Medical-Legal Evaluation	\$148,812	\$168,462	\$19,650
Payments Made Directly to Patients	\$631,797	\$602,706	-\$29,091
Medical Cost-Containment Programs*	\$109,651	\$104,197	-\$5,454
Medicare Set-Aside (Medical Payments and Reimbursements)	\$65,268	\$75,588	\$10,320
Capitated Medical	\$7,832	\$5,021	-\$2,811
Other (Med Liens, Dental***, Interpreter, and Copy*** Services)	\$190,583	\$234,542	\$43,959
Total	\$2,610,730	\$2,517,365	-\$93,365

Sources: Calculated by CHSWC, based on data from WCIRB.

* Figures for medical cost-containment programs (MCCP) are based on a sample of insurers who reported medical cost containment expenses to WCIRB. Costs on claims covered by policies incepting July 1, 2010 and beyond are considered Allocated Loss Adjustment Expenses (ALAE). The amount of MCCP costs reported as ALAE for calendar year 2014 is \$263 million.

** Figures estimated are based on insured employers' costs. Self-insured employers and the State of California are estimated to comprise 33.6 percent of all California workers' compensation claims.

*** Based on WCIRB surveys of insurer medical payments.

SYSTEM COSTS AND BENEFITS OVERVIEW

Trends in Paid Medical Benefits

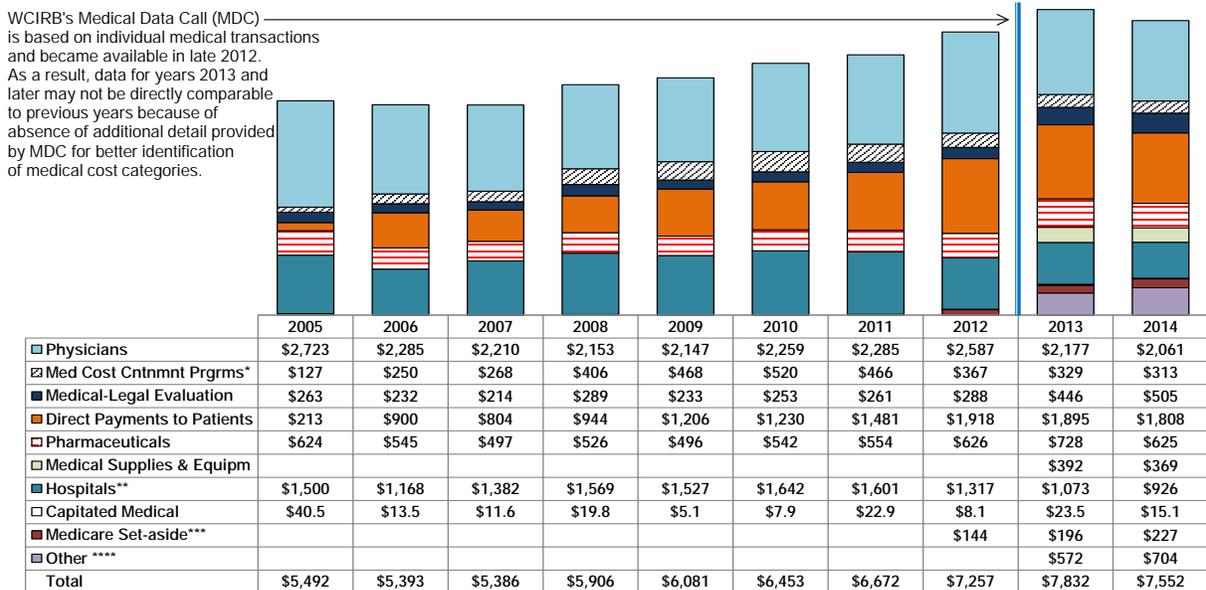
The estimated systemwide paid medical costs for the past several years are shown in Figure 23. The following trends may result from the impact of recent workers' compensation reforms and economic recession.

Figure 23 indicates that the payments in 2013 for hospitals, physicians, and pharmacies remained below the 2004 pre-reform level, while cost-containment program costs and direct payment to patients increased greatly.

The cost of the total medical benefit decreased by 18 percent from 2004 to 2007, and then increased by 45 percent from 2007 to 2013. Payments to physicians decreased by 37 percent from 2004 to 2009, and then increased 33 percent from 2009 to 2013. Pharmacy costs peaked in 2004, declined by 27 percent from 2004 to 2007, and then increased overall by 42 percent from 2007 to 2013. Hospital costs declined by 35 percent from 2004 to 2006, increased overall by 41 percent from 2006 to 2010, and then decreased by 23 percent from 2010 to 2013. Direct payments to patients averaged \$210 million for 2004 and 2005, increased sharply 4 times from 2005 to 2006, and then overall increased 2.5 times to \$2.2 billion from 2006 to 2013. Expenditures on medical cost-containment programs in 2005 were half of what they were in 2004, increased four times from 2005 to 2010, and then decreased by 37 percent from 2010 to 2013.¹⁷ Medical-legal evaluation costs peaked in 2008 at \$289 million (an increase of 26 percent from 2004), decreased by 19 percent from 2008 to 2009, gradually returned to the 2008 level from 2009 to 2012, and then decreased by 9 percent from 2012 to 2013.

The apparent increases in the medical payments made to injured workers and medical cost-containment programs were in part the result of availability of more detailed reporting of payments into specific recipient/payee categories.

Figure 23: Workers' Compensation Paid Medical Benefits by Type, Systemwide Estimated Costs (Million \$)



Source: WCIRB (Calculations by CHSWC)

* Medical cost-containment program (MCCP) costs on claims covered by policies incepting July 1, 2010 and beyond are considered Allocated Loss Adjustment Expenses (ALAE). The amount of MCCP costs reported as ALAE for calendar year 2014 is \$263 million.

** Hospitals include Outpatient and Inpatient services that became separately identifiable beginning from 2013.

*** Medicare Set-aside Payments include Medical Payments and Reimbursements.

****Other includes Medical Liens, Dental, Interpreter, and Copy services.

¹⁷ Medical cost-containment program costs on claims covered by policies incepting prior to July 1, 2010, are considered medical loss, and those covered by policies incepting July 1, 2010, and beyond are considered allocated loss adjustment expenses.

SYSTEM COSTS AND BENEFITS OVERVIEW

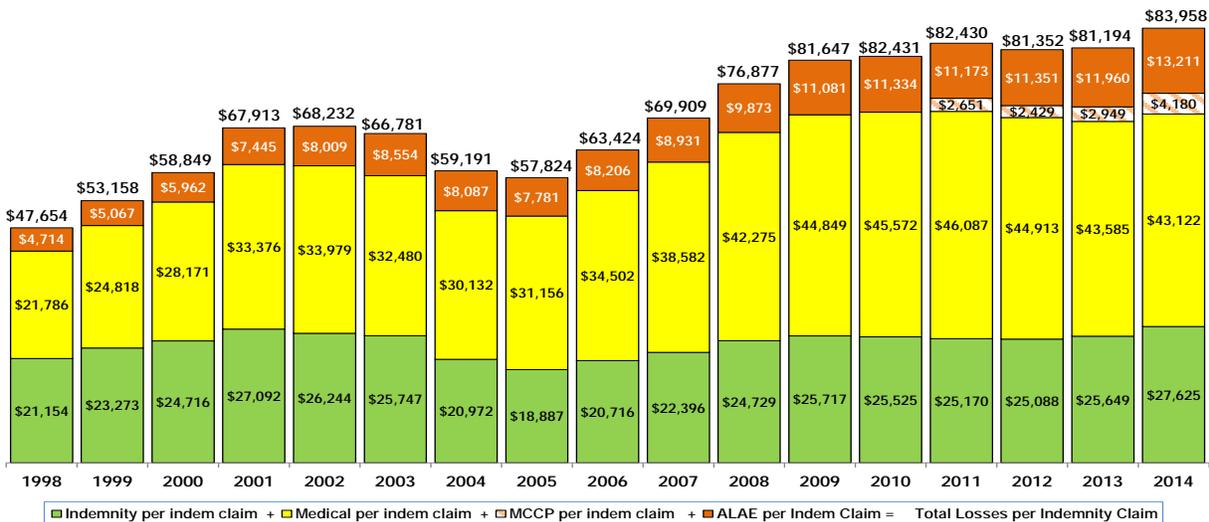
Average Ultimate Total Loss

Figure 24 shows changes in indemnity and medical components of the projected ultimate total loss per workers' compensation indemnity claim.

