

# Estimation of Outstanding Losses As of June 30, 2023

**State of Tennessee**  
Workers Compensation

December 19, 2023

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*Estimation of Outstanding Losses as of June 30, 2023*

**State of Tennessee**

**Report Date:** December 19, 2023

Based on data as of June 30, 2023

**Prepared by**

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## Section 1

### Executive Summary

The purpose of this report is to provide the State of Tennessee (the State) with an evaluation of the projected liabilities arising from its Workers Compensation exposures. The specific objectives are (a) to estimate ultimate and outstanding losses for the accident periods beginning July 1, 1993, through June 30, 2023, as of June 30, 2023, (b) to estimate outstanding losses for accident periods prior to July 1, 1993, as of June 30, 2023, and (c) to analyze the variability inherent in the loss experience by deriving loss estimates at various confidence levels or risk margins.

This report addresses liabilities associated with pure losses only. It does not address expenses associated with the cost of settling the losses.

### Results of this Analysis

The tables and graphs at the end of this section present the main results of our analysis. A version of each table displaying all agencies combined is shown first, followed by tables for individual agencies (Correction, Mental Health and DIDD, Locally Governed Institutions & TBR, Transportation, University of Tennessee), and finally, a table showing all other agencies combined.

Outstanding Losses as of 6/30/23	Outstanding Losses Discounted at 4.0%	Expected Payments on Outstanding Losses 7/1/23 to 6/30/24
\$102,398,000	\$73,428,000	\$12,428,000

Table 1 displays the ultimate and outstanding losses as of June 30, 2023, both undiscounted and discounted at 4.0%. Outstanding losses, or required reserves, for all agencies combined total \$102,398,000, undiscounted and \$73,428,000, discounted at 4.0%. This includes an estimate for accident years prior to 7/1/93-94. Of this outstanding amount, we expect \$12,428,000 to be paid out in the next 12 months. Based on our forecast report, we also expect \$4,395,000 to be paid during fiscal year 2023/24 on claims incurred after July 1, 2023, so total projected fiscal year payments are \$16,823,000.

Table 2 provides a comparison of actual incurred and paid losses as of June 30, 2023, with expected incurred and paid losses. These expectations were based on the information and assumptions made in the previous actuarial study dated January 5, 2023. Also shown is a comparison of the current estimates of ultimate losses with those selected in the previous analysis. These tables are discussed in detail below.

Table 3 shows the ultimate and outstanding losses as of June 30, 2023, at various confidence levels, both undiscounted and discounted at 4.0%. This total also includes a provision for accident years prior to 7/1/93-94.

Table 4 reconciles the required reserves as of June 30, 2023, to the required reserves provided in the prior analysis as of June 30, 2022.

Graph 1 displays the breakdown of ultimate losses into paid losses, case reserves, and Incurred But Not Reported reserves (IBNR).

Graph 2 shows how reported losses have developed compared to expectations based on the prior analysis. The first graphs show the difference between actual and expected losses reported by accident year during the period June 30, 2022, through June 30, 2023. The second graph shows the change in the ultimate losses from the prior analysis to the current analysis.

Graph 3 presents the dollar amount changes that were made to the ultimate losses selected in the prior analysis, broken down by agency or agency group.

Graph 4 displays the total and percentage of undiscounted outstanding losses by agency or agency group.

## Discussion of Results

For all years and all agencies combined, \$20.6 million in losses were projected to be reported from June 30, 2022, to June 30, 2023. Actual reported losses during that time were \$10.1 million, roughly half the amount projected. Overall paid losses tracked closer to projections with \$16.2 million paid during the past fiscal year compared with \$17.7 million projected paid. We note that higher than projected paid loss development was observed for the mature periods prior to 2008/09 and this was consistent year over year. Paid losses developed favorably for the more recent years and claim frequency remains low since the start of the pandemic. For all agencies and all years combined, estimated ultimate losses decreased \$9.7 million from estimates in the previous actuarial report.

More detail about the changes can be found in the results shown below for the agencies and agency groups.

## Correction

Undiscounted outstanding losses for the Department of Correction total \$18,524,000 as of June 30, 2023. Of this total, \$9,239,000 is case reserves and the remaining \$9,286,000 is incurred but not reported (IBNR) reserves<sup>1</sup>. Outstanding losses discounted at 4.0% total \$12,941,000.

At the 65th percentile, outstanding losses are \$19,390,000, undiscounted and \$13,546,000, discounted at 4.0%.

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<sup>1</sup> The sum of case reserves and IBNR may not be equal to the estimated outstanding amount due to rounding

Since the prior evaluation as of June 30, 2022, total reported losses for Correction have developed \$2,551,000 less than projected. For most accident years prior to 2017/18 reported losses *decreased* during the past year due to activity on a few claims. The 2008/09 and 2010/11 years stand out with each year having a claim that decreased more than \$100,000. From the 2008/09 year, reopened claim #0546-WC-09-0502694 had reported losses decrease from \$262,000 to \$81,000. Likewise, claim #0546-WC-11-0501342 from the 2010/11 year closed with reported losses decreasing from \$416,000 to \$187,000. For the more recent periods (2017/18 through 2022/23), reported losses developed favorably as well. As shown on Exhibit 6, claim frequency has been on the decline since 2017/18 and this has contributed to the overall favorable results. The latest year, 2022/23, has reported losses at year-end tracking 31% less than projected and there are no large claims with reported losses exceeding \$100,000. For all years combined, estimated ultimate losses decreased \$2,724,000 from estimates in the previous actuarial report.

## Mental Health and DIDD

Undiscounted outstanding losses for the Mental Health and DIDD departments total \$11,124,000 as of June 30, 2023. Of this total, \$5,900,000 is case reserves and the remaining \$5,226,000 is incurred but not reported (IBNR) reserves. Outstanding losses discounted at 4.0% total \$7,957,000.

At the 65th percentile, outstanding losses are \$11,670,000, undiscounted and \$8,348,000, discounted at 4.0%.

During the past twelve months, reported losses for Mental Health and DIDD developed \$1,515,000 lower than projected. Much of the favorable development was observed for the latest four accident years, 2019/20 through 2022/23. There were only a handful of claims from these years with reserve increases over \$10,000 since the prior evaluation. For the latest accident period, 2022/23, reported losses are tracking 65% less than projected and the vast majority of new reported claims are under \$10,000. There was also noteworthy favorable development for the 2008/09 year driven by large decreases on two claims. Claim #0546-WC-09-0501416 had reported losses decrease \$215,000 and claim #0546-WC-09-0501273 had reported losses decrease \$121,000. However, we note that both claims were open as of June 30, 2023. There was one accident period with noteworthy adverse development and that was 2002/03. Experience for 2002/03 was driven by a large increase of \$135,000 on claim #0546-WC-03-0503571. Years with favorable development more than offset the adverse experience on 2002/03. Like Correction, claim frequency for Mental Health and DIDD has been on the decline since 2017/18. For all years combined, estimated ultimate losses have decreased \$1,516,000 from estimates in the previous report.

