

**THE NATIONAL BASKETBALL ASSOCIATION
THE NATIONAL HOCKEY LEAGUE
THE NATIONAL FOOTBALL LEAGUE
MAJOR LEAGUE BASEBALL**

**ANALYSIS OF GROSS ULTIMATE LOSS AND ALLOCATED LOSS
ADJUSTMENT EXPENSE FROM CALIFORNIA BASED
CUMULATIVE TRAUMA CLAIMS**

Prepared for: The National Basketball Association
The National Hockey League
The National Football League
Major League Baseball

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I. BACKGROUND AND SCOPE

A. Background

The National Basketball Association (“the NBA”), The National Hockey League (“the NHL”), The National Football League (“the NFL”), and Major League Baseball (“MLB”) have experienced an unprecedented increase in the frequency of cumulative trauma workers’ compensation claims filed in California in recent years.

B. Scope and Intended Purpose

Milliman, Inc. (“Milliman”) has been retained to provide the NBA, the NHL, the NFL and MLB, collectively referred to as “The Leagues”, with an independent actuarial analysis of the economic impact of their California cumulative trauma (“CT”) claims, based on data and information provided by The Leagues from 12/31/11 through 7/26/12. That is, the purpose of this report is to assist The Leagues with the evaluation of their overall exposure to California CT claims. This report provides the consolidated results for all The Leagues.

Included in this report will be analyses of:

1. The estimated gross ultimate California CT loss and allocated loss adjustment expenses (“ALAE”) for The Leagues; and
2. The impact of California CT loss and ALAE on Workers’ Compensation rates in the state of California.

Generally, ALAE includes claims settlement costs directly assigned to specific claims, such as legal fees. In our analysis, we estimated loss and ALAE on a combined basis. Throughout the remainder of this report the terms “loss” or “losses” refer to combined loss and ALAE amounts.

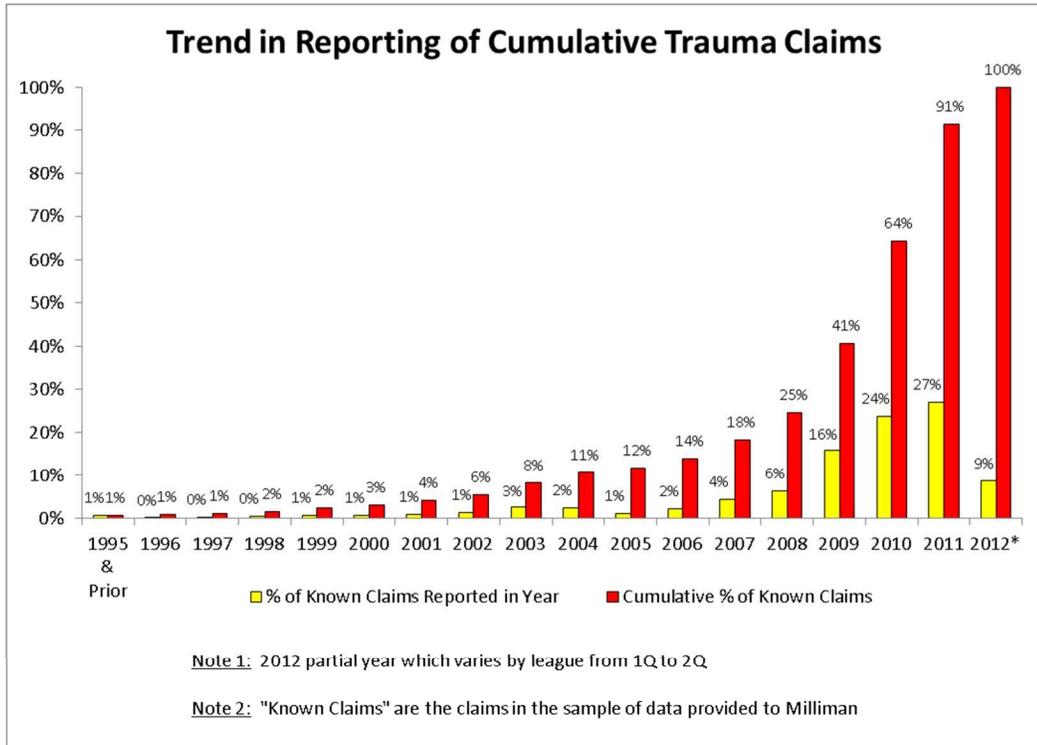
II. EXECUTIVE SUMMARY

The following outlines the major findings of our analysis:

- **Ultimate California CT Losses** - Estimated ultimate losses from California CT claims filed and expected to be filed by players who participated in their sport during the past thirty years is \$1.573 billion (range between \$1.035 billion and \$2.595 billion).
 - **Currently Filed Claims** - Estimated ultimate losses from California CT claims that have already been filed is \$747 million (range between \$646 million and \$856 million).
 - **Claims Not Yet Filed** - Estimated ultimate losses from retired players who have not yet filed a CT claim is \$825 million (range between \$389 million and \$1.739 billion).
- **Players Retired From Teams Outside California** - Approximately 78% of the estimated California CT losses come from players associated with lead teams located outside of California, which is an estimated \$1.233 billion (range between \$811 million and \$2.031 billion).
- **Potential Additional Losses as Current Players Retire** - Estimated ultimate California CT losses for the most recent calendar-accident year (2012) is \$85 million (range between \$56 million and \$142 million). Without changes, the projected losses for the next several years are likely to be at least as high as the 2012 year.
- **Statewide Overall Rate Impact** – Using our estimated California CT losses in the rating of California pure premium, the indicated overall statewide California pure premium rate would be greater by 1.3% (range between 0.8% and 2.1%). With a California statewide premium volume of \$10 billion, an increase of 2% in premium

rate would equate to an annual premium increase of approximately \$200 million, or \$2 billion over a ten year period.

- **Increasing Trend in Reported Claim Numbers** - There has been a significant increase in the number of California CT claims reported each year since 2009, as depicted below in the graph of the sample of California CT claims we received.



III. SUMMARY OF FINDINGS

A. Estimated Ultimate Losses for The Leagues

We estimated ultimate losses resulting from California CT claims filed and expected to be filed by players who participated in their sport during the past thirty years. Typically, players do not file CT claims prior to retirement. Therefore, our estimated ultimate losses generally relate to retired players and do not include CT claims that may be made in the future by currently active players.

Each CT claim, generally filed after a player's retirement, typically names all the teams that the claimant played for during his or her career. Therefore, there will typically be more than one individual claim created as a result of each filed CT claim. For example, six new claims get created for a player (CT claimant) who played for six different teams. Further, a "lead team" is typically determined for each CT claim and is often, but not always, the team from which the player retired. Generally, the lead team pays the majority of the settlement, but all teams incur expenses (e.g., medical and legal). Solely for the purposes of our analysis, all losses and expenses from all a claimant's individual claims are aggregated together and treated as a single claim arising from an injury in one accident year, typically the year the player retired.

We estimated the expected losses (including expenses). We also varied some of our selected assumptions to create a range of reasonable estimates, described by low and high estimates.

Table 1 shows our expected, low and high range estimates of gross ultimate California CT losses for the most recent thirty calendar-accident year periods.

Table 1 The Leagues Estimated Ultimate California CT Losses			
Calendar / Accident Year	Low	Expected	High
1983	18,592,637	28,349,892	46,142,874
1984	19,326,303	29,472,442	47,980,151
1985	19,014,721	28,993,194	47,197,370
1986	20,104,346	30,709,466	50,055,246
1987	22,898,849	35,044,841	57,201,734
1988	22,259,888	34,044,867	55,547,669
1989	21,501,043	32,881,570	53,628,549
1990	22,654,867	34,623,513	56,437,514
1991	23,542,972	35,969,720	58,620,523
1992	24,266,980	37,049,687	60,404,768
1993	26,099,134	39,909,801	65,138,001
1994	26,493,907	40,418,310	65,929,798
1995	29,442,432	44,938,564	73,201,217
1996	30,482,320	46,448,860	75,736,222
1997	31,642,105	48,296,312	79,139,507
1998	33,577,050	51,171,392	84,023,532
1999	35,850,206	54,084,313	88,603,746
2000	37,917,805	56,976,343	93,518,244
2001	37,758,377	57,565,657	96,025,605
2002	40,363,648	61,641,725	102,659,240
2003	42,155,605	63,858,346	105,717,475
2004	44,727,712	66,815,937	109,404,717
2005	44,895,547	67,956,411	112,434,034
2006	48,247,092	71,703,585	118,234,814
2007	49,134,110	73,763,299	123,258,164
2008	50,009,007	75,442,292	125,481,116
2009	50,521,952	77,055,566	128,775,215
2010	52,593,953	80,495,900	134,787,696
2011	53,631,171	82,133,405	137,618,954
<u>2012</u>	<u>55,519,612</u>	<u>85,027,169</u>	<u>142,336,600</u>
Total	1,035,225,353	1,572,842,379	2,595,240,296

Notes:

1. There is claim activity prior to 1983 that is not included in the Table 1 estimates.
2. Estimates include claim payments, claim expenses, case reserves, and incurred but not reported reserves.
3. Losses in Table 1 are undiscounted.