Beginning with claims incurred on policies incepting on or after July 1, 2010, the cost of medical cost containment programs (MCCP) is reported to WCIRB as allocated loss adjustment expenses (ALAE) rather than as medical loss. As a result, a portion of MCCP costs for accident years 2010 and 2011 was reported as medical loss, and a portion was reported as ALAE. In order to facilitate consistent comparison from year to year of medical losses and ALAE, accident year 2010 MCCP costs reported as ALAE were shifted to medical loss, and the estimated amount of accident year 2011 MCCP costs reported as medical loss were shifted to ALAE.¹⁸ In order to provide consistent comparisons across years in Figure 24, to the extent appropriate, the amounts and ratios shown represent the combined cost of losses and ALAE, with MCCP amounts shown separately.

WCIRB projects the average cost or "severity" of a 2014 indemnity claim to be approximately \$84,000, which is moderately higher than the projected severities for the last several accident years.¹⁹ The projected average indemnity cost of a 2014 indemnity claim increased by 8 percent over that for 2013, primarily a result of SB 863 increases to permanent disability benefits in 2014. The projected average medical cost—including MCCP costs—of a 2014 indemnity claim declined for the third straight year and is 6 percent below the projected average medical cost for 2011.²⁰ Despite the enactment of SB 863, which was forecast to decrease ALAE costs, the projected average ALAE cost of a 2014 indemnity claim, excluding MCCP costs, is approximately 10 percent above that of 2013 and approximately 16 percent higher than the average ALAE severity for 2012.²¹

Figure 24: Estimated Ultimate Total Loss* per Indemnity Claim as of September 30, 2015



* Excluded medical-only

Note: Before July 1, 2010, the costs of Medical Cost Containment Program (MCCP) that could be allocated to a particular claim were reported as medical losses. After July 1, 2010, MCCP is reported as ALAE.

Data Source: WCIRB

Please note that WCIRB's estimates of average indemnity claim costs have not been indexed to take into account wage increases and medical inflation.

¹⁸ WCIRB Report on September 30, 2015, Insurer Experience, released December 15, 2015, p. 1.

¹⁹ Ibid., Exhibits 8.1-8.4.

²⁰ Ibid.

²¹ Ibid.

SYSTEM COSTS AND BENEFITS OVERVIEW

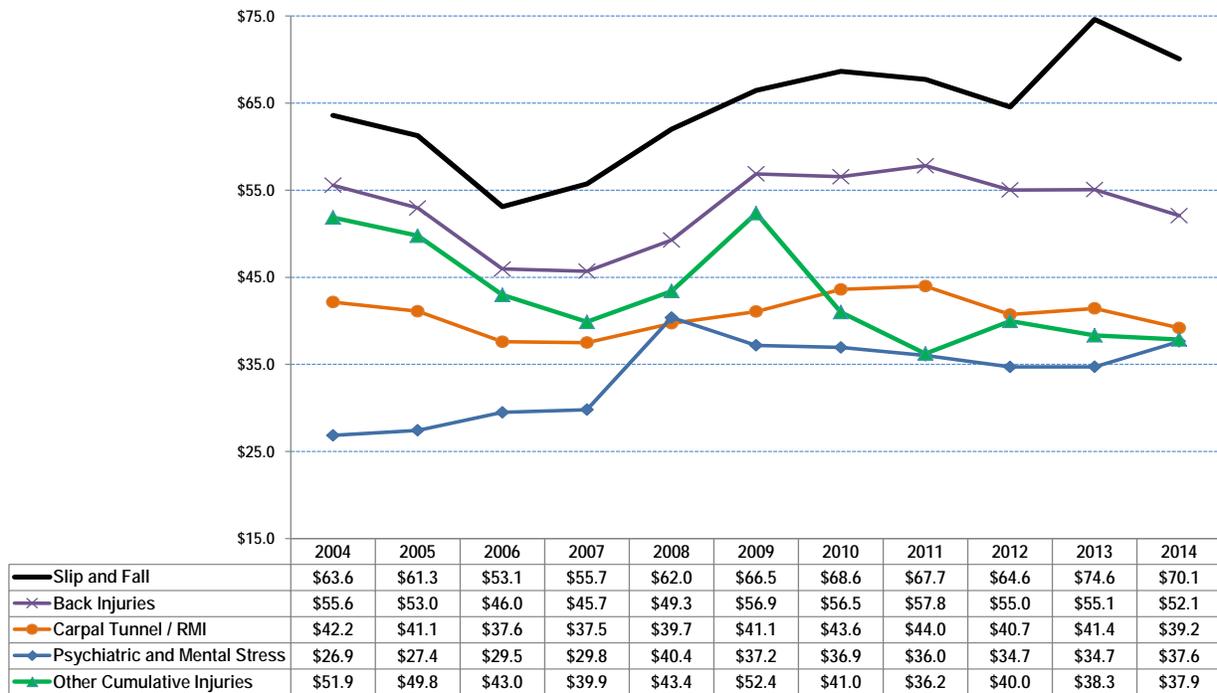
Average Cost per Claim by Type of Injury

As shown in Figure 25, from 2004 to 2007, the average costs declined overall for all types of injuries, with the exception of psychiatric and mental stress. The average cost of other cumulative injuries decreased by 23 percent, and the average cost of back injuries decreased by almost 18 percent, followed by a 11 percent decrease in the average cost of carpal tunnel or repetitive motion injury (RMI) injuries. The average cost of slip and fall injuries decreased by 16.5 percent from 2004 to 2006.

The average cost of slip and fall injuries increased overall by 40.5 percent from 2006 to 2013 and then fell 6 percent from 2013 to 2014. The average cost of back injuries increased by 24 percent from 2007 to 2009, stabilized at an average cost of \$56,300 from 2009 to 2013, and then decreased by 5 percent from 2013 to 2014. The average cost of carpal tunnel (RMI) increased by 17 percent from 2007 to 2011, decreased by 7 percent from 2011 to 2012, and then averaged \$40,000 from 2012 and 2014. The average cost of other cumulative injuries increased by 31 percent from 2007 to 2009, decreased by 31 percent from 2009 to 2011, increased by 10 percent from 2011 to 2012, and then decreased again by 5 percent from 2012 to 2014.

The average costs of psychiatric and mental stress claims increased by 50 percent between 2004 and 2008, decreased by 14 percent from 2008 to 2013, and then increased by 8 percent from 2013 to 2014.

Figure 25: Average Cost per Claim by Type of Injury, 2004-2014 (Thousand \$)



Data Source: WCIRB

SYSTEM COSTS AND BENEFITS OVERVIEW

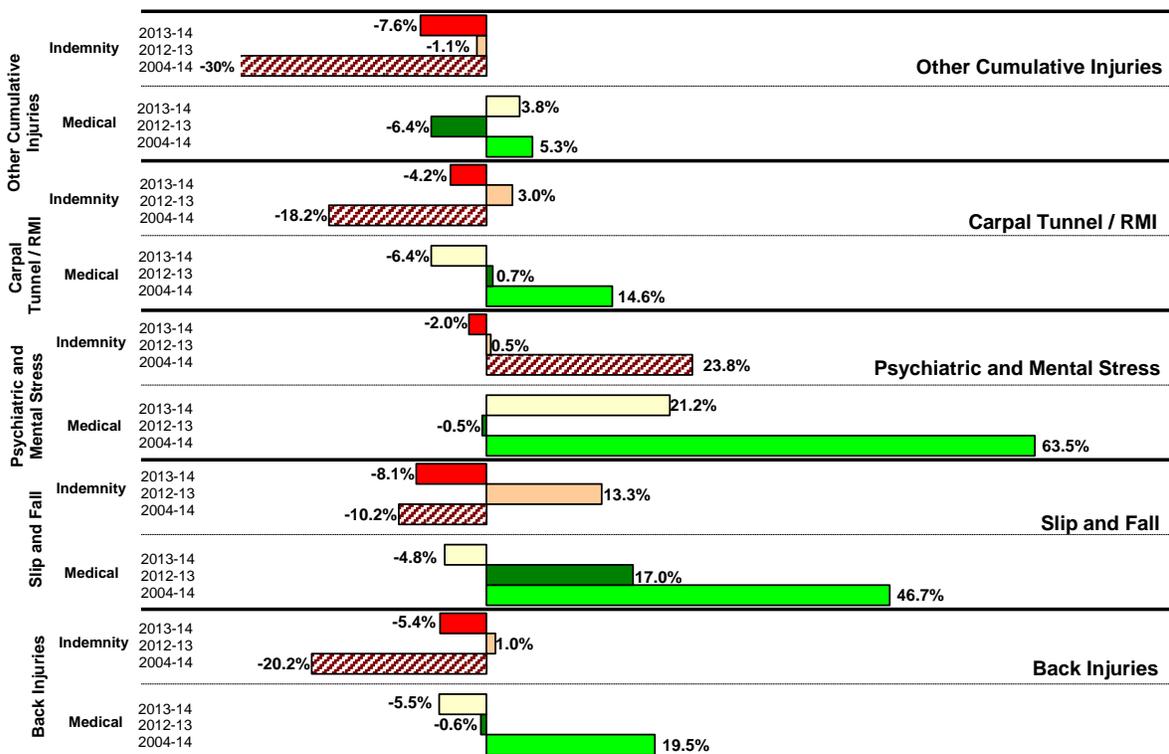
Changes in Average Medical and Indemnity Costs per Claim by Type of Injury

Figure 26 illustrates the impact of the reforms on selected types of injury. The long-term trend from 2004 to 2014 shows increases in medical costs for all types of injuries. The same trend for indemnity costs shows a 30 percent decrease for other cumulative injuries, a 20 percent decrease for back injuries, an 18 percent decrease for carpal tunnel injuries, and a 10 percent decrease for slip and fall injuries. There was a long-term 24 percent increase in indemnity costs of psychiatric and mental stress disorders. Psychiatric and mental stress disorders was the only category that showed a significant long-term increase in both average indemnity and medical costs.