## Locally Governed Institutions & Tennessee Board of Regents

For this analysis we are more clearly referring to this agency group as “Locally Governed Institutions & Tennessee Board of Regents.” In past actuarial reports, this agency group was simply called “Tennessee Board of Regents”. The losses and exposures referred to in both the current and past actuarial reports are consistent and include LGIs, community colleges, TCATs, and all entities falling under the umbrella of TBR.

Undiscounted outstanding losses for LGIs & TBR total \$10,431,000 as of June 30, 2023. Of this total, \$5,775,000 is case reserves and the remaining \$4,658,000 is incurred but not reported (IBNR) reserves. Outstanding losses discounted at 4.0% total \$7,234,000.

At the 65th percentile, outstanding losses are \$10,929,000, undiscounted and \$7,579,000, discounted at 4.0%.

Total reported losses as of June 30, 2023, emerged \$1,774,000 lower than projected. As noted for other agencies, decreases to reported losses on claims has contributed to the favorable development. There were 17 claims with reserve decreases of \$10,000 or more since the prior evaluation. The largest decreases were for claim #0546-WC-06-0503633 from the 2005/06 year and claim #0546-WC-08-0503268 from the 2007/08 year. Both claims closed with reported losses decreasing more than \$100,000 apiece. At the same time, very few claims reported as of June 30, 2022, experienced large increases during the past twelve months. For the latest year, 2022/23, reported losses came in \$187,000, or 15%, less than projected. The largest claim reported so far for 2022/23 is claim #0546-WC-23-0305415 totaling \$103,000. It appears that COVID shutdowns had a greater impact on claim frequency for the LGIs & TBR than it did for other agencies. As shown on Exhibit 6, claim frequency hit an all-time low in 2020/21 and has since increased slightly in 2021/22 and 2022/23. Nevertheless, claim frequency for the latest three accident periods is lower than all past years. Based on the overall observed results, the estimated ultimate losses for all years combined have decreased \$2,131,000 from prior estimates.

## Transportation

Undiscounted outstanding losses for the Department of Transportation total \$14,351,000 as of June 30, 2023. Of this total \$7,152,000 is case reserves and the remaining \$7,194,000 is incurred but not reported (IBNR) reserves. Outstanding losses discounted at 4.0% total \$10,212,000.

At the 65th percentile, outstanding losses are \$15,029,000, undiscounted and \$10,694,000, discounted at 4.0%.

Overall, losses for Transportation have developed favorably since the previous evaluation as of June 30, 2022. Much of the favorable development for this agency was concentrated in the most recent stretch of accident years, from 2017/18 through 2022/23. Considering only the known claims as of June 30, 2022, from the years 2017/18 through 2021/22, decreases on claims were about equal to the increases on other claims such that total reported losses for these years changed very little in twelve months. For the 2022/23 year, reported losses emerged \$760,000, or 44%, less than projected. There was one high severity claim reported for 2022/23, claim #0546-WC-23-0301590, which has reported losses totaling almost \$300,000. For more mature periods, there was some adverse development observed for a few accident years driven by activity on a single claim from each year. Claim #0546-WC-96-0502832 from the 1995/95 year increased \$82,000, claim #0546-WC-05-0500836 from the 2004/05 year increased \$154,000, claim #0546-WC-11-0500941 from the 2010/11 year increased \$184,000, and claim #0546-WC-17-0000951 from the 2016/17 year increased \$263,000. For accident years 2016/17 and prior, estimated ultimate losses increased \$575,000. For accident years 2017/18 through 2022/23, estimated ultimate losses decreased \$2,000,000. The net result for all years combined is a decrease of

\$1,425,000 from estimates in the prior report. Favorable development for the latest six years more than offset adverse development for prior periods.

## University of Tennessee

Undiscounted outstanding losses for the University of Tennessee total \$7,982,000 as of June 30, 2023. Of this total \$4,130,000 is case reserves and the remaining \$3,850,000 is incurred but not reported (IBNR) reserves. Outstanding losses discounted at 4.0% total \$5,799,000.

At the 65th percentile, outstanding losses are \$8,360,000, undiscounted and \$6,074,000, discounted at 4.0%.

For the University of Tennessee, most accident years developed in line with or less than expectations. Similar to other agencies, most of the overall favorable development for UT was observed for the latest accident periods. The 2020/21 and 2021/22 years stand out with reported losses for the two years combined *decreasing* \$624,000 from June 30, 2022, to June 30, 2023. The decrease was driven by moderate decreases on several claims. From the 2020/21 and 2021/22 years, there were 21 claims that closed with decreases to reported losses between \$10,000 and \$65,000 per claim. The latest year, 2022/23, is off to a good start with reported losses tracking 10% less than projected. Claim #0546-WC-96-0501109 from the 1995/96 year closed with a \$98,000 decrease to reported losses and this also contributed to the overall favorable results. Similar to the LGIs & TBR, historical claim frequencies for UT indicate that COVID shutdowns likely impacted experience. Claim frequency dropped significantly in 2020/21, followed by a modest increase to frequency in 2021/22 and 2022/23. Based on the last twelve months of development since the prior analysis, estimated ultimate losses have decreased \$1,093,000.

## All Other Agencies

For the 1993/94 through 2022/23 years, undiscounted outstanding losses for all other agencies combined total \$38,325,000 as of June 30, 2023. Of this total \$19,440,000 is case reserves and the remaining \$18,888,000 is incurred but not reported (IBNR) reserves. Outstanding losses discounted at 4.0% total \$27,624,000.

At the 65th percentile, outstanding losses are \$39,626,000, undiscounted and \$28,562,000, discounted at 4.0%.

The required reserves for claims occurring between 7/1/1969 and 6/30/1993 are \$1,661,000, with \$324,000 of that amount in IBNR reserves. Ultimate losses for these years are \$57,168,000, which is up \$29,000 from the estimate in the previous actuarial report. The analysis supporting these amounts can be found in Appendix C of the All Other Agencies section.

Based on estimates and assumptions from the previous actuarial report, limited reported losses as of June 30, 2023, for all years through 2022/23 combined, came in \$1,952,000 lower than projected. There was favorable development observed for several accident years. In some cases, the favorable development for a year can be attributed to activity on one or two claims. Five claims for all other agencies experienced especially large decreases to reported losses (between \$70,000 and \$120,000)



and these claims drove the less-than-projected development for 2006/07, 2008/09, 2012/13, and 2015/16. On the other hand, we notice that paid losses consistently developed higher than projected for the years 2003/04 and prior. This development is worth keeping an eye on as it can be an indication of future unanticipated development in the tail. In response to this experience, estimated ultimate losses for the years 2003/04 and prior have increased from estimates in the prior report. For the most recent accident year, 2022/23, reported losses are tracking right in line with expectations while paid losses are 39% higher than expected. A large claim totaling \$514,000 emerged for the 2022/23 year. As noted for some of the other agencies, Exhibit 6 shows frequency hit an historic low during COVID shutdowns and increased slightly in 2021/22 and 2022/23.

