

INVESTIGATIVE EXCLUSIVE

RAND Study Overstates California SIBTF Liability by 632%

A \$6.75 Billion Deception.

January 06, 2026

SUMMARY

A Jacobi Journal investigation concludes that the RAND Corporation's influential \$7.9 Billion estimate of California's SIBTF liability is profoundly flawed and that a series of questionable assumptions led to a massive \$6.75 billion overstatement.

The overstatement stems primarily from two critical flaws: using a non-representative, 42-case sample to assume a 91% benefit payment rate for open cases (compared to the historical rate of 24-44%) and by artificially inflating the cost of Total Disability awards. The inflation of Total Disability costs resulted from combining an understated 3% discount rate with an elevated 3.9% COLA, while also ignoring the reduced life expectancy of disabled recipients.

By correcting these assumptions, the journal's actuaries determined the CA SIBTF's **true estimated liability is closer to \$1.25 billion**, concluding that the numbers are inflated to an unreasonable degree and cast doubt on both the study's motive and its credibility.

INTRODUCTION

In 2022, the California DIR commissioned the RAND Corporation to review the state's Second Injury Fund, called the Subsequent Injury Benefits Trust Fund (SIBTF), to assess its financial impact on the California Workers Compensation Industry. With it, RAND was provided unparalleled access to the state's EMR systems.

In 2024 RAND reported the results of their findings in a 180-page report. The highlight? A staggering \$7.9 Billion estimated future liability for the fund. This number sent shockwaves throughout California and lawmakers felt the pressure to reform. The result was Senate Bill 1329, authored by Assemblymember Liz Ortega, which proposed to materially alter the SIBTF. The bill was passed by the California Senate in October 2025, only to be vetoed by CA Governor Gavin Newsom.

We at the Jacobi Journal, with the assistance of a few of our actuarial contacts within the Insurance Industry, decided to do a deep dive into RAND's influential study and the validity of its calculations.

What we found is a set of assumptions we classify as "Mathematical Malpractice," so egregiously erroneous that they raise serious questions about RAND's credibility. The effect of this numerical mischief was an overstatement of the SIBTF liability by 632%, or \$6.75 billion.

While there are many instances of false accounting in the study, we focus on the two most impactful:

1. The study assumed 91% of all open cases would result in benefits paid to the worker when the historical average is only 24%.
2. Because of multiple flawed assumptions, the cost of Total Disability cases (where the applicant is found to be 100% disabled) was overstated by \$453,933 per case, resulting in billions of dollars in inflated liability estimates.

CRITICAL FLAW #1: RAND’s Prediction Algorithm – What Were They Thinking?

% of SIBTF Cases That Paid Benefits

Sample	Time Period	Sample Size	Resolved w/Benefits
All Resolved Cases	2010-2022	14,611	44.40%
All Open and Closed Cases	2010-2022	27,047	24.00%
RAND's Prediction Algorithm	2019-2022	42	91.24%

Excerpt from RAND Study: “Finally, for cases that were unresolved at the time of our data collection, we developed a **prediction algorithm** to predict the likelihood of three possible outcomes occurring in the case: dismissal, resolution with benefits with a rating less than 100 percent, and resolution with benefits with a rating of 100 percent.” (page 64)

HISTORICAL BENEFIT RATES VS RAND’S ASSUMPTIONS

The bulk of RAND’s SIBTF estimate (\$5.4 Billion out \$7.9 Billion) involved the liability associated with the 14,681 cases that are open but not yet resolved. To produce the forecast, RAND developed a “Prediction Algorithm”. This algorithm was used to forecast the rate at which the 14,681 cases were resolved across three possible outcomes:

1. Resolved with no benefits (Dismissal)
2. Resolved with benefits, disability rating at 100%
3. Resolved with benefits, disability rating below 100%

Shown below is Table B.7 from the RAND study, highlighting the assumptions that drove their projections:

Table B.7. Average Predicted Probabilities in and out of Sample

Outcome	Actual post-2019 Distribution	Average Model-Predicted Probabilities in Training Sample	Average Model-Predicted Probabilities out of Sample
Dismissal	8.76%	8.77%	8.76%
Benefits rated at 100%	37.54%	37.68%	39.70%
Benefits rated at < 100%	53.70%	53.54%	51.54%

SOURCE: RAND analysis of SIBTF case documents.