From 2012 to 2013, medical costs increased by 17 percent for slips and falls and by 0.7 percent for carpal tunnel injuries. In the same period, there was a 6.4 percent decrease in the average medical cost of claim for other cumulative injuries, a 0.6 percent decrease for back injuries, and a 0.5 percent decrease for psychiatric and mental stress disorders. In the same year, indemnity costs increased for slips and falls (13 percent), carpal tunnel (RMI) (3 percent), back injuries (1 percent), and psychiatric and mental stress disorders (0.5 percent). There was a 1 percent decrease in the average indemnity cost for other cumulative injuries.

From 2013 to 2014, medical costs increased 21 percent for psychiatric and mental stress disorders and about 4 percent for other cumulative injuries. In the same year, medical costs decreased 6.4 percent for carpal tunnel (RMI) injuries, 5.5 percent for back injuries, and about 5 percent for slip and fall injuries. From 2013 to 2014, indemnity costs decreased for all types of injuries and illnesses.

Figure 26: Percent Change in Average Medical and Indemnity Costs per Claim by Type of Injury (From 2004 through 2014, from 2012 to 2013, and from 2013 to 2014)



Data Source: WCIRB

SYSTEM COSTS AND BENEFITS OVERVIEW

Medical-Legal Expenses

Changes to the medical-legal process over the years have been intended to reduce both the cost and the frequency of litigation. Starting in 1989, legislative reforms have restricted the number of medical-legal evaluations needed to determine the extent of permanent disability (PD). The qualified medical evaluator (QME) designation was intended to improve the quality of medical evaluations in cases where the parties did not select an agreed medical evaluator (AME). Legislation in 1993 attempted to limit workers' compensation judges to approving the PD rating proposed by one side or the other (Labor Code Section 4065, known as "baseball arbitration"). In addition, the 1993 legislation established a presumption in favor of the evaluation by the treating physician (Labor Code Section 4602.9), which was expected to reduce litigation and reduce costs.

In 1995, CHSWC contracted with the University of California (UC) Berkeley to assess the impact of workers' compensation reform legislation on the workers' compensation medical-legal evaluation process.

This ongoing study has determined that, during the 1990s, the cost of medical-legal evaluations dramatically improved. As shown in the following discussion, this was due to reductions in all the factors that contribute to the total cost. However, baseball arbitration proved to be impractical, and the treating physician's presumption turned out to cost more than it saved. AB 749, enacted in 2002, repealed baseball arbitration and partially repealed the primary treating physician's presumption, except when the worker had predesignated a personal physician or personal chiropractor for injuries that occurred on or after January 1, 2003. This partial repeal was carried further by SB 228, enacted in 2003, to all dates of injury, except in cases where the employee predesignated a personal doctor or chiropractor. Finally, in 2004, SB 899 completely repealed the primary treating physician's presumption.

The reforms of SB 899 also changed the medical dispute resolution process in the workers' compensation system by eliminating the practice of each attorney obtaining a QME of his or her own choice. These provisions required that the dispute resolution process through an AME or a single QME applied to all disputes including compensability of claim and PD evaluation.

In cases where attorneys did not agree on an AME, SB 899 limited the attorneys to one QME jointly selected by process of elimination from a state-assigned panel of three evaluators. In cases without attorneys, the injured worker selected the QME from the state-assigned panel.

Pre-SB 863 increases in both the number and cost of medical-legal evaluations, among other reasons, resulted from two California Workers' Compensation Appeals Board en banc decisions (introduced between 2007 and 2009). The Almaraz/Guzman and Ogilvie decisions required more reports and more complex reports for the assessment of permanent impairment and disability, and as a result, an increase in litigation and medical-legal costs. SB 863 effectively eliminates Ogilvie and does not address Almaraz/Guzman.

SB 863, which took effect January 1, 2013, introduced a significant change to medical-legal evaluations in how medical treatment disputes are resolved. As of January 1, 2013, for injuries occurring on or after that date, and as of July 1, 2013, for all dates of injury, disagreements about a specific course of medical treatment recommended by the treating physician can only be resolved through a process called independent medical review (IMR). In this environment, the medical-legal evaluations by QME and AME are limited to disagreements about whether a claim is covered by workers' compensation (compensability) and disability threshold issues.

According to DWC, under the former system, it typically took 9 to 12 months to resolve a dispute over the treatment needed for an injury. The process required: (1) negotiating over the selection of an agreed medical evaluator, (2) obtaining a panel, or list, of state-certified medical evaluators if agreement could not be reached, (3) negotiating over the selection of the state-certified medical evaluator, (4) making an appointment, (5) awaiting the examination, (6) awaiting the evaluator's report, and then, if the parties still disagree, (7) awaiting a hearing with a workers' compensation judge, and (8) awaiting the judge's decision on the recommended treatment. In many cases, the treating physician could also rebut or

SYSTEM COSTS AND BENEFITS OVERVIEW

request clarification from the medical evaluator, and the medical evaluator could be required to follow up with supplemental reports or answer questions in a deposition.

SB 863 replaced those eight steps with an IMR process similar to the one used in group health plans, which takes approximately forty (or fewer) days to arrive at a determination to obtain appropriate treatment.

The WCIRB's prospective evaluation of SB 863 assumed that QME reports related to medical treatment issues would be replaced by IMR reports, thereby decreasing the number and cost of medical-legal evaluations. Analysis based on WCIRB's Medical Call Data (MDC) showed that even after IMR became effective for all injuries as of July 1, 2013, the number and cost of medical-legal reports did not show a significant decline.²²

Although the medical treatment-related evaluations are outside its scope, a medical-legal report is still conducted to determine other multiple compensability and disability threshold issues:

- Worker's eligibility for benefits: Arising out of Employment (AOE)/Course of Employment (COE).
- Permanent and stationary status of injured worker.
- Existence and extent of permanent and temporary disabilities.
- Apportionment.
- Ability to return to work.
- Injured worker's ability to engage in his usual occupation.
- Need for future medical treatment in cases that are settled by Compromise and Release.

The data used in this 2015 CHSWC Annual Report that came from the latest WCIRB's 2012 first-level Permanent Disability Survey requires the permanent partial disability (PPD) claims to be mature enough for analysis (from 30 to 36 months) and provide year-to-year comparability by separating and grouping the PPD claims by accident year. Ninety-one (91) percent of medical-legal evaluations in WCIRB's 2012 PD Survey have dates of service on or after July 1, 2013, and show the impact of SB 863.

As mentioned above, the medical-legal analysis that follows uses data from the WCIRB Permanent Disability Survey. Accident year 2012 is the latest year for which sufficiently mature data reports are available.

Permanent Disability Claims

Figure 27 displays the number of PPD claims in each calendar year since 1996. Before 1993, WCIRB created these data series from Individual Case Report Records submitted as part of the Unit Statistical Report. Since that time, the series has been discontinued, and estimates for 1994 and subsequent years are based on policy year data adjusted to the calendar year and information on the frequency of all claims,²³ including medical-only claims, which are still available on a calendar-year basis.

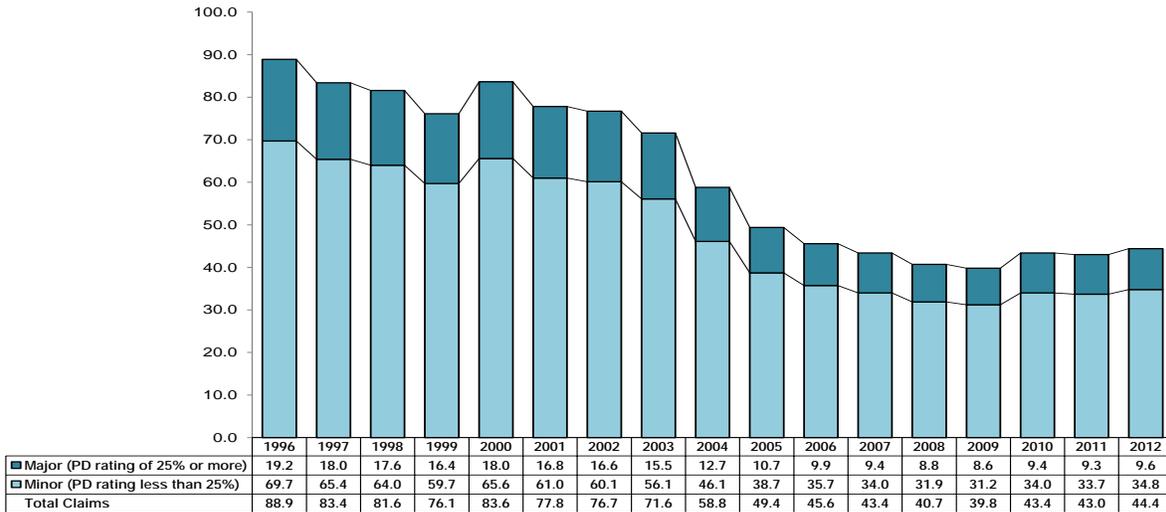
The data presented in the medical-legal section of this report are current and based on the latest available data through accident year 2012.