Based on the last twelve months of observed experience, estimated ultimate losses for years prior to 2004/05 have increased \$241,000. For the years 2004/05 through 2022/23, ultimate losses decreased \$1,058,000. As shown on Table 2, the net result for all years combined is a decrease of \$817,000.

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Paid Losses	(D) Total Required Reserves	(E) Discount Factor at 4.0%	(F) Total Discounted Reserves at 4.0%	(G) Projected Payments 7/1/2023 to 6/30/2024	(H) Projected Payments after 6/30/2024
7/1/1969 - 6/30/1993	\$57,168,000	\$55,506,603	\$1,661,000	1.000	\$1,661,000	\$43,000	\$1,618,000
7/1/93-94	\$15,855,127	\$15,493,347	\$362,000	0.997	\$361,000	\$10,000	\$351,000
7/1/94-95	\$15,540,448	\$15,328,900	\$212,000	0.976	\$207,000	\$6,000	\$206,000
7/1/95-96	\$15,654,749	\$15,448,718	\$206,000	0.942	\$194,000	\$5,000	\$202,000
7/1/96-97	\$13,132,000	\$12,093,411	\$1,039,000	0.909	\$944,000	\$29,000	\$1,009,000
7/1/97-98	\$15,865,727	\$15,513,038	\$353,000	0.878	\$310,000	\$11,000	\$342,000
7/1/98-99	\$18,596,226	\$17,987,130	\$609,000	0.846	\$515,000	\$18,000	\$590,000
7/1/99-00	\$23,345,000	\$22,197,200	\$1,148,000	0.821	\$943,000	\$36,000	\$1,113,000
7/1/00-01	\$21,581,788	\$20,573,265	\$1,009,000	0.795	\$802,000	\$33,000	\$976,000
7/1/01-02	\$21,810,000	\$20,509,730	\$1,300,000	0.772	\$1,004,000	\$44,000	\$1,257,000
7/1/02-03	\$22,249,330	\$21,144,925	\$1,104,000	0.753	\$831,000	\$41,000	\$1,064,000
7/1/03-04	\$24,507,000	\$22,881,795	\$1,625,000	0.731	\$1,188,000	\$60,000	\$1,565,000
7/1/04-05	\$29,255,000	\$25,568,532	\$3,686,000	0.715	\$2,635,000	\$145,000	\$3,542,000
7/1/05-06	\$22,749,140	\$21,257,744	\$1,491,000	0.700	\$1,044,000	\$62,000	\$1,430,000
7/1/06-07	\$36,664,000	\$31,218,235	\$5,446,000	0.685	\$3,733,000	\$235,000	\$5,210,000
7/1/07-08	\$27,181,471	\$23,889,703	\$3,292,000	0.673	\$2,217,000	\$151,000	\$3,140,000
7/1/08-09	\$23,676,000	\$21,457,103	\$2,219,000	0.664	\$1,474,000	\$108,000	\$2,111,000
7/1/09-10	\$31,890,000	\$27,862,322	\$4,028,000	0.656	\$2,641,000	\$207,000	\$3,821,000
7/1/10-11	\$30,895,000	\$27,302,395	\$3,593,000	0.650	\$2,334,000	\$197,000	\$3,394,000
7/1/11-12	\$32,643,000	\$28,324,470	\$4,319,000	0.646	\$2,788,000	\$254,000	\$4,066,000
7/1/12-13	\$30,669,000	\$25,336,534	\$5,332,000	0.644	\$3,432,000	\$337,000	\$4,995,000
7/1/13-14	\$27,840,000	\$23,304,943	\$4,535,000	0.645	\$2,926,000	\$312,000	\$4,225,000
7/1/14-15	\$15,992,000	\$12,897,912	\$3,094,000	0.644	\$1,994,000	\$227,000	\$2,867,000
7/1/15-16	\$15,516,000	\$12,772,931	\$2,743,000	0.650	\$1,783,000	\$225,000	\$2,518,000
7/1/16-17	\$16,434,000	\$12,676,034	\$3,758,000	0.660	\$2,480,000	\$347,000	\$3,412,000
7/1/17-18	\$13,326,000	\$9,937,744	\$3,388,000	0.669	\$2,265,000	\$350,000	\$3,037,000
7/1/18-19	\$19,538,000	\$13,663,994	\$5,874,000	0.683	\$4,010,000	\$695,000	\$5,179,000
7/1/19-20	\$16,259,000	\$10,612,616	\$5,646,000	0.702	\$3,964,000	\$789,000	\$4,856,000
7/1/20-21	\$16,548,000	\$9,336,163	\$7,212,000	0.728	\$5,248,000	\$1,234,000	\$5,978,000
7/1/21-22	\$15,696,000	\$7,070,865	\$8,625,000	0.760	\$6,559,000	\$1,891,000	\$6,733,000
7/1/22-23	\$17,383,000	\$3,894,481	\$13,489,000	0.811	\$10,941,000	\$4,326,000	\$9,163,000
<b>Total</b>	<b>\$705,460,000</b>	<b>\$603,062,784</b>	<b>\$102,398,000</b>		<b>\$73,428,000</b>	<b>\$12,428,000</b>	<b>\$89,970,000</b>

