

## Informational Bulletin: Actuarial Data Analysis - 2013

Over the past two years there have been changes to reporting requirements for many private companies who self-insure workers' compensation exposures in California. Specifically, provisions in SB 863 require most private self-insurers to annually provide the Office of Self Insurance Plans (OSIP) with actuarial estimates of loss and loss adjustment expense liabilities valued as of December 31. In addition, self-insurers continue to provide OSIP with annual reports of summarized claim and program information. The purpose of this letter is to update self-insurers and their actuaries regarding what we are doing with this information.

First of all, thank you! We are very pleased that we received actuarial studies and forms from all of the self-insurers who were required to report them. We believe obtaining actuarial data has led to a significant improvement in our ability to regulate workers' compensation self-insurance in California.

The loss and loss adjustment expense liability estimates provided by each self-insurer's actuary now form the primary basis for determining collateral deposit requirements. In the past OSIP had relied primarily on medical and indemnity case reserves (or "expected future loss") as a starting point. Other factors including financial strength and credit risk will continue to play a role in evaluating collateral deposit requirements. We feel that the actuarial estimates provide a more accurate basis for determining collateral requirements than case reserves. This is a big improvement.

Given the critical role of the actuarial estimates in determining collateral deposit requirements, OSIP retained actuarial consultants to evaluate and analyze the data and to identify outliers. Specifically, our goal is to identify actuarially-estimated liabilities which appear to be too low. The identification of outliers is based on objective criteria applied to loss and loss adjustment expense. These criteria are explained in Exhibits 1 & 2 of this letter.

Self-insurers whose loss and loss adjustment expense liability estimates which are flagged as outliers are reviewed in-depth. It is important to note that being flagged as an outlier does not in itself indicate that the liability estimates are too low. There are several reasonable explanations regarding why an estimate may be flagged. Being flagged as an outlier will result in a closer review to develop a more thorough understanding of the entities exposures, risks and appropriate collateral requirements.

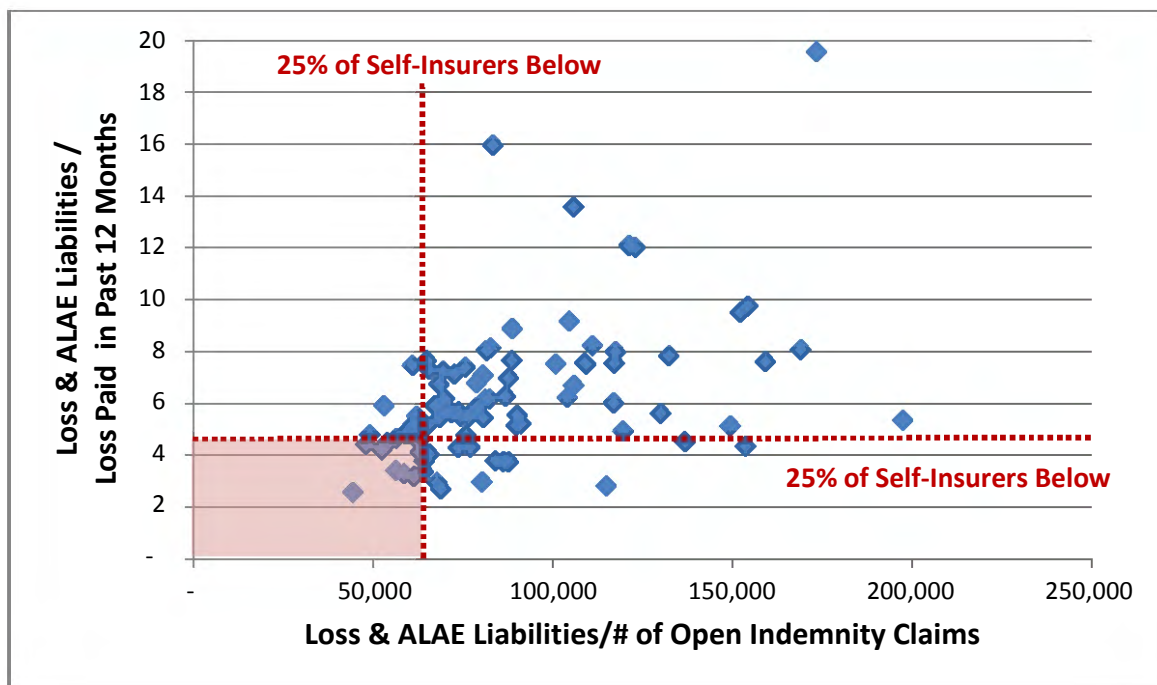
I invite you to contact me if you have any questions or comments regarding this letter. The indicators and methods that we use to review the actuarial estimates will likely evolve as we collect more years of information, and we are happy to consider your input. As always we remain dedicated to transparency and eager to continue to ensure that self-insurance is an attractive option for California employers.