²² SB 863 WCIRB Cost Monitoring Report—2014 Retrospective Evaluation, November 2014, p. 13.

²³ WCIRB Report on September 30, 2015, Insurer Experience, released December 15, 2015, Exhibit 7.

SYSTEM COSTS AND BENEFITS OVERVIEW

Figure 27: PPD Claims at Insured Employers by Year of Injury (Thousands)



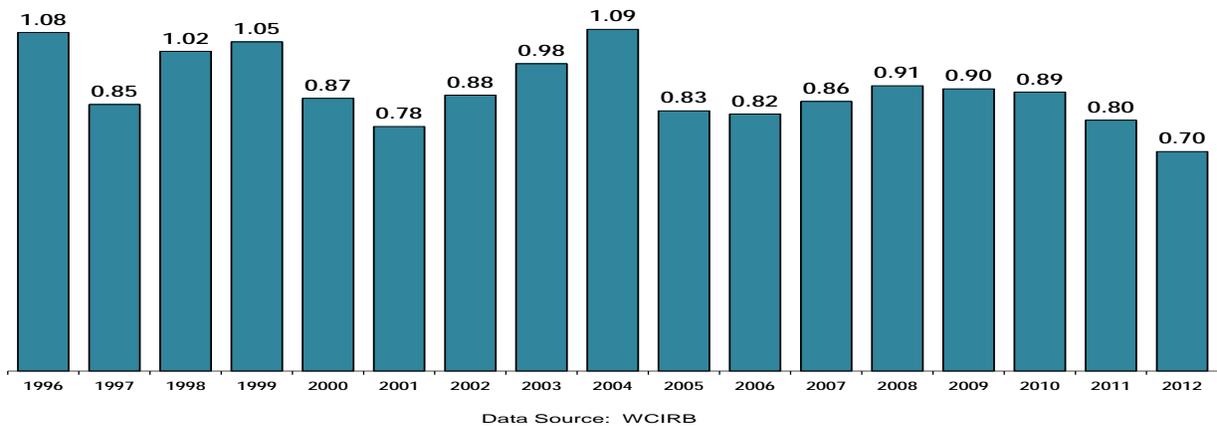
Data Source: WCIRB

Medical-Legal Evaluations per Claim

Figure 28 illustrates that the average number of medical-legal evaluations per claim declined from 1.08 evaluations in 1996 to 0.78 in 2001. This decline of 28 percent is attributed to a series of reforms since 1989 and the impact of efforts to combat medical mills.

Reforms instituted in 1993 that advanced the role of the treating physician in the medical-legal process and granted the opinions of the treating physician a presumption of correctness were expected to reduce the average number of evaluations even further. Earlier CHSWC reports evaluating the treating physician presumption did not find that these reforms had a significant effect on the average number of evaluations per claim. SB 899, enacted in 2004, repealed the primary treating physician's presumption (Labor Code Section 4062.9).

Figure 28: Number of Medical-Legal Evaluations per Workers' Compensation Claim (at 40 months from the beginning of the accident year)



Data Source: WCIRB

Between 2001 and 2004, the average number of medical-legal evaluations per claim increased by 29.5 percent. The increase from 2001 to 2004 could be driven by a number of factors discussed below. In accident year (AY) 2005, the average number of medical-legal evaluations per claim decreased by almost

SYSTEM COSTS AND BENEFITS OVERVIEW

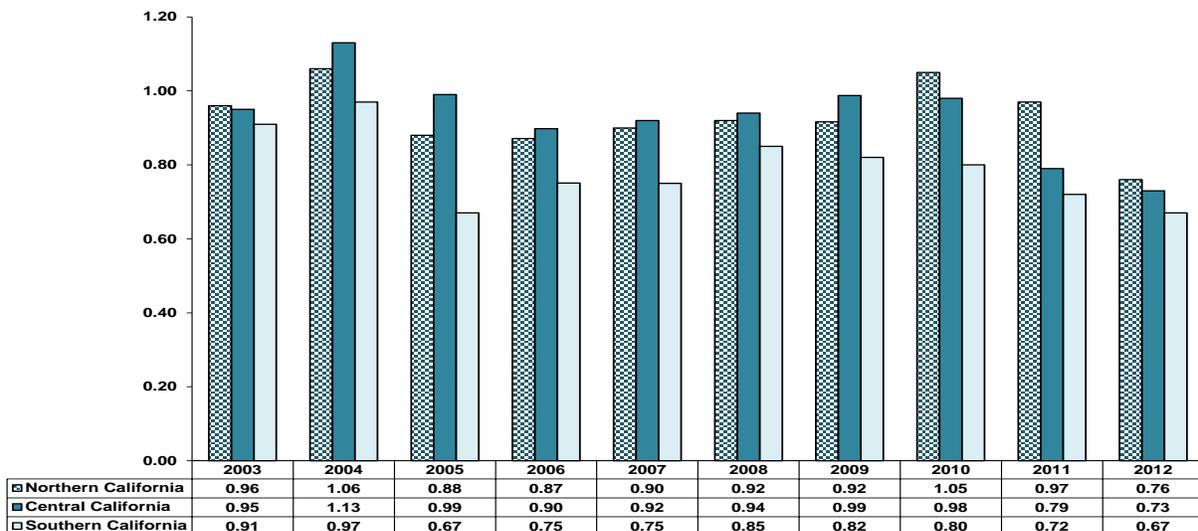
25 percent compared to AY 2004, and then increased by 11 percent from the AY 2006 to AY 2008. From 2008 to 2011, during the ongoing economic crisis, the average number of medical-legal evaluations per claim decreased by 11 percent. The decrease in the average number of evaluations per claim from AY 2004 to AY 2006 was likely due to the SB 899 provision requiring a single QME or AME even in represented cases for injuries beginning January 1, 2005. From AY 2011 to AY 2012, the average number of medical-legal evaluations per claim decreased by 12.5 percent due to SB 863, which replaced the QME reports related to medical treatment issues with IMR reports. Ninety-one (91) percent of medical-legal legal evaluations done for AY 2012 injuries had dates of service on or after January 1, 2013, when SB 863 took effect.

Medical-Legal Reporting by the California Region

The different regions of California are often thought to have different patterns of medical-legal reporting. The revisions to the WCIRB Permanent Disability Survey, undertaken at the recommendation of CHSWC and instituted for AY1997, explored new issues. A zip code field was added to analyze patterns in different regions.

Figure 29 demonstrates the frequency with which medical-legal evaluations were used between 2003 and 2012 in different regions. Between 2003 and 2004, the average number of medical-legal evaluations per claim increased for each region, with a 10 percent increase in the Northern region, a 19 percent increase in the Central region, and a 7 percent increase in the Southern region. From 2004 to 2005, the average number of medical-legal evaluations per claim decreased in all three regions, with the lowest number of medical-legal evaluations per claim (0.67) in nine years for Southern California, from which the prevailing majority of PPD claims and medical-legal evaluations originate. From 2005 to 2008, the average number of evaluations per claim increased by 4.5 percent in the Northern region and by 27 percent in the Southern region. From 2008 to 2011, during the ongoing economic crisis, the Southern region experienced a 15 percent decline and the Central region showed a 16 percent decline in average number of evaluations per claim. In the same period, there was a 5 percent increase in the frequency of medical-legal evaluations in the Northern region. As a result of the impact of SB 863, the average number of evaluations per claim in all three California regions decreased from AY 2011 to AY 2012: a 22 percent decrease in the Northern region, an 8 percent decrease in the Central region, and a 7 percent decrease in the Southern region, where it fell to its lowest level of 0.67 evaluations per claim.