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Selected Ultimate Losses	Paid Losses	Total Required Reserves	Discount Factor at 4.0%	Total Discounted Reserves at 4.0%	Projected Payments 7/1/2023 to 6/30/2024	Projected Payments after 6/30/2024
7/1/93-94	\$1,691,000	\$1,691,185	\$0	1.000	\$0	\$0	\$0
7/1/94-95	\$1,768,000	\$1,736,817	\$31,000	0.981	\$30,000	\$1,000	\$30,000
7/1/95-96	\$1,481,000	\$1,470,412	\$11,000	0.944	\$10,000	\$0	\$11,000
7/1/96-97	\$2,059,000	\$2,058,779	\$0	0.910	\$0	\$0	\$0
7/1/97-98	\$1,728,000	\$1,727,782	\$0	0.878	\$0	\$0	\$0
7/1/98-99	\$3,417,000	\$3,241,586	\$175,000	0.848	\$148,000	\$5,000	\$170,000
7/1/99-00	\$3,338,000	\$3,337,774	\$0	0.821	\$0	\$0	\$0
7/1/00-01	\$3,190,000	\$3,190,218	\$0	0.796	\$0	\$0	\$0
7/1/01-02	\$3,845,000	\$3,313,666	\$531,000	0.773	\$410,000	\$18,000	\$513,000
7/1/02-03	\$3,125,000	\$3,051,419	\$74,000	0.751	\$56,000	\$3,000	\$71,000
7/1/03-04	\$3,220,000	\$3,219,785	\$0	0.732	\$0	\$0	\$0
7/1/04-05	\$4,016,000	\$3,742,565	\$273,000	0.715	\$195,000	\$11,000	\$262,000
7/1/05-06	\$6,255,000	\$5,766,204	\$489,000	0.700	\$342,000	\$20,000	\$469,000
7/1/06-07	\$5,783,000	\$5,012,312	\$771,000	0.686	\$529,000	\$34,000	\$737,000
7/1/07-08	\$3,704,000	\$3,432,683	\$271,000	0.674	\$183,000	\$12,000	\$259,000
7/1/08-09	\$4,333,000	\$4,005,490	\$328,000	0.665	\$218,000	\$16,000	\$312,000
7/1/09-10	\$6,045,000	\$5,255,167	\$790,000	0.657	\$519,000	\$41,000	\$749,000
7/1/10-11	\$7,616,000	\$6,895,717	\$720,000	0.651	\$468,000	\$40,000	\$680,000
7/1/11-12	\$6,743,000	\$5,478,159	\$1,265,000	0.647	\$818,000	\$75,000	\$1,190,000
7/1/12-13	\$7,941,000	\$6,498,343	\$1,443,000	0.644	\$930,000	\$92,000	\$1,351,000
7/1/13-14	\$8,386,000	\$7,001,469	\$1,385,000	0.644	\$893,000	\$95,000	\$1,290,000
7/1/14-15	\$3,866,000	\$3,066,636	\$799,000	0.647	\$517,000	\$60,000	\$739,000
7/1/15-16	\$2,560,000	\$1,904,021	\$656,000	0.651	\$427,000	\$54,000	\$602,000
7/1/16-17	\$2,775,000	\$2,121,341	\$654,000	0.659	\$431,000	\$60,000	\$594,000
7/1/17-18	\$2,688,000	\$1,861,826	\$826,000	0.670	\$553,000	\$85,000	\$741,000
7/1/18-19	\$2,451,000	\$1,495,206	\$956,000	0.684	\$654,000	\$113,000	\$843,000
7/1/19-20	\$2,895,000	\$1,666,520	\$1,228,000	0.702	\$863,000	\$171,000	\$1,057,000
7/1/20-21	\$2,807,000	\$1,521,996	\$1,285,000	0.727	\$934,000	\$218,000	\$1,067,000
7/1/21-22	\$2,530,000	\$1,098,906	\$1,431,000	0.760	\$1,088,000	\$311,000	\$1,120,000
7/1/22-23	\$2,694,000	\$562,404	\$2,132,000	0.809	\$1,725,000	\$668,000	\$1,464,000
<b>Total</b>	<b>\$114,950,000</b>	<b>\$96,426,390</b>	<b>\$18,524,000</b>		<b>\$12,941,000</b>	<b>\$2,203,000</b>	<b>\$16,321,000</b>

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Selected Ultimate Losses	Paid Losses	Total Required Reserves	Discount Factor at 4.0%	Total Discounted Reserves at 4.0%	Projected Payments 7/1/2023 to 6/30/2024	Projected Payments after 6/30/2024
7/1/93-94	\$3,160,000	\$3,020,056	\$140,000	1.000	\$140,000	\$4,000	\$136,000
7/1/94-95	\$3,218,000	\$3,218,255	\$0	0.981	\$0	\$0	\$0
7/1/95-96	\$3,303,000	\$3,237,310	\$66,000	0.944	\$62,000	\$2,000	\$64,000
7/1/96-97	\$1,997,000	\$1,996,690	\$0	0.910	\$0	\$0	\$0
7/1/97-98	\$2,832,000	\$2,806,125	\$26,000	0.878	\$23,000	\$1,000	\$25,000
7/1/98-99	\$3,683,000	\$3,682,683	\$0	0.849	\$0	\$0	\$0
7/1/99-00	\$3,219,000	\$3,219,427	\$0	0.822	\$0	\$0	\$0
7/1/00-01	\$2,972,653	\$2,972,653	\$0	0.797	\$0	\$0	\$0
7/1/01-02	\$3,595,000	\$3,555,407	\$40,000	0.774	\$31,000	\$1,000	\$39,000
7/1/02-03	\$4,304,000	\$4,115,961	\$188,000	0.753	\$142,000	\$7,000	\$181,000
7/1/03-04	\$4,039,000	\$4,003,494	\$36,000	0.734	\$26,000	\$1,000	\$35,000
7/1/04-05	\$5,550,000	\$5,388,133	\$162,000	0.717	\$116,000	\$7,000	\$155,000
7/1/05-06	\$5,724,000	\$5,256,703	\$467,000	0.702	\$328,000	\$20,000	\$447,000
7/1/06-07	\$5,794,000	\$4,896,595	\$897,000	0.689	\$618,000	\$41,000	\$856,000
7/1/07-08	\$5,621,000	\$5,092,519	\$528,000	0.678	\$358,000	\$26,000	\$502,000
7/1/08-09	\$4,876,000	\$4,335,013	\$541,000	0.669	\$362,000	\$28,000	\$513,000
7/1/09-10	\$5,146,000	\$4,671,795	\$474,000	0.661	\$313,000	\$26,000	\$448,000
7/1/10-11	\$5,103,000	\$4,574,759	\$528,000	0.656	\$346,000	\$31,000	\$497,000
7/1/11-12	\$5,843,000	\$5,424,247	\$419,000	0.653	\$273,000	\$26,000	\$393,000
7/1/12-13	\$3,982,000	\$3,283,150	\$699,000	0.651	\$455,000	\$47,000	\$652,000
7/1/13-14	\$3,633,000	\$3,071,037	\$562,000	0.652	\$366,000	\$41,000	\$521,000
7/1/14-15	\$1,946,000	\$1,720,299	\$226,000	0.655	\$148,000	\$18,000	\$208,000
7/1/15-16	\$2,361,000	\$2,173,010	\$188,000	0.661	\$124,000	\$17,000	\$171,000
7/1/16-17	\$2,440,000	\$2,005,448	\$435,000	0.670	\$291,000	\$43,000	\$392,000
7/1/17-18	\$1,522,000	\$1,063,516	\$458,000	0.682	\$312,000	\$51,000	\$407,000
7/1/18-19	\$1,268,000	\$964,614	\$303,000	0.697	\$211,000	\$39,000	\$264,000
7/1/19-20	\$2,131,000	\$1,489,146	\$642,000	0.718	\$461,000	\$98,000	\$544,000
7/1/20-21	\$2,248,000	\$1,265,364	\$983,000	0.745	\$732,000	\$185,000	\$798,000
7/1/21-22	\$1,549,000	\$700,616	\$848,000	0.781	\$662,000	\$207,000	\$641,000
7/1/22-23	\$1,486,000	\$218,081	\$1,268,000	0.834	\$1,057,000	\$459,000	\$809,000
<b>Total</b>	<b>\$104,546,000</b>	<b>\$93,422,107</b>	<b>\$11,124,000</b>		<b>\$7,957,000</b>	<b>\$1,426,000</b>	<b>\$9,698,000</b>