NOTE: Estimates based on sample of 42 post-2019 resolutions in training sample and 276 unresolved cases out of sample.

We note in particular the dismissal rate forecast of 8.77% used in their “prediction algorithm.” The study assumed that out of 14,681 open cases, 13,360 (91%) would receive benefits. This provided a powerful foundation for their \$8 Billion headline grabbing forecast.

The fundamental issue with this assumption is its significant departure from established historical experience. From 2010 to 2022, 14,611 cases were resolved, but only 6,485 resulted in benefits, while 8,126 resolved without benefits. In actual, not estimated, terms, only 44.4% of resolved cases from 2010 to 2022 resulted in benefits. This historical figure stands in stark contrast to the 91% assumption embedded in the Prediction Algorithm.

Total Resolved Cases 2010-2022		
Resolved w/ Benefits	6,485	44.4%
Abandoned (no activity since 2017)	2,245	15.4%
Resolved w/o Benefits	5,881	40.3%
Total No Benefits	8,126	55.6%
Total Resolved Cases	14,611	100%

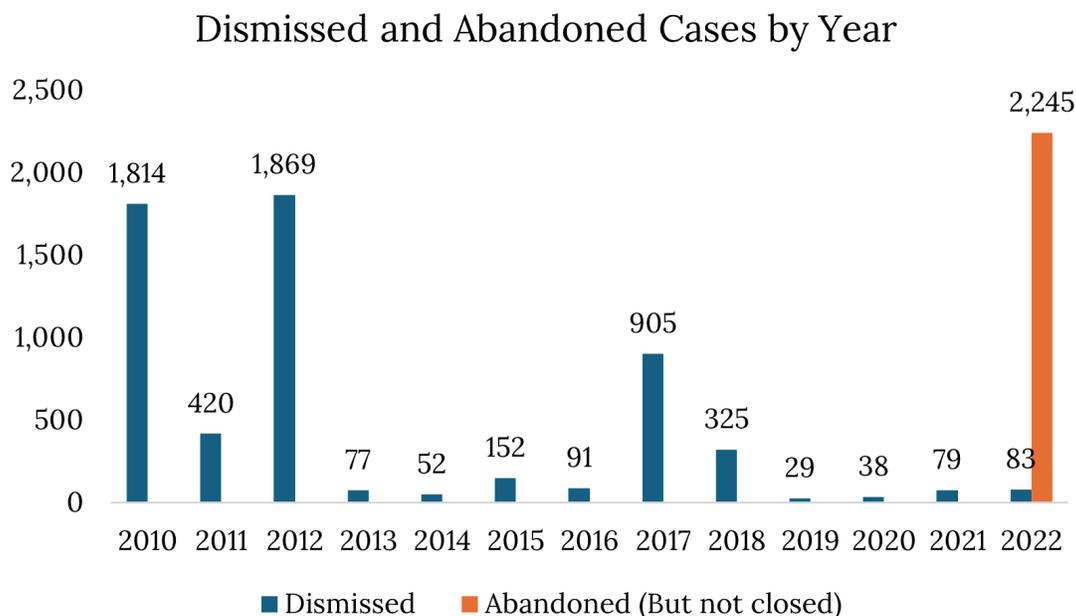
FAILURE TO CONSIDER ABANDONED CASES

But that doesn’t tell the full story. In our opinion, even the benefit rate of 44.4% overstates the likelihood that benefits will be paid on an open case. This is because it fails to factor in the possibility that the open case will be abandoned. The reality is that a large percentage of SIBTF cases are neither dismissed nor do they settle for benefits. Rather, a large number of SIBTF cases are simply abandoned, filed but never pursued. This means cases will sit open indefinitely without the finality of a closing action of a settlement or dismissal.

Appendix C. Additional Results Table C.1. SIBTF Case Characteristics by Year of Resolution for Resolved Cases, 2010–2022

SIBTF Resolved	2010–2015	2016–2019	2020–2022	Total
With C&R	18%	35%	46%	29%
With STIP/F&A?	12%	22%	48%	23%
With F&O/Dismissal/Closed	70%	43%	7%	48%

As shown in Table C.1 of the RAND study (page 120), the dismissal rate was 70% from 2010–2015, dropped to 43% from 2016–2019, and fell to just 7% in 2020–2022. The stark difference in dismissal rates is explained almost entirely by whether abandoned cases are accounted for. The DIR is certainly aware of this issue as it has at various times over the last 12 years cleaned the books by “administratively closing” any case that has been inactive for over 5 years. It is important to note that they do not “administratively close” cases on a consistent basis.