The ultimate loss estimates shown in Table 1 include losses arising from California CT claims that have already been reported (filed) as well as the yet to be reported claims. To estimate these two components of the Table 1 losses, we estimated gross ultimate California CT losses arising from: a) players that have officially reported a CT claim

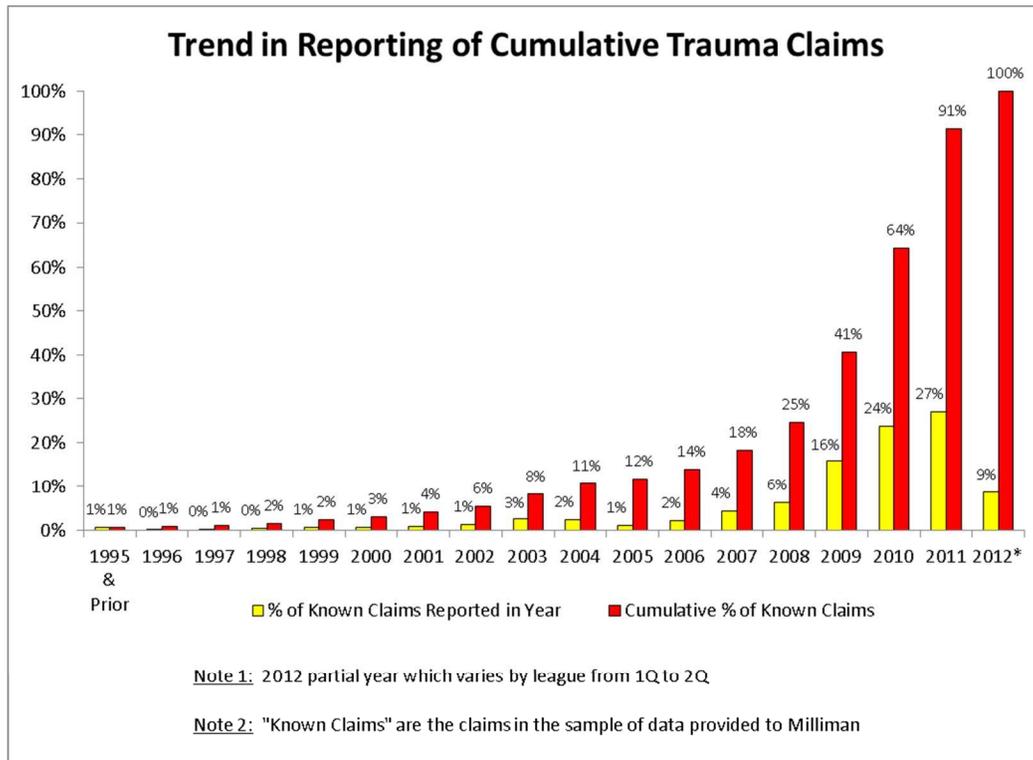
(referred to in Table 2 as reported CT claims); and b) players that have participated in their sport but have yet to officially file a CT claim (referred to in Table 2 as unreported CT claims). That is, Table 2 shows the gross ultimate California CT losses (from Table 1) separated into reported and unreported components. Note that, in general, the unreported component only includes claims from retired players, not from currently active players.

Table 2 The Leagues Estimated Ultimate California CT Losses Arising From Unreported Claims			
	Low	Expected	High
Total Ultimate Losses from Table 1	1,035,225,353	1,572,842,379	2,595,240,296
• Ultimate Losses arising from Reported CT Claims	646,393,865	747,449,311	855,753,036
• Ultimate Losses arising from Unreported CT Claims	388,831,487	825,393,067	1,739,487,260

Most of the California CT losses shown in Table 1 come from players associated with lead teams located outside of California. Our expected estimate of gross ultimate losses for California CT claims associated with players whose lead team is located outside of California is \$1.233 billion, with low and high estimates of \$811 million and \$2.031 billion, respectively. These values represent approximately 78% of the totals shown in Table 1.