**Figure 29: Average Number of Medical-Legal Evaluations per Claim by Region
(at 34 months after the beginning of the accident year)**



Data Source: WCIRB

SYSTEM COSTS AND BENEFITS OVERVIEW

Prior to 2003, the Southern California region had higher numbers for both the average cost per evaluations and the average number of evaluations per claim than the Northern California region. However, starting in 2003, the number of medical-legal evaluations per claim in the Northern California region exceeded that in the Southern California region. The number of medical-legal evaluations per claim in the Central California region was the highest among all three regions in seven out of the ten years.

Different regions of California have different patterns of medical-legal reporting. Also, regions with a higher share of workers' compensation claims in the system have a bigger impact on the average number of medical-legal evaluations per claim and average cost of medical-legal evaluations in the State. As the Table 9 indicates, the Southern California region has the highest number of workers' compensation claims in the system, followed by the Northern California region.

Table 9: Distribution of Workers' Compensation Permanent Disability Claims by Region

	2005 1st level	2006 1st level	2007 1st level	2008 1st level	2009 1st level	2010 1st level	2011 1st level	2012 1st level
Southern	63.1%	61.8%	63.5%	61.6%	66.2%	64.4%	65.6%	67.4%
Central	13.5%	13.6%	12.5%	14.0%	10.7%	12.0%	11.0%	11.5%
Northern	23.4%	24.6%	24.0%	24.4%	23.1%	23.4%	23.4%	21.1%

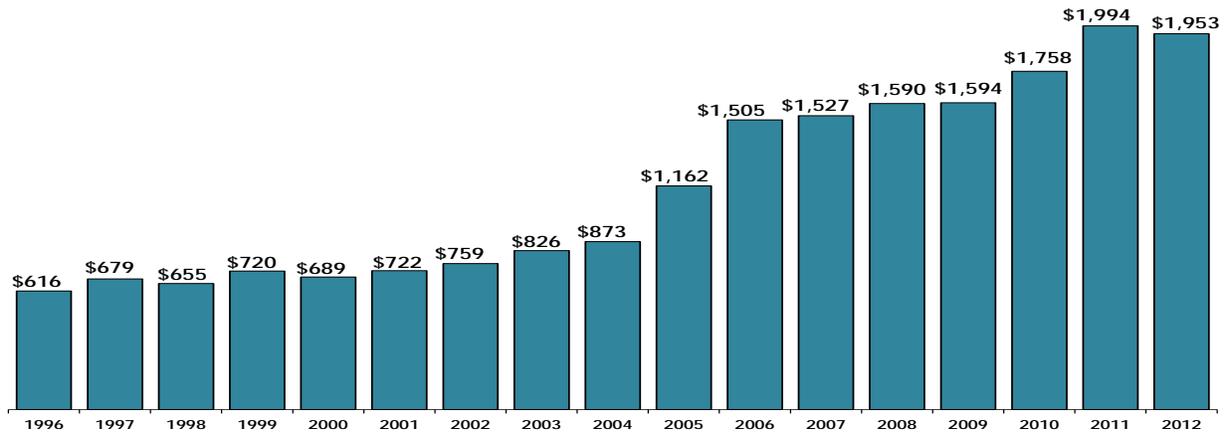
* Based on WCIRB's PD Survey 2012 random sample.

Source: WCIRB

Average Cost per Medical-Legal Evaluation

The average cost of a medical-legal evaluation fluctuated between \$600 and \$720 from the mid-1990s to 2001. After a significant decrease in medical-legal expenses starting in 1989, when legislative reforms restricted the number and lowered the cost of medical-legal evaluations, a significant increase in average medical-legal costs began to recur in AY 2000. In 2011 and 2012, the average cost of medical-legal evaluations approached a \$2,000 mark, or almost three times the level in AY 2000, the highest amount since 1989.

Figure 30: Average Cost of a Medical-Legal Evaluation (at 40 months from the beginning of the accident year)

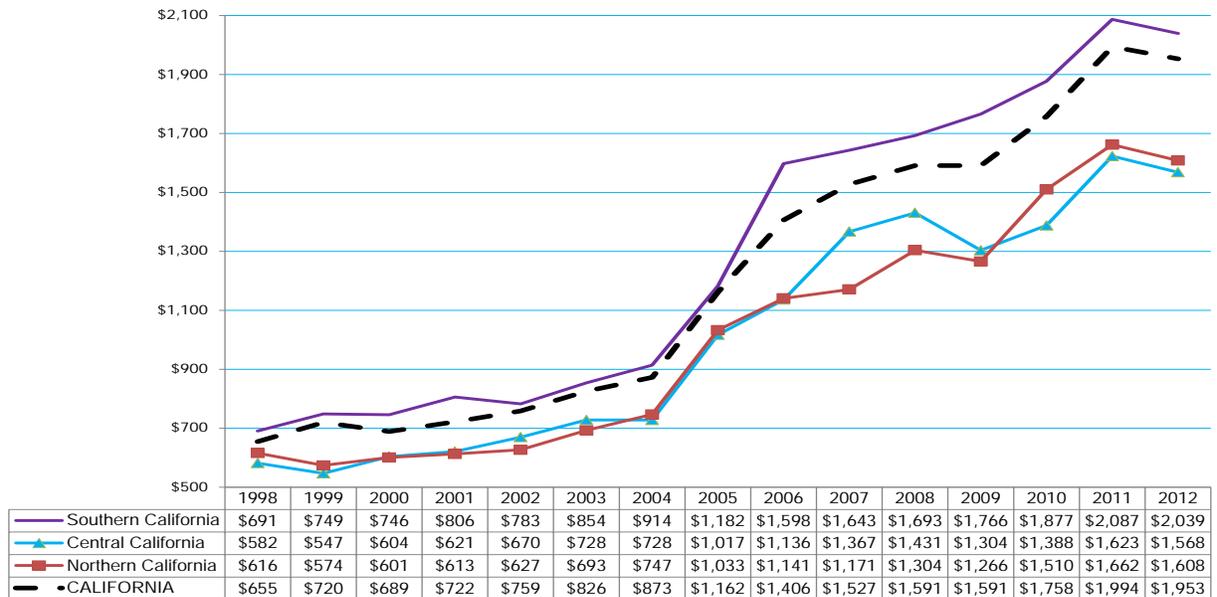


Data Source: WCIRB

SYSTEM COSTS AND BENEFITS OVERVIEW

Since the mid-1990s, the average cost of a medical-legal evaluation has increased, even though the reimbursement under the medical-legal fee schedule did not change from 1993 until 2006.²⁴ The revised PD Survey by WCIRB includes additional questions that reveal some of the potential causes of this increase in costs. The changes indicate various types of fee schedule classifications as well as geographical factors.²⁵ The survey data show that, on average, medical-legal evaluations done in the Southern California region have always been substantially more expensive.

**Figure 31: Average Cost of a Medical-Legal Evaluation by Region
(at 34 months from the beginning of the accident year)**



Data Source: WCIRB

Increases in both the average number of medical-legal evaluations per claim and the average cost of an evaluation are being driven by medical-legal evaluations in the Southern California region, as can be seen in Table 10.

Table 10: Regional Contributions to the Increase of the Average Medical-Legal Costs: 2000-2012

Region	Distribution of Medical-Legal Evaluations by Region in 2000	Distribution of Medical-Legal Evaluations by Region in 2012	Change in Average Cost 2000-2012	Contribution of Each Region to the Average Cost
Southern California	58.6%	64.6%	\$1,438	75%
Central California	16.5%	12.2%	\$964	9%
Northern California	24.9%	23.2%	\$862	16%

Source: WCIRB

Cost Drivers

The primary cost driver for California and its Southern region is not the price paid for specific types of evaluations.²⁶ Rather, the mix of codes under which the evaluations are billed has changed to include a

²⁴ The new Medical-Legal Fee Schedule became effective for dates of service on or after July 1, 2006.

²⁵ Issues for injury years before 1997 cannot be examined because the WCIRB survey revision of that year prevents comparisons.

²⁶ An additional category, "Other than ML-101, ML-102, ML-103, or ML-104" was included by WCIRB in the type of evaluations for PD Survey 2007. It was extended to "Other than ML-101, ML-102, ML-103, ML-104, or ML-105" for 2008 and afterward.

SYSTEM COSTS AND BENEFITS OVERVIEW

higher percentage of the most complex and expensive evaluations and fewer of the least expensive type.²⁷ Tables 11 and 12 show the costs and description from the Medical-Legal Fee Schedule.

Table 11: Medical-Legal Evaluation Cost for Dates of Service Before July 1, 2006²⁸

Evaluation Type	Amount Presumed Reasonable
ML-101 Follow-up	\$250
ML-102 Basic	\$500
ML-103 Complex	\$750
ML-104 Extraordinary	\$200/hour

Table 12: Medical-Legal Evaluation Cost for Dates of Service on or After July 1, 2006²⁹

Evaluation Type	Amount Presumed Reasonable
ML-101 Follow-up	\$62.50/15 minutes or \$250/hr
ML-102 Basic (flat rate)	\$625
ML-103 Complex (flat rate)	\$937.50
ML-104 Extraordinary	\$62.50/15 minutes or \$250/hr
ML-105 Testimony	\$62.50/15 minutes or \$250/hr
ML-106 Supplemental	\$62.50/15 minutes or \$250/hr

Also in 2006, when the Administrative Director adopted a new Medical-Legal expense Fee Schedule, Section 9795(b) of Title 8 CCR was amended to increase the multiplier from \$10.00 to \$12.50, resulting in a 25 percent increase for Medical-Legal expenses beginning July 1, 2006.