**Calculation of Required Reserves  
 As of June 30, 2023  
 Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Selected Ultimate Losses	Paid Losses	Total Required Reserves	Discount Factor at 4.0%	Total Discounted Reserves at 4.0%	Projected Payments 7/1/2023 to 6/30/2024	Projected Payments after 6/30/2024
7/1/93-94	\$1,226,000	\$1,225,627	\$0	1.000	\$0	\$0	\$0
7/1/94-95	\$1,845,000	\$1,845,115	\$0	0.981	\$0	\$0	\$0
7/1/95-96	\$1,665,000	\$1,652,051	\$13,000	0.944	\$12,000	\$0	\$13,000
7/1/96-97	\$819,000	\$819,209	\$0	0.909	\$0	\$0	\$0
7/1/97-98	\$1,243,000	\$1,243,439	\$0	0.877	\$0	\$0	\$0
7/1/98-99	\$2,461,000	\$2,460,826	\$0	0.848	\$0	\$0	\$0
7/1/99-00	\$1,706,000	\$1,706,365	\$0	0.820	\$0	\$0	\$0
7/1/00-01	\$2,711,000	\$2,420,216	\$291,000	0.794	\$231,000	\$9,000	\$282,000
7/1/01-02	\$2,502,000	\$2,432,220	\$70,000	0.771	\$54,000	\$2,000	\$68,000
7/1/02-03	\$1,938,000	\$1,858,486	\$80,000	0.749	\$60,000	\$3,000	\$77,000
7/1/03-04	\$2,196,000	\$2,032,694	\$163,000	0.729	\$119,000	\$6,000	\$157,000
7/1/04-05	\$2,542,000	\$2,542,329	\$0	0.711	\$0	\$0	\$0
7/1/05-06	\$2,008,000	\$1,976,468	\$32,000	0.695	\$22,000	\$1,000	\$31,000
7/1/06-07	\$9,818,000	\$8,592,518	\$1,225,000	0.681	\$835,000	\$49,000	\$1,176,000
7/1/07-08	\$2,916,000	\$2,360,627	\$555,000	0.669	\$371,000	\$24,000	\$531,000
7/1/08-09	\$3,858,000	\$3,460,843	\$397,000	0.658	\$261,000	\$18,000	\$379,000
7/1/09-10	\$3,625,000	\$3,133,700	\$491,000	0.650	\$319,000	\$24,000	\$467,000
7/1/10-11	\$3,812,000	\$3,306,519	\$505,000	0.643	\$325,000	\$26,000	\$479,000
7/1/11-12	\$4,555,000	\$3,958,488	\$597,000	0.638	\$381,000	\$33,000	\$564,000
7/1/12-13	\$2,245,000	\$1,791,519	\$453,000	0.635	\$288,000	\$27,000	\$426,000
7/1/13-14	\$1,800,000	\$1,714,341	\$86,000	0.634	\$55,000	\$5,000	\$81,000
7/1/14-15	\$2,783,000	\$2,075,873	\$707,000	0.636	\$450,000	\$49,000	\$658,000
7/1/15-16	\$2,147,000	\$1,834,902	\$312,000	0.640	\$200,000	\$24,000	\$288,000
7/1/16-17	\$1,616,000	\$1,336,396	\$280,000	0.647	\$181,000	\$24,000	\$256,000
7/1/17-18	\$1,580,000	\$1,263,598	\$316,000	0.657	\$207,000	\$31,000	\$285,000
7/1/18-19	\$1,946,000	\$1,399,107	\$547,000	0.670	\$367,000	\$61,000	\$486,000
7/1/19-20	\$1,445,000	\$864,646	\$580,000	0.689	\$400,000	\$77,000	\$503,000
7/1/20-21	\$1,415,000	\$826,923	\$588,000	0.714	\$420,000	\$95,000	\$493,000
7/1/21-22	\$1,534,000	\$705,843	\$828,000	0.749	\$620,000	\$175,000	\$653,000
7/1/22-23	\$1,733,000	\$418,352	\$1,315,000	0.803	\$1,056,000	\$418,000	\$897,000
<b>Total</b>	<b>\$73,690,000</b>	<b>\$63,259,240</b>	<b>\$10,431,000</b>		<b>\$7,234,000</b>	<b>\$1,181,000</b>	<b>\$9,250,000</b>

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Paid Losses	(D) Total Required Reserves	(E) Discount Factor at 4.0%	(F) Total Discounted Reserves at 4.0%	(G) Projected Payments 7/1/2023 to 6/30/2024	(H) Projected Payments after 6/30/2024
7/1/93-94	\$3,128,000	\$3,127,684	\$0	1.000	\$0	\$0	\$0
7/1/94-95	\$1,828,000	\$1,827,846	\$0	0.981	\$0	\$0	\$0
7/1/95-96	\$3,122,000	\$3,105,721	\$16,000	0.944	\$15,000	\$0	\$16,000
7/1/96-97	\$1,624,000	\$1,600,402	\$24,000	0.910	\$22,000	\$1,000	\$23,000
7/1/97-98	\$2,182,000	\$2,082,147	\$100,000	0.878	\$88,000	\$3,000	\$97,000
7/1/98-99	\$1,827,000	\$1,826,851	\$0	0.849	\$0	\$0	\$0
7/1/99-00	\$3,616,000	\$3,616,019	\$0	0.821	\$0	\$0	\$0
7/1/00-01	\$2,322,000	\$2,322,003	\$0	0.796	\$0	\$0	\$0
7/1/01-02	\$1,587,000	\$1,567,053	\$20,000	0.773	\$15,000	\$1,000	\$19,000
7/1/02-03	\$3,075,000	\$2,975,941	\$99,000	0.752	\$74,000	\$4,000	\$95,000
7/1/03-04	\$2,039,000	\$1,914,766	\$124,000	0.733	\$91,000	\$5,000	\$119,000
7/1/04-05	\$5,588,000	\$4,737,835	\$850,000	0.716	\$609,000	\$34,000	\$816,000
7/1/05-06	\$2,023,000	\$1,812,883	\$210,000	0.701	\$147,000	\$9,000	\$201,000
7/1/06-07	\$3,532,000	\$2,735,854	\$796,000	0.688	\$548,000	\$36,000	\$760,000
7/1/07-08	\$2,205,000	\$1,896,132	\$309,000	0.676	\$209,000	\$15,000	\$294,000
7/1/08-09	\$1,765,000	\$1,725,158	\$40,000	0.667	\$27,000	\$2,000	\$38,000
7/1/09-10	\$3,176,000	\$2,793,241	\$383,000	0.659	\$252,000	\$20,000	\$363,000
7/1/10-11	\$3,004,000	\$2,711,723	\$292,000	0.653	\$191,000	\$16,000	\$276,000
7/1/11-12	\$4,381,000	\$3,840,229	\$541,000	0.650	\$351,000	\$33,000	\$508,000
7/1/12-13	\$3,524,000	\$3,064,262	\$460,000	0.648	\$298,000	\$30,000	\$430,000
7/1/13-14	\$3,780,000	\$2,929,350	\$851,000	0.648	\$551,000	\$60,000	\$791,000
7/1/14-15	\$2,365,000	\$1,967,996	\$397,000	0.651	\$258,000	\$30,000	\$367,000
7/1/15-16	\$1,913,000	\$1,485,260	\$428,000	0.655	\$281,000	\$36,000	\$392,000
7/1/16-17	\$3,216,000	\$2,105,261	\$1,111,000	0.663	\$737,000	\$104,000	\$1,007,000
7/1/17-18	\$1,425,000	\$1,026,471	\$399,000	0.674	\$269,000	\$42,000	\$357,000
7/1/18-19	\$4,209,000	\$2,902,471	\$1,307,000	0.688	\$899,000	\$158,000	\$1,149,000
7/1/19-20	\$2,069,000	\$1,271,780	\$797,000	0.707	\$563,000	\$113,000	\$684,000
7/1/20-21	\$2,489,000	\$1,319,139	\$1,170,000	0.731	\$855,000	\$200,000	\$970,000
7/1/21-22	\$2,620,000	\$1,039,036	\$1,581,000	0.763	\$1,206,000	\$343,000	\$1,238,000
7/1/22-23	\$2,344,000	\$297,735	\$2,046,000	0.809	\$1,656,000	\$626,000	\$1,420,000
<b>Total</b>	<b>\$81,978,000</b>	<b>\$67,628,249</b>	<b>\$14,351,000</b>		<b>\$10,212,000</b>	<b>\$1,921,000</b>	<b>\$12,430,000</b>