To further illustrate this point, refer to the chart above showing dismissed SIBTF cases by year. The spikes in 2010, 2012, 2017, and 2018 reflect the inclusion of administratively closed cases, whereas the other years do not. At the time of the RAND study (2022), there were 2,245 cases that met the fund’s criteria for administrative closure, having been inactive for more than five years.

Thus, in older time periods, abandoned cases are more clearly identified. The dismissal rate for 2010–2015 is higher because it more fully captures these abandonments, as more cases were administratively closed. By comparison, the lower rate from 2016–2019 is somewhat understated, as many abandoned cases were not captured once the DIR ceased administratively closing cases after 2018.

Finally, the 7% Dismissal rate for the 2020-2022 greatly understates the real underlying paid benefit rate because it does not yet capture any abandonments.

In our discussion with legal participants in California SIBTF program, this is also in line with how they describe the current state of affairs. The program is understaffed; therefore, cases are only resolved when the Applicant’s Attorney aggressively pushes the case forward.

As a result, the cases that are resolved are often “cherry picked”, they are the strongest cases from the applicant perspective and are not representative of the entire universe of open cases. If the case is weak, and SIBTF defense counsel provides some type of rightful objection, the case is not technically dismissed (and thus captured in the dismissal statistics) it is simply abandoned and sits open for years. This is what happens to a large number of SIBTF cases.

RAND’S PROBLEMATIC SAMPLE SIZE

We also question the sample size RAND relied upon for its 8.76% dismissal forecast, as it was derived from just 42 cases out of a universe of more than 27,000.

RAND justified the forecast by stating “we base the future predictions on recent trends of cases resolved after 2020”. That recent trend was “based on a sample of 42 post-2019 resolutions.”

% of SIBTF Cases That Paid Benefits

Sample	Time Period	Sample Size	Resolved w/Benefits
All Resolved Cases	2010-2022	14,611	44.40%
All Open and Closed Cases	2010-2022	27,047	24.00%
RAND's Prediction Algorithm	2019-2022	42	91.24%

The fact that the dismissal rate used in RAND’s Prediction Algorithm, deviates so dramatically from the empirical evidence and is based on a sample of just 42 cases (out of a universe of 27,047) raises significant red flags and, in our view, invalidates the study’s results.

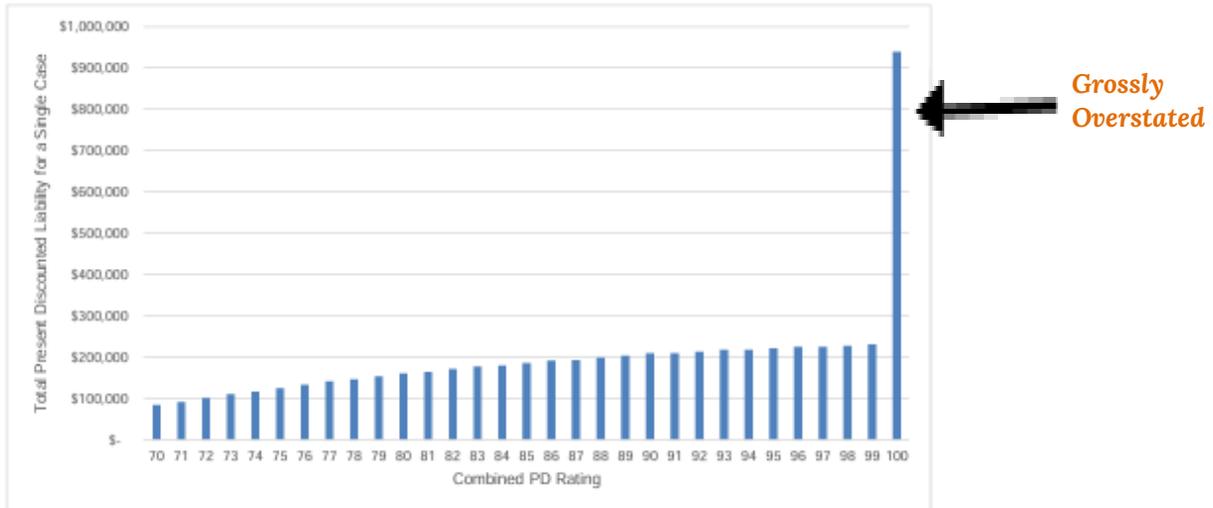
A more accurate benefit would involve an analysis of the number of cases that actually pay benefits (as opposed to the dismissal rate) because this more accurately captures abandoned cases.