Figure 32 shows that the average cost of Extraordinary medical-legal evaluations increased by 40 percent after July 1, 2006, when the new Medical-Legal Fee Schedule became effective.

Figure 32: Average Cost of Medical-Legal Evaluation by Type Before and After the Effective Date of the New Medical-Legal Fee Schedule (calculations are based on PD Survey 2005, second level)



²⁷ WCIRB also noted that much of the increase in the average cost of a medical-legal evaluation is attributable to increases in a proportion of more complex medical-legal evaluations. Claims Subcommittee meeting minutes for July 28, 2008.

²⁸ Agreed Medical Evaluators receive 25 percent more than the rates shown in both tables.

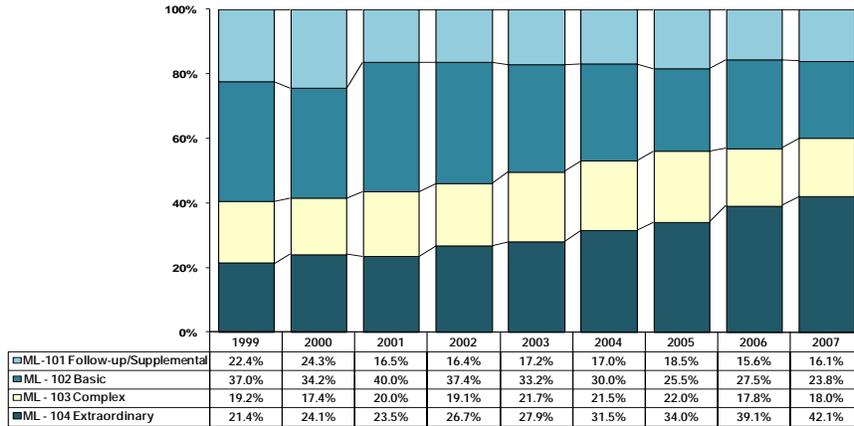
²⁹ Two categories ML-105 and ML-106, created by CCR Title 8, Sections 9793 & 9795, June 2006, were applicable to 2008 and later claims. The functions of medical testimony and supplemental evaluations were moved into these two new categories from their previous status.

SYSTEM COSTS AND BENEFITS OVERVIEW

Figures 33, 34, and 35 indicate that from 1999 to 2007, the distribution of evaluations in both the Southern California and the Northern and Central regions shifted the statewide distribution of medical-legal evaluations away from the ML-101 and ML-102 types and included a higher percentage of ML-104 evaluations with “Extraordinary” complexity.³⁰

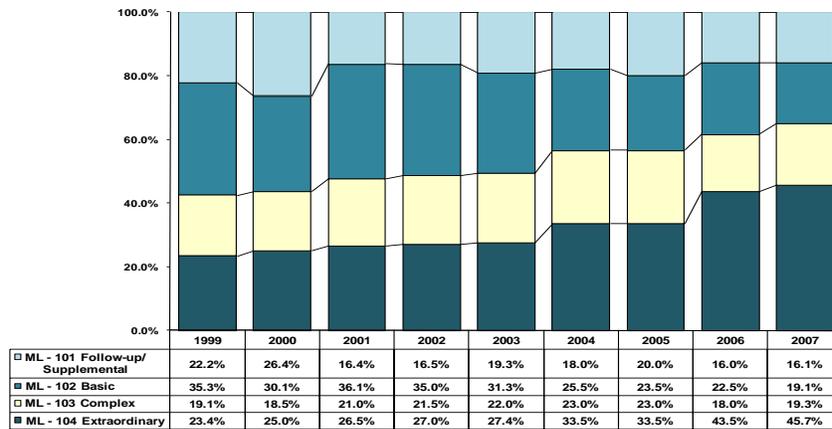
From 1999 to 2007, evaluations with “Extraordinary” complexity doubled, from 23.4 percent to 45.7 percent, in the Southern California region, more than doubled, from 18.3 percent to 37.2 percent, in Northern and Central regions, and, as a result of that shift, doubled from 21.4 percent to 42.1 percent statewide. For the same period, the share of medical-legal evaluations billed as ML-102 Basic (the least expensive code) was between 4.0 percentage points and 11.5 percentage points smaller in the Southern region than in Northern and Central California.

Figure 33: Distribution of Medical-Legal Evaluations by Type (California)



Data Source: WCIRB

Figure 34: Distribution of Medical-Legal Evaluations by Type (Southern California)

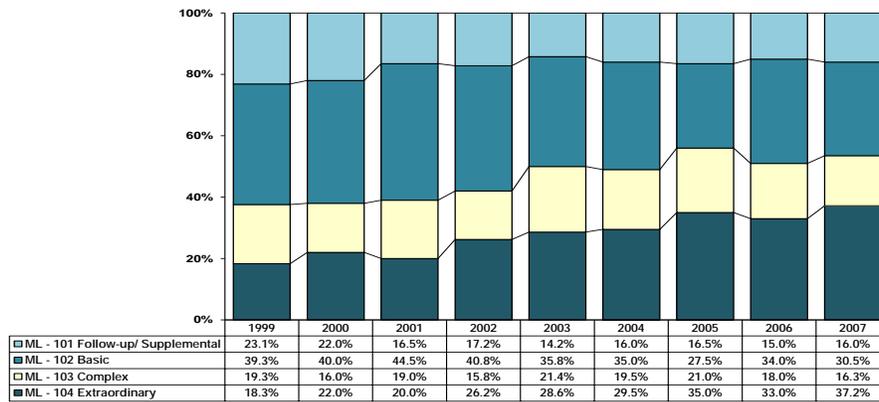


Data Source: WCIRB

³⁰ These three figures on the percent distribution of medical-legal evaluations by type go up to 2007 for the reason of two new categories ML-105 and ML-106 being added in 2008. The category “Other than ML-101, ML-102, ML-103, or ML-104” was introduced for AY 2007 and is also excluded from the three figures for comparability purposes. This latter category comprised 2 percent of medical-legal evaluations in 2007.

SYSTEM COSTS AND BENEFITS OVERVIEW

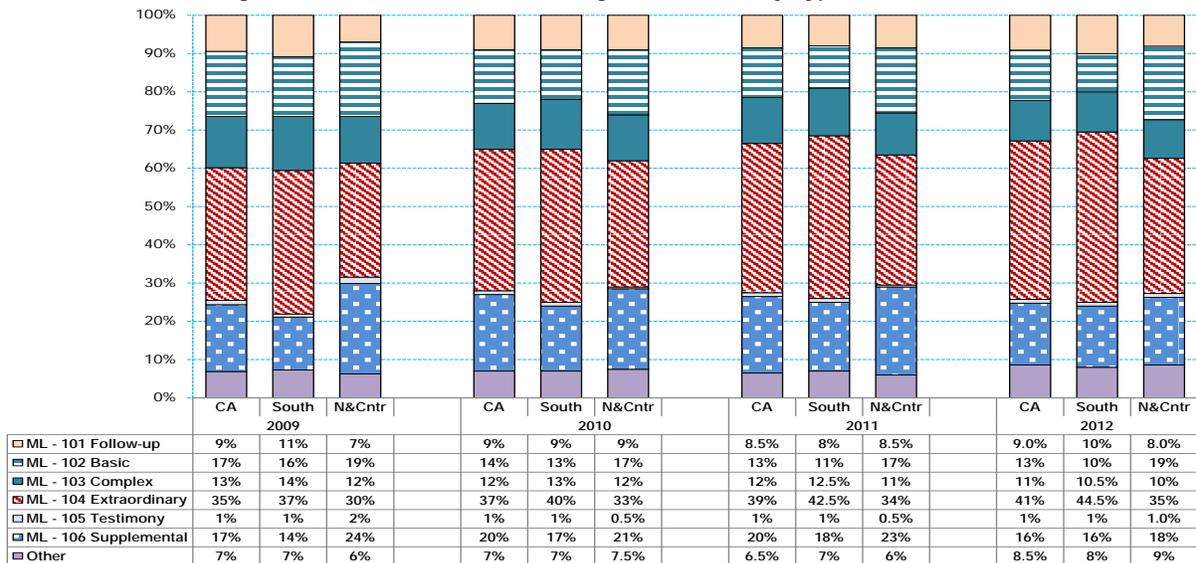
Figure 35: Distribution of Medical-Legal Evaluations by Type (Northern and Central California)



Data Source: WCIRB

The distribution of medical-legal evaluations by categories of “fee schedule type” applicable to 2008 and later claims in Figure 36 show that, on average, one-third of medical-legal evaluations are classified as Extraordinary (ML-104), in both the Southern region and the combined Northern and Central regions of California. In 2012, 60.5 percent of medical-legal evaluations in Northern/Central California and 70.5 percent in Southern California regions were billed under the time-based codes, such as ML-101, ML-104, or ML-106, which are priced at \$62.50 for every 15 minutes for QMEs or \$78.13 for every 15 minutes for AMEs. Some medical-legal evaluation activities are not billable separately under all medical-legal fee codes. For example, reviewing medical-legal consultation reports could not be billed separately under flat-rated codes as ML-102 or ML-103, as opposed to the way it could be done under time-based codes. This makes billing a medical-legal evaluation under a time-based code more profitable in the majority of evaluations.