## Indicators regarding Loss & Allocated Loss Adjustment Expense (ALAE) Liabilities

The information utilized in this report includes claims and program information reported to OSIP for many years in the “annual report,” as well as actuarial information reported to OSIP as a result of the requirements in SB 863. The most recent actuarial information is valued as of December 31, 2013, and includes high-level data reported on the “Actuarial Summary” form, in addition to full actuarial studies.

Two key ratios were developed in order to flag loss and ALAE liability estimates that could be low. These flags are: a) loss and ALAE liabilities divided by the number of open indemnity claims; and b) loss and ALAE liabilities divided by payments made in the prior 12 months. The following scatter plot shows the results, with each self-insurer representing a point on the graph. The shaded area in the lower left represents those self-insurers with indicated red flags using both tests, and this potentially triggers a more in-depth actuarial review. This includes 10 self-insurers.

**Graph 1**  
**Loss and ALAE Liabilities: Red Flags**

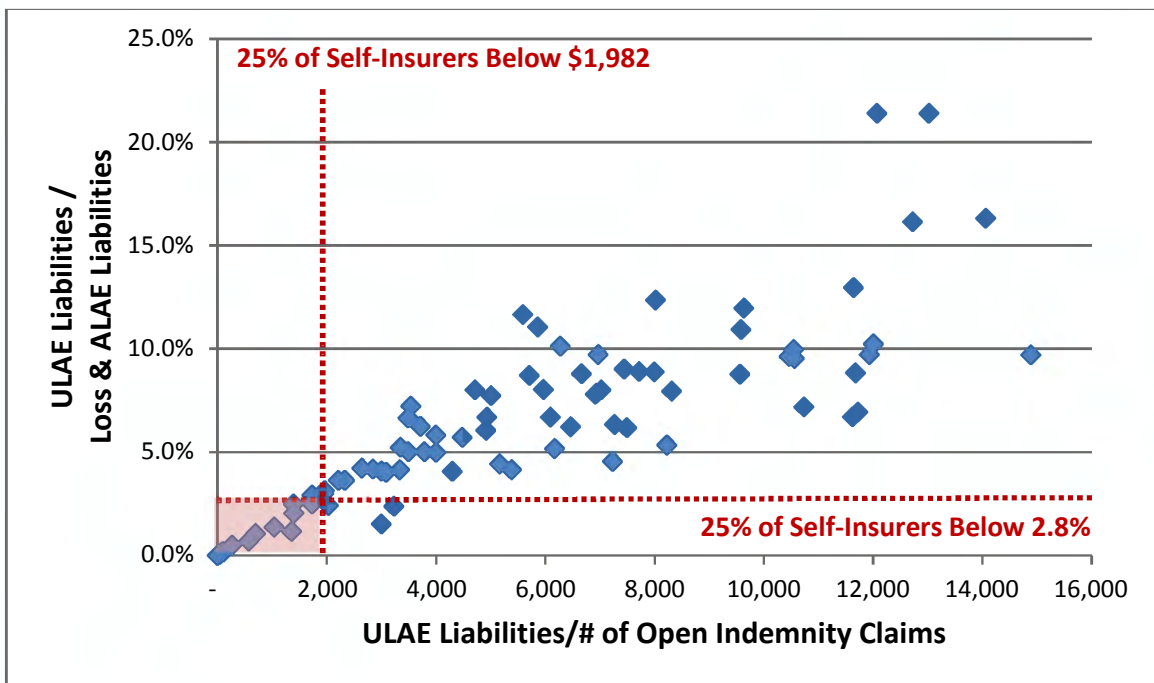


The preceding graph shows that while the two ratios are highly correlated, there are many examples of self-insurers who indicated a red flag based on one indicator but not on the other. For example, there are a few self-insurers whose ratio of loss and ALAE liabilities divided by payments in the past 12 months are less than 4.5 but who have over \$100,000 in liabilities per open indemnity claim. In order to most efficiently identify those liability estimates that could be low, we focused on those that had indicated red flags using both ratios.

## Indicators regarding Unallocated Loss Adjustment Expense (ULAE) Liabilities

The red flags related to ULAE (generally claims administration expense) liabilities are: a) ULAE liabilities divided by the number of open indemnity claims; and b) ULAE liabilities divided by loss and ALAE liabilities. The following scatter plot shows the results, with each self-insurer representing a point on the graph. The shaded area in the lower left represents those self-insurers who raised flags using both tests.