Over the 12-year life of the study, benefits were paid on 6,485 cases out of a total universe of 27,047. This equates to a 24.0% benefit rate. A 24% benefit payment rate equates to a dismissal/abandonment rate of 76%. A more accurate predictor falls somewhere in between the long-term dismissal rate of 56% for closed cases and the 76% rate that factors in abandonment.

All Cases 2010-2022		
Resolved w/ Benefits	6,485	24.0%
Abandoned (no activity since 2017)	2,245	8.3%
Resolved w/o Benefits	5,881	21.7%
Total No Benefits	8,126	30.0%
Total Resolved Cases	14,611	54.0%
Unresolved Cases	12,436	46.0%
Total Cases	27,047	100%

CRITICAL FLAW #2: Estimated Liability of 100% Disability Cases Is Grossly Overstated

Figure S.1. Impact of 100% Combined PD Rating on Expected Liabilities



Another major focus of the RAND study was a cost breakdown estimate of a case resulting in a 100% disability award versus a 99% award. This distinction is critical because an applicant with a 100% disability receives a cost-of-living adjusted (COLA) income payment for life.

The RAND study claims the liability for a 99% award is \$212,000, and jumps to \$933,000 at 100%. This enormous spike, captured in an excerpt of the RAND Study above, was a key driver of the \$7.9 billion estimated liability.

However, this estimate is also logically flawed and materially overstated due to a series of false assumptions. We will address three flawed financial assumptions:

1. Elevated COLA assumption
2. Abnormally low discount rate
3. Overstated Life Expectancy

Elevated COLA Assumption

RAND used an annual Cost of Living Adjustment assumption of 3.9%. This is an aggressive assumption when considering the historical context. Over the last 20 years, COLA has averaged 2.6%, and was 2.5% in 2025. Our actuaries suggest a more appropriate figure is 2.6%. Rerunning the cost calculation with a 2.6% COLA drops the estimated cost of a 100% case from \$933,000 to \$774,017.

Understated Discount Rate

Estimating a future liability requires discounting that number back to its “present value”, a fundamental component of all pension fund accounting. The discount rate should generally match the duration of the liability. Given SIBTF pays lifetime payments, it should reflect a longer-term interest rate. The average public pension fund discount rate in 2022 was 6.7%. California Labor Code mandates a 7% discount rate for all pension liabilities. RAND, however, used a 3% discount rate, which our experts call the lowest they’ve seen for a base rate. This artificially low discount rate results in an overstated liability. If we assume the California mandated 7% discount rate applies for estimating California’s SIBTF liability this further reduces the expected cost of a 100% Disability case to \$489,619.

To virtually any data scientist, a 3% Discount Rate coupled with a 3.9% COLA is indicative of mathematical malpractice.

Overstated Life Expectancy Assumption

The cost of a lifetime pension depends on the life expectancy of the recipient. Note that SIBTF benefits are paid to individuals who have been legally proven to be completely disabled. It is a logical and widely recognized actuarial assumption that those deemed 100% disabled under California’s guidelines will, on average, have a shorter life expectancy than healthy individuals of comparable age.

In its study even RAND admitted, "Research has shown that workers with severe workplace injuries have reduced survival compared with similar individuals in the general population...implying that a workplace injury reduces life expectancy by somewhere between 4 and 17 percent." Despite this clear finding, the study failed to apply this reduced life expectancy in its headline grabbing projections. Only in the Addendum did the study admit the cost should be 17% lower. Factoring in a reduced life expectancy brings the estimated cost of a 100% award further reduced to \$418,478.

Assumption Error	RAND's Assumption	Jacobi's Corrected Assumption	Impact on \$933k Estimate
Inflated COLA Rate	3.9% annual COLA	2.6% annual COLA (20-year historical average)	Reduces cost to \$774,017
Understated Discount Rate	3% Discount Rate	7% Discount Rate (Closer to public pension average of 6.7%)	Reduces cost to \$489,619
Overstated Life Expectancy	General population life expectancy	17% Reduction (As admitted in RAND's own addendum)	Reduces cost to \$418,345

Jacobi Corrected Estimate: Total Liability only \$1.25 Billion

By simply resolving these two errors, the estimated future liability for the SIBTF is drastically reduced.