Figure 36: Distribution of Medical-Legal Evaluations by Type, 2009–2012



"N&Cntr" - Northern and Central regions

Data Source: WCIRB

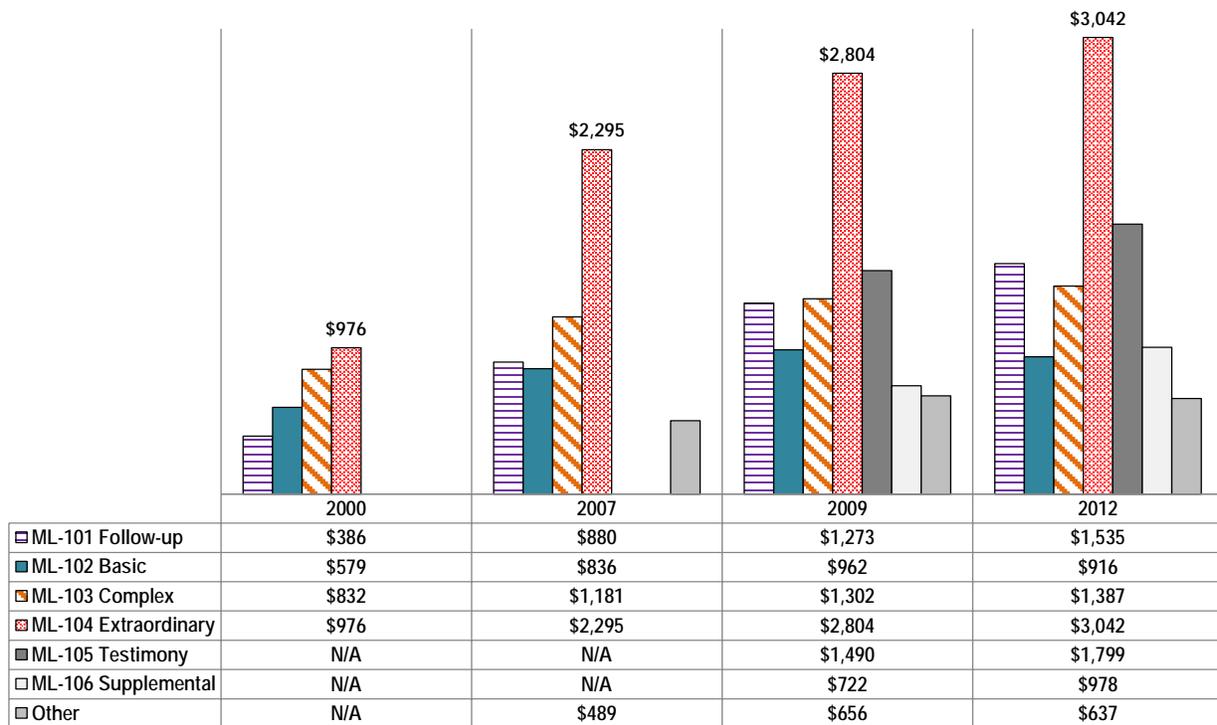
Increases to the medical-legal fee schedules for dates of services on or after July 1, 2006, could also have contributed to the higher average cost per evaluation. Figure 37 shows that the average cost per evaluation in each type of evaluation was higher in AY 2007 than in AY 2000. The biggest increases were for the Complex and Extraordinary cases.

SYSTEM COSTS AND BENEFITS OVERVIEW

In addition, the medical-legal evaluations in AY 2007 had both a higher average cost of Extraordinary evaluations (\$2,295 and \$976 respectively; see Figure 37) and a higher share of Extraordinary evaluations (42.1 percent and 24.1 percent respectively; see Figure 33) than in AY 2000. In 2007, the pattern of the average cost of a medical-legal evaluation changed. From 2002 to 2006, the average cost of a Basic medical-legal evaluation was higher than the average cost of a Follow-Up/Supplemental evaluation. However in 2007, the average cost of a Basic medical-legal evaluation was lower than the average cost of a Follow-up/Supplemental evaluation. The share of medical-legal evaluations billed under Basic code decreased from 40.0 percent in AY 2001 to 23.8 percent in AY 2007 (see Figure 33).

According to Figure 37, the average costs of medical-legal evaluations billed under codes comparable to 2008 through 2012 evaluation codes showed overall a higher level than the average costs in AY 2007.

**Figure 37: Overall Change in Average Cost of a Medical-Legal Evaluation by Type
(Accident years 2000–2012)**



Note: Category "Other" became applicable from accident year 2007 and on. Categories "ML-105" and "ML-106" were introduced in AY2008.

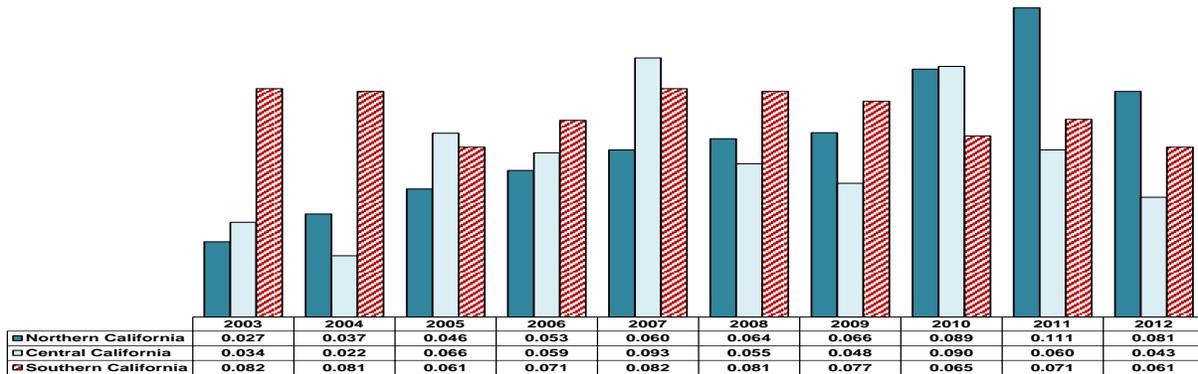
Data Source: WCIRB

Another possible explanation for the differing trends in the average cost per evaluation and the increasing frequency of the most complex evaluations in California could be an increase in both the frequency and number of psychiatric evaluations per claim. On average, psychiatric evaluations are the most expensive evaluations by specialty of provider. Although the relative portion of all evaluations that is made up of psychiatric evaluations has declined since hitting a peak during 1990-1991, leading to a substantial improvement in the overall average cost per evaluation, there was an increase in psychiatric evaluations from 6.9 percent of total medical-legal evaluations in the 2002 PD Survey sample to 9.5 percent in the 2012 sample. The average number of psychiatric evaluations per claim in California increased by 29 percent from 0.062 in 2002 to 0.080 in 2011. AY 2012 was the first year when, as a result of SB 863, the average number of psychiatric evaluations per claim dropped to its AY 2002 level (0.063). Psychiatric evaluations are nearly always billed under the ML-104 code, which is the most expensive. The average cost of a psychiatric evaluation in California increased 2.5-fold from \$1,528 in 2002 to \$3,783 in 2012. The Southern region produces about 65 percent of the psychiatric evaluations in California and has the

SYSTEM COSTS AND BENEFITS OVERVIEW

biggest impact on both the frequency and cost of medical-legal evaluations statewide. The frequency of psychiatric evaluations in the Southern region increased from 8.4 percent in AY 2002 to 10.2 percent in AY 2011 and then decreased to 9.5 percent in AY 2012. The average number of psychiatric evaluations per claim increased by 3 percent, from 0.069 in AY 2002 to 0.071 in AY 2011, and then in AY 2012 decreased to its lowest level of 0.061 in AY 2005. At the same time, the average cost of a psychiatric evaluation steadily increased 2.5-fold from \$1,533 in 2002 to \$3,813 in 2012.