We note that most of the CT claims in the sample data provided to us were reported (filed) in recent years, although the players' injuries underlying the claims (and the calendar-accident years of the losses) spread back over the thirty year period shown in Table 1. The following graph is based on the CT claim data provided to us (referred to

in the graph as “known claims”) and shows the percentage of known claims that were reported (filed) in each calendar year. Note that 2012 is a partial year. The graph illustrates the increasing number of CT claims being reported each year, most notably in the years from 2009 to 2011. Also note that the reported losses from those years are associated with claims that have accident year dates as far back as 1983.



B. Estimated Impact on California Workers' Compensation Rates

The Executive Summary in the July 1, 2012 pure premium rate filing prepared by the Workers' Compensation Insurance Rating Bureau of California ("WCIRB") and dated April 12, 2012, states that one of the "system cost drivers" for the increase in pure premium rates underlying this filing was an increase in indemnity claims "that are, in part, attributable to an increase in cumulative injury claims." As shown in Chart 6 of the attached Exhibit A, from this WCIRB filing, the 2009 and 2010 years show a marked

increase over the prior years in the percentage of “cumulative injury claims” relative to indemnity claims.

The most recent California workers’ compensation pure premium rate filing is based on 2011 calendar-accident year experience. In this filing, the estimated ultimate losses for calendar-accident year 2011 are approximately \$6.4 billion. Our analysis of the aggregated experience for The Leagues indicates expected, low, and high range gross ultimate losses for calendar-accident year 2011 of \$82.1 million, \$53.6 million, and \$137.6 million, respectively. If our estimate of California CT losses were recognized in this most recent rate filing, the indicated California pure premium rate change would be greater by approximately 1.3%, 0.8%, and 2.1%, respectively. The 2011 earned premium volume for California workers’ compensation (for all classification codes) was \$10.418 billion. To illustrate the potential impact of CT claims, we note that an increase of 2% on an overall premium volume of \$10 billion equates to an annual premium increase of approximately \$200 million, or \$2 billion over a ten year period.

IV. DISCLOSURES AND LIMITATIONS

A. Disclosures

1. Basis of Presentation

Our estimates are intended as measurements of expected value over a range of reasonably possible outcomes. Such estimates are known as “actuarial central estimates” and are conceptually similar to mean estimates. Since the range of reasonably possible outcomes may not include all conceivable outcomes, an actuarial central estimate is not technically a true statistical mean. For example, the range of reasonably possible outcomes may exclude conceivable extreme events whose contribution to the true statistical mean is not reliably estimable. We also produced a range of reasonable estimates. Note that our low and high range estimates are not lower and upper bounds of the possible ultimate losses.

In addition, please note the following regarding our estimates:

- Our estimates are presented on a gross basis with respect to excess insurance and reinsurance recoverables;
- We have not made any provisions for uncollectable excess insurance or reinsurance;
- Our estimates are gross of deductibles and gross of salvage and subrogation recoverable; and
- Our estimates are presented on an undiscounted basis with regard to the time value of money.

2. Terminology

Loss Adjustment Expenses (“LAE”). LAE are classified as ALAE and unallocated loss adjustment expenses (“ULAE”). Generally, ALAE includes claims settlement costs directly assigned to specific claims, such as legal fees, and ULAE includes other claims administration expenses.

We estimated loss and ALAE reserves on a combined basis. Throughout the remainder of this report the terms “loss” or “losses” refer to combined loss and ALAE amounts.

3. Acknowledgment of Qualifications

Kenneth E. Carlton III and Guy A. Avagliano are Principals of Milliman, Fellows of the Casualty Actuarial Society and Members of the American Academy of Actuaries. Ken and Guy meet the qualification standards of the American Academy of Actuaries to provide the estimates in this report.

4. Constraints

There have been unusual constraints on our ability to provide this analysis (including availability of data, and access to information). It is possible that additional resource availability and additional time to perform an in-depth analysis would have made a material difference in our estimates.

In particular for the NFL analysis, we were not able to obtain a complete listing of the NFL CT claims (i.e., from all teams) for any of the thirty calendar-accident years included in our analysis. Therefore, we were limited to basing our selected frequency and severity on the sample of data that the NFL was able to provide. The percentage of teams contributing to the sample varied across the thirty year period, with the highest percentages in each of the most recent ten years and the lowest percentages in the earliest few years. In addition, as a result of being limited to a sample of the claims, our

selected severity was based on historical severities known to be biased (i.e. to underestimate) the true underlying severity, although the extent of the bias was unknown. The bias exists because each claimant may have multiple individual claims (if they played for multiple teams) but due to our incomplete sample of data, we may not have all the individual claims for a claimant, and therefore, may not have all the paid and incurred losses associated with the claimant. The results of the analysis are most sensitive to the selected frequency and severity of CT claims, which are highly uncertain.