Component	RAND Study Estimate	Jacobi Corrected Estimate
Resolved Cases (2010–2022)	\$2,492,407,301	\$587,450,200
<i>Correction: Accurate Sampling Weights, COLA 2.6%, Discount Rate 7%, Corrected Life Expectancy, Reduced Life Expectancy, Sampling Adjustment</i>		
Projected Unresolved Cases	\$5,454,644,236	\$664,141,517
<i>Corrections: Abandoned Cases Factored, Dismissal Rate of 70% used, COLA 2.6%, Discount Rate 7%, Reduced Life Expectancy</i>		
Total Estimated Fund Liability	\$7,947,051,537	\$1,251,591,717

CONCLUSION

The Jacobi Journal investigation concludes that the RAND Corporation's **2024 SIBTF liability estimate of \$7.9 billion is profoundly flawed**, asserting that computational errors led to a massive **\$6.75 billion (632%) overstatement**.

This overstatement stems primarily from two critical flaws: using a non-representative, 42-case sample to assume a **91% benefit payment rate** for open cases (compared to the historical 24-44% rate) and artificially inflating the cost of Total Disability awards. The inflation was achieved by combining an **understated 3% discount rate** with an **elevated 3.9% COLA** and ignoring the reduced life expectancy of disabled recipients.

By correcting these assumptions, the journal's actuaries determined the SIBTF's true estimated liability is closer to **\$1.25 billion**, concluding that the numbers are over-inflated beyond reason and raise questions as to credibility of the study and its motive for targeting California's disabled residents.

EDITORS' COMMENTS

Why does this matter? This RAND corporation study was publicly funded and the data collection was conducted by students at RAND. With little oversight by their Institutional Review Board they failed to prove their null hypothesis beyond chance, so they reduced their sample size and made questionable assumptions.

If this error occurred in the private sector, RAND would be held accountable. The error magnitude of **632%**—overstating a liability of approximately \$1.25 billion to \$7.95 billion—is exceptionally large, and is reminiscent of past high-profile financial scandals. Publicly-cited corporate fraud cases at this scale of financial deception can be compared to major frauds where assets or earnings were inflated by hundreds of percentage points.

Historical Examples of Comparable Large-Scale Financial Overstatements

Here are a few real-life examples from history that illustrate massive percentage overstatements, similar in concept to the magnitude of the error described in the RAND study critique:

1. WorldCom (2002)

- **The Fraud:** WorldCom fraudulently inflated its assets (and thus, its earnings) by approximately **\$11 billion**. The primary method was illegally classifying routine operating expenses (like line access charges) as capital expenditures (investments). This accounting maneuver immediately boosted profit and net worth.
- **The Percentage Scale:** While the exact percentage of the total balance sheet distortion is complex, the **\$11 billion** figure itself represented an enormous percentage of the company's stated assets and income. When compared to the company's true, uninflated earnings, the percentage error in reported profit was well over 100%.

2. HealthSouth (2003)

- **The Fraud:** HealthSouth executives, led by CEO Richard Scrushy, systematically inflated company earnings over several years by approximately **\$1.8 billion**. The goal was to meet Wall Street expectations and keep the stock price high. The fraud involved manually altering accounting entries to boost revenue and reduce reported expenses.
- **The Percentage Scale:** In some quarters, the fraudulent increases represented profits that would have otherwise been losses. This means the stated earnings were inflated by an *infinite* percentage relative to the true negative number, or certainly by **hundreds of percentage points** compared to the actual, non-manipulated revenue or profit base.

3. Enron (2001)

- **The Fraud:** Enron used complex off-balance-sheet entities (Special Purpose Entities or SPEs) to hide billions of dollars in debt and toxic assets, making the company appear financially strong when it was essentially bankrupt. This was a case of **understating liabilities and overstating assets**.
- **The Percentage Scale:** Because Enron concealed debts that would have immediately wiped out its reported equity, the error in its financial picture, if measured as the amount of hidden debt relative to the company's reported profit, would have easily surpassed the 632% threshold in magnitude.