**Graph 2**  
**ULAE Liabilities: Red Flags**

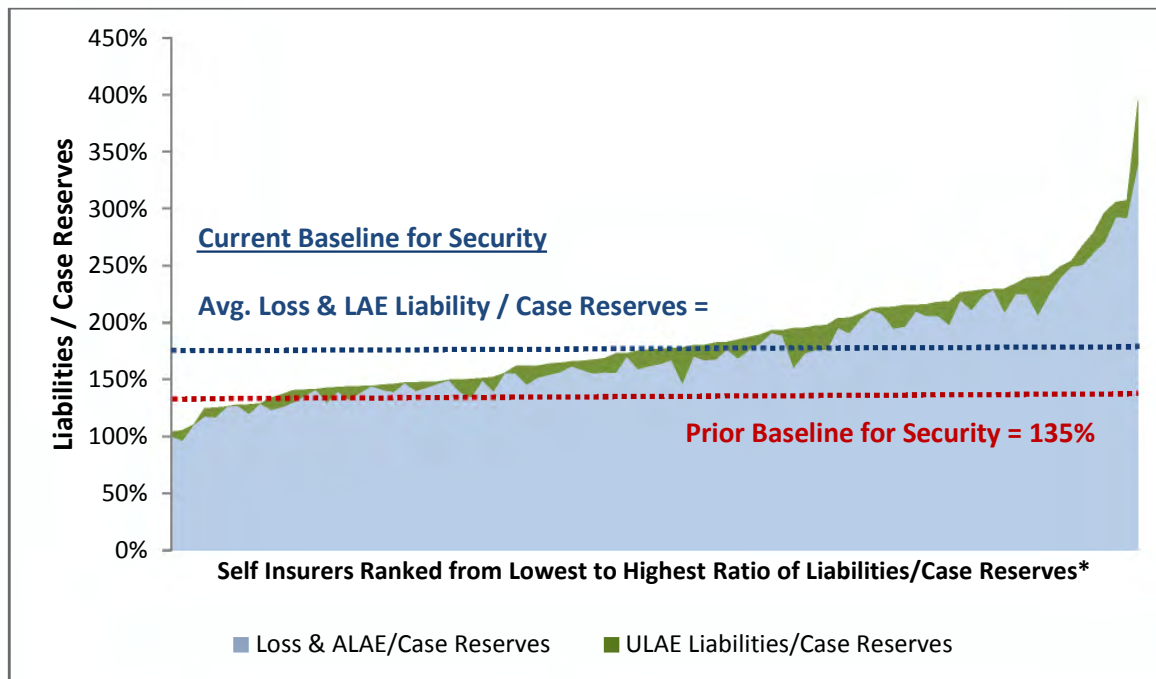


It is interesting to note that the two ULAE ratios are highly correlated with each other. Only three self-insurers were flagged on one ULAE ratio but not the other. In addition, six of the ten self-insurers whose loss and ALAE liability estimates were flagged also had the ULAE liability flagged.

## Impact of SB 863

SB 863 requires self-insurers to send summary actuarial information and actuarial reports to OSIP. The ratios and red flags developed in this report would not have been possible without this newly-required information. In addition, providing actuarial information allows collateral deposit requirements to be based on actuarially-determined liabilities, whereas prior to that they had been based on a multiple of case reserves. We regard this as a major improvement. The following chart shows the ratio of total loss and LAE liabilities to case reserves as identified in each self-insurer’s actuarial summary.

**Graph 3**  
**Total Liabilities/Case Reserves**



\* Only includes those self-insurers with greater than \$10,000,000 in case reserves

The preceding graph shows the ratio of liabilities to case reserves varies quite substantially by self-insurer, and this is now able to be reflected in the collateral deposit calculations due to SB 863. Interestingly, the loss and ALAE red flags indicate that strictly looking at the ratio of liabilities to case reserves is not necessarily a good indicator of the adequacy of the total liability estimate. Three of the five self-insurers with the highest ratio of loss and ALAE liabilities to case reserves are among the ten self-insurers identified by the red flags as potentially concerning. Although these self-insurers had substantial Incurred but not Reported (IBNR), they still had low ratios of liabilities per open claim and liabilities in relation to prior year payments. Only one of the five self-insurers with the lowest ratio of total liabilities to case reserves was identified using the red flags. This shows there are quite legitimate reasons why the ratio of total liabilities to case reserves may vary from one self-insurer to another.