For the MLB analysis, we were not able to obtain a complete listing of the MLB CT claims for calendar-accident years prior to calendar-accident year 2003. For these years prior to 2003, we received a sample of claims. However, this sample was not able to be identified as a complete list of claims for a known subset of teams and, therefore, we were unable to match these claims with corresponding exposures and use this information to review historical frequencies prior to 2003. The results of the analysis are most sensitive to the selected frequency and severity of CT claims, which are highly uncertain.

This lack of a complete loss data precluded us from examining certain methods and diagnostic measures and, therefore, increases the uncertainty of our estimates.

5. Other Disclosures

Milliman performs annual analyses of the loss and ALAE reserves for the captive insurance companies of both the NBA and the NHL. These analyses include, but are not limited to, the exposures related to California CT claims. In addition and as required by the regulatory authorities, Ken Carlton provides actuarial statements of opinion for the aforementioned captive insurance companies.

B. Limitation on Distribution

Milliman's work contained in this report and referred to herein as the Master Report has been prepared solely for the internal use of The Leagues. Except as set forth below, the Master Report may not be provided to third parties (including, without limitation, potential insurers) without Milliman's prior written consent, which consent may be conditioned on the third party's execution of Milliman's standard Release. Milliman does not intend to legally benefit any third party recipient of its work product, even if Milliman consents to the release of the Master Report to a third party. Milliman's work may not be filed with the SEC or other securities regulatory bodies. Should The Leagues or any of their affiliates make reference to the engagement of an independent actuary (without specifically identifying Milliman) in any SEC or other securities filing, the SEC or other securities regulatory bodies may require disclosure of the name of the actuary. Such disclosure is prohibited without Milliman's prior written consent.

The Leagues may distribute the final, non-draft version of the Master Report in its entirety to (i) their respective professional advisors who agree to comply with the Distribution language set forth in this report, and (ii) legislators/legislative bodies solely in connection with lobbying activities. The Leagues may make accurate references to Milliman and the Master Report in verbal and written communications with (a) each other and (b) legislators/legislative bodies only after such legislators/legislative bodies have first received the Master Report in its entirety. The Leagues shall not, and shall not permit their professional advisors to, edit, modify, summarize, abstract or otherwise change the content of the final Master Report and any distribution must include the entire Master Report. Notwithstanding the foregoing, the Master Report shall not be used by The Leagues in connection with offering, prospectus, securities filing, or solicitation of investment. Milliman may post the Master Report in its entirety on Milliman's website upon the earlier of (i) Milliman's detection of a written or broadcast media reference to the contents of the Master Report (whether or not such media reference is accurate, in whole or in part), or (ii) distribution by The Leagues of the Master Report to legislators/legislative bodies and prompt confirmation from The

Leagues that their lobbying effort and Milliman's involvement in such lobbying effort has become generally known to the public.

The Leagues may share the Master Report and make accurate reference to Milliman and the Master Report in verbal and written communications with their respective affiliates, but only if either (a) the respective League has the full power and authority to bind such affiliate to the terms of its respective Consulting Services Agreement and the engagement letter for this assignment, and does bind such affiliate to such terms, or (b) the affiliate acknowledges in writing that the Master Report is subject to certain contractual limitations and restrictions and that the affiliate acquires no greater rights than are possessed by the respective League under the engagement letter for this assignment.

Any reader of this report agrees not to use Milliman's name, trademarks or service marks, or to refer to Milliman directly or indirectly in any third party communication without Milliman's prior written consent for each such use or release, which consent shall be given in Milliman's sole discretion.

C. General Limitations

1. Reliance on Data

In performing this analysis, we relied on data and other information provided by The Leagues and parties designated by The Leagues to provide data on their behalf. We have not audited or verified this data and information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If

there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

2. Uncertainty

Actuarial estimates are subject to uncertainty from various sources, including changes in claim reporting patterns, claim settlement patterns, judicial decisions, legislation, and economic conditions.

In estimating the gross ultimate California CT losses for The Leagues, it is necessary to project future loss payments. Actual future losses will not develop exactly as projected and may, in fact, vary significantly from the projections. Further, the projections make no provision for future emergence of new classes or types of losses not sufficiently represented in The Leagues' historical database or that are not yet quantifiable.