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Selected Ultimate Losses	Paid Losses	Total Required Reserves	Discount Factor at 4.0%	Total Discounted Reserves at 4.0%	Projected Payments 7/1/2023 to 6/30/2024	Projected Payments after 6/30/2024
7/1/93-94	\$1,198,127	\$1,198,127	\$0	1.000	\$0	\$0	\$0
7/1/94-95	\$1,575,448	\$1,575,482	\$0	0.981	\$0	\$0	\$0
7/1/95-96	\$2,517,749	\$2,517,749	\$0	0.944	\$0	\$0	\$0
7/1/96-97	\$2,375,000	\$1,702,652	\$672,000	0.909	\$611,000	\$18,000	\$654,000
7/1/97-98	\$1,262,727	\$1,262,727	\$0	0.878	\$0	\$0	\$0
7/1/98-99	\$831,226	\$831,226	\$0	0.848	\$0	\$0	\$0
7/1/99-00	\$2,416,000	\$2,322,359	\$94,000	0.820	\$77,000	\$3,000	\$91,000
7/1/00-01	\$1,835,135	\$1,835,135	\$0	0.795	\$0	\$0	\$0
7/1/01-02	\$1,849,000	\$1,641,142	\$208,000	0.771	\$160,000	\$7,000	\$201,000
7/1/02-03	\$1,290,330	\$1,290,330	\$0	0.750	\$0	\$0	\$0
7/1/03-04	\$1,958,000	\$1,922,339	\$36,000	0.730	\$26,000	\$1,000	\$35,000
7/1/04-05	\$1,737,000	\$1,316,449	\$421,000	0.712	\$300,000	\$16,000	\$405,000
7/1/05-06	\$1,528,140	\$1,528,140	\$0	0.697	\$0	\$0	\$0
7/1/06-07	\$1,697,000	\$1,570,387	\$127,000	0.683	\$87,000	\$5,000	\$122,000
7/1/07-08	\$1,019,471	\$1,019,471	\$0	0.670	\$0	\$0	\$0
7/1/08-09	\$1,353,000	\$1,327,634	\$25,000	0.660	\$17,000	\$1,000	\$24,000
7/1/09-10	\$2,101,000	\$1,803,466	\$298,000	0.652	\$194,000	\$15,000	\$283,000
7/1/10-11	\$1,749,000	\$1,555,854	\$193,000	0.645	\$125,000	\$10,000	\$183,000
7/1/11-12	\$1,509,000	\$1,301,143	\$208,000	0.641	\$133,000	\$12,000	\$196,000
7/1/12-13	\$2,691,000	\$2,076,602	\$614,000	0.638	\$392,000	\$37,000	\$577,000
7/1/13-14	\$1,977,000	\$1,664,278	\$313,000	0.637	\$200,000	\$20,000	\$293,000
7/1/14-15	\$1,142,000	\$800,423	\$342,000	0.639	\$219,000	\$24,000	\$318,000
7/1/15-16	\$1,608,000	\$1,290,781	\$317,000	0.643	\$204,000	\$25,000	\$292,000
7/1/16-17	\$683,000	\$561,694	\$121,000	0.651	\$79,000	\$11,000	\$110,000
7/1/17-18	\$1,318,000	\$1,006,620	\$311,000	0.661	\$205,000	\$31,000	\$280,000
7/1/18-19	\$1,725,000	\$1,272,980	\$452,000	0.675	\$305,000	\$52,000	\$400,000
7/1/19-20	\$1,829,000	\$1,417,525	\$411,000	0.694	\$285,000	\$55,000	\$356,000
7/1/20-21	\$1,505,000	\$930,098	\$575,000	0.719	\$413,000	\$95,000	\$480,000
7/1/21-22	\$1,484,000	\$677,947	\$806,000	0.753	\$607,000	\$173,000	\$633,000
7/1/22-23	\$1,974,000	\$535,716	\$1,438,000	0.806	\$1,160,000	\$460,000	\$978,000
<b>Total</b>	<b>\$49,738,000</b>	<b>\$41,756,477</b>	<b>\$7,982,000</b>		<b>\$5,799,000</b>	<b>\$1,071,000</b>	<b>\$6,911,000</b>