Figure 38: Average Number of Psychiatric Evaluations per PPD Claim by Region



Data Source: WCIRB

According to WCIRB's estimates based on the PD Claim Survey, claims with psychiatric evaluations increased from 6.4 percent of medical-legal evaluations by physician specialty in 2005 to 14 percent in 2014, and the cost of psychiatric evaluations as a share of the cost of all medical-legal evaluations by physician specialty increased from 13.6 percent in 2005 to 27.7 percent in 2014.

The average cost of a psychiatric medical-legal evaluation was the highest in comparison to average costs of other medical-legal evaluations by physician type, averaging \$4,249 in 2014, or almost twice the average cost of all medical-legal evaluations, and nearly double its 2005 level (\$1,860).

The recent data on the QME process presented in CHSWC studies in collaboration with UC Berkeley indicate a significant increase in the share of QME panels assigned to psychiatrist/psychologist specialties. The demand for psychiatric specialties as a share of all specialties increased from 6.5 percent in 2005 to 12.7 percent in 2010.

Total Medical-Legal Cost Calculation

Total medical-legal costs are calculated by multiplying the number of PPD claims by the average number of medical-legal evaluations per claim and by the average cost per medical-legal evaluation:

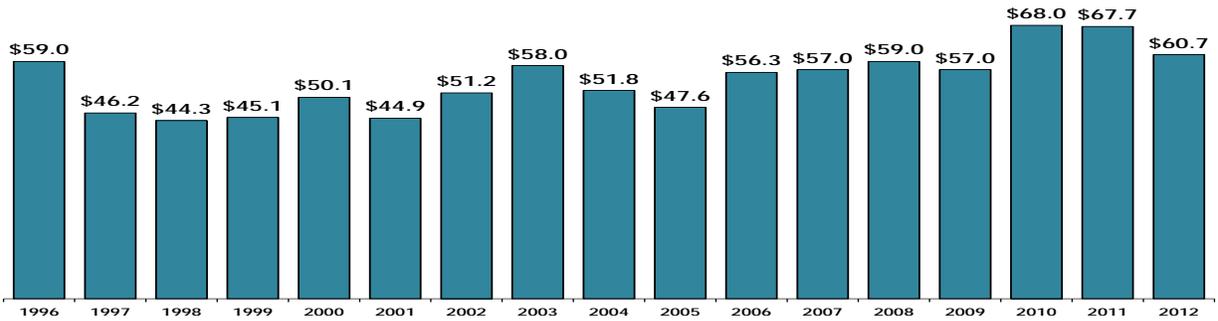
$$\text{Total Medical-Legal Cost} = \text{Number of PPD Claims} \times \text{Average Evaluations/Claim} \times \text{Average Cost/Evaluation}$$

Medical-Legal Costs

During the 1990s, the cost of medical-legal evaluation improved dramatically. For the insured community, the total cost of medical-legal evaluations performed on PPD claims by 40 months after the beginning of the accident year declined from a peak of \$223.7 million in 1992 to an estimated \$60.7 million for injuries occurring in 2012, a 73 percent decrease from AY 1992.

SYSTEM COSTS AND BENEFITS OVERVIEW

Figure 39: Medical-Legal Costs on PPD Claims at Insured Employers (in Million \$, 40 months after the beginning of the accident year)



Data Source: WCIRB

The total medical-legal expenses could be different for different organizations and even within the same organization, depending on how the data are collected, methods of estimation, and on inclusion or exclusion of insured, self-insured, and legally uninsured employers.

While WCIRB's PD Survey, on which CHSWC's total is based, covers medical-legal evaluations only for PD claims, its own Losses and Expenses Report includes medical-legal expenses for total and partial permanent disabilities, temporary disability, medical-only, and denied claims as well. The WCIRB's survey form Permanent Disability Claim Survey asks specifically for a permanent disability rating thereby getting a response from claim administrators that excludes other types of claims with medical-legal evaluations. For example, according to the Losses and Expenses Report, the amount of paid medical-legal evaluations was \$168,711,000 for the total of 335,715³¹ permanent disability, temporary, and medical-only claims in 2010. However, the estimated total medical-legal cost on PPD claims based on the PD Survey in the same year (2010) was \$68,000,000 for the total of 39,896³² PPD claims. While PPD claims constituted 12 percent of workers' compensation claims, they accounted for 40 percent of medical-legal expenses.

The WCIRB's Losses and Expenses Report contains the "paid medical-legal amount" or amounts paid in a certain calendar year determined by the date of service on claims with different years of injury and different policy years while claims covered in its PD Survey are collected for a certain accident year, all with the same year of injury and more uniform policy years in order to provide mature claims (30 to 36 months). Any data based on medical bills are paid amounts and in order to adjust and make it comparable to WCIRB's PD Survey data, for example, the PPD claims have to be separated from other types of claims and grouped by year of injury.

Another consideration when the dollar amounts of medical-legal reports are estimated as a share of medical bills, which constitutes the denominator, as is done by CWCI (ICIS database), is that not all medical costs could be captured by the data bases, especially medical costs not covered by the fee schedule. Moreover, the bill review data are based on the fee schedules.

Also, the methods of calculating the medical expenses that constitute the denominator could differ by the inclusion or exclusion of different categories of medical expenses, such as the medical cost containment program (MCCP) expenses, thereby increasing or decreasing the denominator.

The medical-legal cost is reported by WCIRB as a component of the total medical cost. Table 13 shows the share of medical-legal costs in paid medical costs from 2003 to 2014, as reported by WCIRB's Losses and Expenses Report. The WCIRB's California Workers' Compensation Aggregate Medical Payment

³¹ WCIRB Summary of Policy Year Statistics—2013 Release, September 17, 2013, Exhibit 1.1.

³² Ibid.

SYSTEM COSTS AND BENEFITS OVERVIEW

Trends—2014 Update³³ increased that share to 8.7 percent for CY 2013 and to 10.1 percent for CY 2014, where, in each year, two-thirds of total medical-legal payments under the Medical Legal Fee Schedule, were spent on the most highly reimbursed ML-104 procedure, thereby increasing costs on a per-transaction basis as well. The average cost of a medical-legal report per transaction increased by 9 percent from CY 2013 to CY 2014. This explains why the average cost of a medical-legal evaluation per PPD claim in AY 2012 did not show a decrease from AY 2011. Fifty-one (51) percent of medical-legal evaluations for PPD claims with injuries in AY 2012 had service dates in CY 2013 and 40 percent were in CY 2014.

Table 13: Percent of Medical-Legal Evaluation Costs in Total Medical Costs

Calendar Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Percent of Medical-Legal Evaluation Costs in Total Medical Costs	2.6	3.5	4.8	4.3	4.8	4.9	3.8	3.9	3.9	4.0	3.3	6.7

Source: WCIRB Losses and Expenses Report, Exhibit 1.4.

Sources of Improvement in Medical-Legal Costs

The changes in total medical-legal cost for insurers reflect changes in all three components of the cost structure. The number of medical-legal examinations per claim dropped sharply after procedural changes enacted in 1989 took effect January 1, 1991. The new procedures for disputes over permanent disability or medical treatment required represented parties to attempt agreement on an AME before selecting their own QMEs, and then it limited the number of QMEs. In the case of an unrepresented worker, an exam could be obtained only from a QME selected from a panel of three QMEs assigned by DWC. These changes cut into the business of “medical mills,” which had referred patients back and forth for multiple evaluations when there was no actual dispute. Beginning in 1994, disputes over the compensability of a claim were also brought into the AME/QME model. Furthermore, the first threshold for compensability of psychiatric injuries took effect in 1990. Beginning in 2005, represented cases also became subject to a requirement to select a QME from a panel, rather than having each party pick its own QME. SB 863, took effect January 1, 2013, introduced a significant change to medical-legal evaluations in how medical treatment disputes are resolved. As of January 1, 2013, for injuries occurring on or after that date, and as of July 1, 2013, for all dates of injury, the Independent Medical Review (IMR) is used to decide disputes regarding medical treatment in workers’ compensation cases. All these changes contributed to the reduction in number of examinations per claim. Declining claim frequency also contributed to reducing the total number of medical-legal evaluations. Costs have begun to trend upward again due to rising costs per examination. The complexity of impairment rating under the AMA Guides, new rules for apportionment, and the criteria for medical treatment decisions under the Medical Treatment Utilization Schedule are among the reasons cited for rising costs per exam.

The changes in claim frequency, evaluations per claim, and cost per evaluation are all summarized in Table 14.

Table 14: Sources of Change in Medical-Legal Costs

	1990	2012	Change 1990-2012
Number of PPD Claims	167,700	44,400	-73.5%
Average Number of Evaluations per PPD Claim	2.53	0.70	-72.3%
Average Cost of Evaluation	\$986	\$1,953	+98.0%

Source: WCIRB.

³³ Released on August 18, 2015, http://www.wcirb.com/sites/default/files/documents/150818_ca_wc_aggregate_medical_payment_trends-2014_update_0.pdf.