Our estimates are presented on a going concern basis. That is, we have not anticipated any changes in claim reporting or claim settlement patterns, practices, and costs that might occur if The Leagues and/or their affiliates were to cease operating as a going concern or file for bankruptcy protection.

We supplemented The Leagues' data with applicable insurance industry data where deemed appropriate. The use of external data is another source of uncertainty in our estimates.

Given The Leagues' limited volume of losses, we expect significant variability in ultimate losses on a year-to-year basis. This increases the uncertainty of our estimates.

There is an increased level of uncertainty associated with CT workers' compensation claims. One reason for this is the lack of an extensive historical period of time with

respect to the reporting of these CT claims. Any changes in the legal interpretation of liability in this area could cause unforeseen results. These reasons add further uncertainty to our ultimate loss estimates and results in a wide range of reasonable estimates.

Federal legislation entitled The Medicare, Medicaid, and SCHIP Extension Act of 2007 contains a provision that requires insurance companies and self-insurers to report all workers' compensation and liability claims that could potentially involve Medicare as a secondary payer of benefits to the Centers for Medicare & Medicaid Services ("CMS"). Following implementation of the law, which was effective July 1, 2009, there has been increased activity in protecting Medicare's secondary payer position with regards to medical payments for which a third party is responsible. These developments have, in some cases, resulted in delays in the claim settlement process and higher claims administration costs. The deadline for reporting claims to CMS has been extended several times, with many companies and self-insurers starting to report in January 2012. As the activity on the part of CMS is relatively recent, the impact of these developments may not yet be fully reflected in the historical data. The new reporting requirements and renewed emphasis on Medicare's secondary payer position increase the uncertainty of our estimates.

3. Variability of Results

Our results are estimates based on long term averages. Actual loss experience may differ from what is suggested by these averages.

The sensitivity of key variables and assumptions in the analysis was considered. Key variables and assumptions include (but are not limited to) loss development factors, trend factors, the selected claim frequencies and claim severities, and the weights given to different actuarial methods. It is possible that reasonable alternative selections would produce materially different ultimate loss estimates.

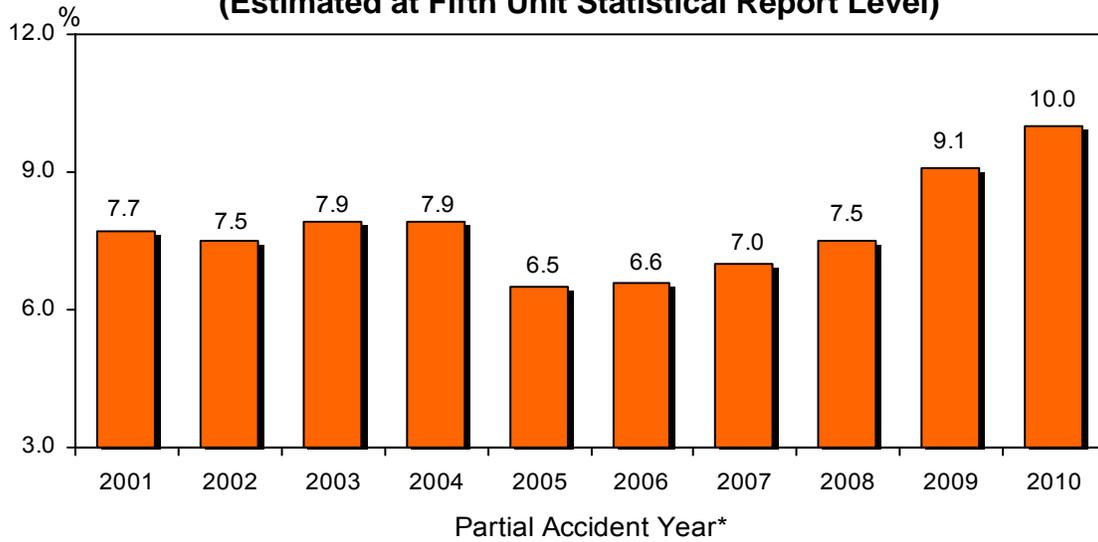
V. EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
A.	WCIRB Executive Summary Exhibit from July 1, 2012 Filing

Exhibit A

WCIRB Executive Summary Exhibit from July 1, 2012 Filing

Chart 6 – Cumulative Injury Claims as a Percentage of Indemnity Claims (Estimated at Fifth Unit Statistical Report Level)



* Partial Accident Year represents the injuries incurred during the specified year against policies incepting the prior year

Chart 7 – Forecasts of Changes in California Average Annual Wage Level