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Paid Losses	(D) Total Required Reserves	(E) Discount Factor at 4.0%	(F) Total Discounted Reserves at 4.0%	(G) Projected Payments 7/1/2023 to 6/30/2024	(H) Projected Payments after 6/30/2024
7/1/1969 - 6/30/1993	\$57,168,000	\$55,506,603	\$1,661,000	1.000	\$1,661,000	\$43,000	\$1,618,000
7/1/93-94	\$5,452,000	\$5,230,667	\$221,000	1.000	\$221,000	\$6,000	\$215,000
7/1/94-95	\$5,306,000	\$5,125,384	\$181,000	0.981	\$177,000	\$5,000	\$176,000
7/1/95-96	\$3,566,000	\$3,465,474	\$101,000	0.944	\$95,000	\$3,000	\$98,000
7/1/96-97	\$4,258,000	\$3,915,679	\$342,000	0.910	\$311,000	\$10,000	\$332,000
7/1/97-98	\$6,618,000	\$6,390,818	\$227,000	0.878	\$199,000	\$7,000	\$220,000
7/1/98-99	\$6,377,000	\$5,943,958	\$433,000	0.848	\$367,000	\$13,000	\$420,000
7/1/99-00	\$9,050,000	\$7,995,257	\$1,055,000	0.821	\$866,000	\$33,000	\$1,022,000
7/1/00-01	\$8,551,000	\$7,833,039	\$718,000	0.795	\$571,000	\$24,000	\$694,000
7/1/01-02	\$8,432,000	\$8,000,242	\$432,000	0.772	\$334,000	\$15,000	\$417,000
7/1/02-03	\$8,517,000	\$7,852,788	\$664,000	0.751	\$499,000	\$24,000	\$640,000
7/1/03-04	\$11,055,000	\$9,788,717	\$1,266,000	0.732	\$926,000	\$47,000	\$1,219,000
7/1/04-05	\$9,822,000	\$7,841,222	\$1,981,000	0.714	\$1,415,000	\$77,000	\$1,904,000
7/1/05-06	\$5,211,000	\$4,917,347	\$294,000	0.699	\$205,000	\$12,000	\$282,000
7/1/06-07	\$10,040,000	\$8,410,568	\$1,629,000	0.685	\$1,116,000	\$70,000	\$1,559,000
7/1/07-08	\$11,716,000	\$10,088,270	\$1,628,000	0.674	\$1,096,000	\$74,000	\$1,554,000
7/1/08-09	\$7,491,000	\$6,602,965	\$888,000	0.664	\$589,000	\$43,000	\$845,000
7/1/09-10	\$11,797,000	\$10,204,953	\$1,592,000	0.656	\$1,044,000	\$81,000	\$1,511,000
7/1/10-11	\$9,611,000	\$8,257,823	\$1,353,000	0.649	\$879,000	\$74,000	\$1,279,000
7/1/11-12	\$9,612,000	\$8,322,203	\$1,290,000	0.645	\$832,000	\$75,000	\$1,215,000
7/1/12-13	\$10,286,000	\$8,622,658	\$1,663,000	0.643	\$1,069,000	\$104,000	\$1,559,000
7/1/13-14	\$8,264,000	\$6,924,467	\$1,340,000	0.643	\$861,000	\$91,000	\$1,249,000
7/1/14-15	\$3,890,000	\$3,266,684	\$623,000	0.645	\$402,000	\$46,000	\$577,000
7/1/15-16	\$4,927,000	\$4,084,957	\$842,000	0.650	\$547,000	\$69,000	\$773,000
7/1/16-17	\$5,704,000	\$4,545,893	\$1,158,000	0.657	\$761,000	\$105,000	\$1,053,000
7/1/17-18	\$4,793,000	\$3,715,714	\$1,077,000	0.668	\$719,000	\$110,000	\$967,000
7/1/18-19	\$7,939,000	\$5,629,617	\$2,309,000	0.682	\$1,574,000	\$272,000	\$2,037,000
7/1/19-20	\$5,890,000	\$3,902,999	\$1,987,000	0.701	\$1,392,000	\$275,000	\$1,712,000
7/1/20-21	\$6,084,000	\$3,472,643	\$2,611,000	0.725	\$1,894,000	\$441,000	\$2,170,000
7/1/21-22	\$5,979,000	\$2,848,516	\$3,130,000	0.759	\$2,376,000	\$682,000	\$2,448,000
7/1/22-23	\$7,152,000	\$1,862,193	\$5,290,000	0.810	\$4,287,000	\$1,695,000	\$3,595,000
<b>Total</b>	<b>\$280,558,000</b>	<b>\$240,570,320</b>	<b>\$39,986,000</b>		<b>\$29,285,000</b>	<b>\$4,626,000</b>	<b>\$35,360,000</b>



**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
Prior	\$56,830,933	\$56,855,208	\$56,843,694	0%	\$57,139,000	\$57,168,000	0%
7/1/93-94	\$15,815,295	\$15,816,745	\$15,815,295	0%	\$15,833,127	\$15,855,127	0%
7/1/94-95	\$15,491,607	\$15,493,087	\$15,498,641	0%	\$15,509,448	\$15,540,448	0%
7/1/95-96	\$15,616,762	\$15,619,875	\$15,601,965	0%	\$15,650,495	\$15,654,749	0%
7/1/96-97	\$13,085,977	\$13,089,009	\$13,085,977	0%	\$13,118,793	\$13,132,000	0%
7/1/97-98	\$15,825,917	\$15,829,812	\$15,789,471	0%	\$15,868,727	\$15,865,727	0%
7/1/98-99	\$18,550,951	\$18,555,188	\$18,515,391	0%	\$18,596,226	\$18,596,226	0%
7/1/99-00	\$23,283,710	\$23,288,390	\$23,243,203	0%	\$23,332,454	\$23,345,000	0%
7/1/00-01	\$21,535,349	\$21,542,381	\$21,494,370	0%	\$21,606,135	\$21,581,788	0%
7/1/01-02	\$21,697,149	\$21,704,892	\$21,645,636	0%	\$21,769,965	\$21,810,000	0%
7/1/02-03	\$21,913,971	\$21,922,283	\$22,025,544	0%	\$21,992,330	\$22,249,330	1%
7/1/03-04	\$24,236,225	\$24,251,967	\$24,247,865	0%	\$24,375,065	\$24,507,000	1%
7/1/04-05	\$28,932,016	\$28,964,217	\$28,941,371	0%	\$29,186,185	\$29,255,000	0%
7/1/05-06	\$22,682,990	\$22,738,484	\$22,433,726	-1%	\$23,101,140	\$22,749,140	-2%
7/1/06-07	\$36,110,050	\$36,208,450	\$36,039,201	0%	\$36,842,837	\$36,664,000	0%
7/1/07-08	\$26,737,413	\$26,827,869	\$26,634,931	-1%	\$27,393,471	\$27,181,471	-1%
7/1/08-09	\$23,670,989	\$23,785,753	\$22,943,029	-4%	\$24,461,000	\$23,676,000	-3%
7/1/09-10	\$30,457,330	\$30,646,093	\$30,725,911	0%	\$31,694,000	\$31,890,000	1%
7/1/10-11	\$29,640,376	\$29,879,919	\$29,596,089	-1%	\$31,156,000	\$30,895,000	-1%
7/1/11-12	\$31,055,470	\$31,358,808	\$30,995,350	-1%	\$32,909,000	\$32,643,000	-1%
7/1/12-13	\$28,786,552	\$29,126,937	\$29,018,204	0%	\$30,781,000	\$30,669,000	0%
7/1/13-14	\$25,758,342	\$26,159,539	\$25,875,126	-1%	\$28,041,000	\$27,840,000	-1%
7/1/14-15	\$14,567,465	\$14,911,075	\$14,504,223	-3%	\$16,423,000	\$15,992,000	-3%
7/1/15-16	\$13,650,375	\$14,042,762	\$13,652,707	-3%	\$15,701,000	\$15,516,000	-1%
7/1/16-17	\$13,660,076	\$14,157,262	\$14,169,891	0%	\$16,178,000	\$16,434,000	2%
7/1/17-18	\$10,546,476	\$11,233,188	\$10,891,577	-3%	\$13,930,000	\$13,326,000	-4%
7/1/18-19	\$15,298,410	\$16,354,679	\$15,642,971	-4%	\$20,374,000	\$19,538,000	-4%
7/1/19-20	\$11,621,252	\$12,902,463	\$11,717,684	-9%	\$17,655,000	\$16,259,000	-8%
7/1/20-21	\$10,220,153	\$11,778,079	\$11,185,040	-5%	\$17,524,000	\$16,548,000	-6%
7/1/21-22	\$8,693,299	\$10,573,974	\$8,790,019	-17%	\$17,673,000	\$15,696,000	-11%
7/1/22-23	--	\$10,918,419	\$8,472,574	-22%	\$19,351,000	\$17,383,000	-10%
<b>Total</b>	<b>\$645,972,881</b>	<b>\$666,536,805</b>	<b>\$656,036,675</b>	<b>-1.6%</b>	<b>\$715,166,000</b>	<b>\$705,460,000</b>	<b>-1.4%</b>
		<i>Variance in Incurred</i>	<b>(\$10,500,130)</b>		<i>Change in Ultimates</i>	<b>(\$9,706,000)</b>	

Comparison of Results with Report Valued as of June 30, 2022  
Workers Compensation

(A) Accident Period	(B) Paid Losses 6/30/2022	(C) Expected Paid Losses 6/30/2023	(D) Actual Paid Losses 6/30/2023	(E) Percent Difference	(F) Estimated Ultimate Losses 6/30/2022	(G) Estimated Ultimate Losses 6/30/2023	(H) Percent Difference
Prior	\$55,327,394	\$55,375,269	\$55,506,603	0%	\$57,139,000	\$57,168,000	0%
7/1/93-94	\$15,450,349	\$15,460,810	\$15,493,347	0%	\$15,833,127	\$15,855,127	0%
7/1/94-95	\$15,292,163	\$15,298,272	\$15,328,900	0%	\$15,509,448	\$15,540,448	0%
7/1/95-96	\$15,301,245	\$15,311,452	\$15,448,718	1%	\$15,650,495	\$15,654,749	0%
7/1/96-97	\$12,038,436	\$12,070,663	\$12,093,411	0%	\$13,118,793	\$13,132,000	0%
7/1/97-98	\$15,487,360	\$15,499,379	\$15,513,038	0%	\$15,868,727	\$15,865,727	0%
7/1/98-99	\$17,944,782	\$17,965,827	\$17,987,130	0%	\$18,596,226	\$18,596,226	0%
7/1/99-00	\$22,059,598	\$22,102,443	\$22,197,200	0%	\$23,332,454	\$23,345,000	0%
7/1/00-01	\$20,501,091	\$20,539,467	\$20,573,265	0%	\$21,606,135	\$21,581,788	0%
7/1/01-02	\$20,443,601	\$20,491,658	\$20,509,730	0%	\$21,769,965	\$21,810,000	0%
7/1/02-03	\$21,015,728	\$21,053,077	\$21,144,925	0%	\$21,992,330	\$22,249,330	1%
7/1/03-04	\$22,754,323	\$22,819,226	\$22,881,795	0%	\$24,375,065	\$24,507,000	1%
7/1/04-05	\$25,161,172	\$25,330,838	\$25,568,532	1%	\$29,186,185	\$29,255,000	0%
7/1/05-06	\$21,151,354	\$21,237,684	\$21,257,744	0%	\$23,101,140	\$22,749,140	-2%
7/1/06-07	\$30,435,222	\$30,732,717	\$31,218,235	2%	\$36,842,837	\$36,664,000	0%
7/1/07-08	\$23,685,592	\$23,868,303	\$23,889,703	0%	\$27,393,471	\$27,181,471	-1%
7/1/08-09	\$21,402,538	\$21,562,727	\$21,457,103	0%	\$24,461,000	\$23,676,000	-3%
7/1/09-10	\$27,545,690	\$27,776,941	\$27,862,322	0%	\$31,694,000	\$31,890,000	1%
7/1/10-11	\$27,065,794	\$27,309,229	\$27,302,395	0%	\$31,156,000	\$30,895,000	-1%
7/1/11-12	\$28,095,933	\$28,404,840	\$28,324,470	0%	\$32,909,000	\$32,643,000	-1%
7/1/12-13	\$24,910,946	\$25,319,534	\$25,336,534	0%	\$30,781,000	\$30,669,000	0%
7/1/13-14	\$22,948,776	\$23,337,514	\$23,304,943	0%	\$28,041,000	\$27,840,000	-1%
7/1/14-15	\$12,745,074	\$13,051,640	\$12,897,912	-1%	\$16,423,000	\$15,992,000	-3%
7/1/15-16	\$12,571,399	\$12,861,838	\$12,772,931	-1%	\$15,701,000	\$15,516,000	-1%
7/1/16-17	\$12,131,844	\$12,557,502	\$12,676,034	1%	\$16,178,000	\$16,434,000	2%
7/1/17-18	\$9,592,033	\$10,114,300	\$9,937,744	-2%	\$13,930,000	\$13,326,000	-4%
7/1/18-19	\$12,728,214	\$13,804,770	\$13,663,994	-1%	\$20,374,000	\$19,538,000	-4%
7/1/19-20	\$9,841,805	\$11,178,269	\$10,612,616	-5%	\$17,655,000	\$16,259,000	-8%
7/1/20-21	\$7,659,447	\$9,834,068	\$9,336,163	-5%	\$17,524,000	\$16,548,000	-6%
7/1/21-22	\$3,613,304	\$8,038,793	\$7,070,865	-12%	\$17,673,000	\$15,696,000	-11%
7/1/22-23	--	\$4,311,470	\$3,894,481	-10%	\$19,351,000	\$17,383,000	-10%
<b>Total</b>	<b>\$586,902,206</b>	<b>\$604,620,520</b>	<b>\$603,062,784</b>	<b>-0.3%</b>	<b>\$715,166,000</b>	<b>\$705,460,000</b>	<b>-1.4%</b>
		<i>Variance in Paid</i>	<b>(\$1,557,736)</b>		<i>Change in Ultimates</i>	<b>(\$9,706,000)</b>	

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,691,185	\$1,691,166	\$1,691,185	0%	\$1,691,000	\$1,691,000	0%
7/1/94-95	\$1,760,907	\$1,760,917	\$1,760,907	0%	\$1,761,000	\$1,768,000	0%
7/1/95-96	\$1,474,934	\$1,474,941	\$1,474,934	0%	\$1,475,000	\$1,481,000	0%
7/1/96-97	\$2,058,779	\$2,058,804	\$2,058,779	0%	\$2,059,000	\$2,059,000	0%
7/1/97-98	\$1,755,612	\$1,755,656	\$1,727,782	-2%	\$1,756,000	\$1,728,000	-2%
7/1/98-99	\$3,395,867	\$3,395,882	\$3,395,867	0%	\$3,396,000	\$3,417,000	1%
7/1/99-00	\$3,410,688	\$3,410,725	\$3,337,774	-2%	\$3,411,000	\$3,338,000	-2%
7/1/00-01	\$3,190,218	\$3,190,191	\$3,190,218	0%	\$3,190,000	\$3,190,000	0%
7/1/01-02	\$3,813,017	\$3,813,015	\$3,810,687	0%	\$3,813,000	\$3,845,000	1%
7/1/02-03	\$3,116,623	\$3,116,671	\$3,092,297	-1%	\$3,117,000	\$3,125,000	0%
7/1/03-04	\$3,219,785	\$3,219,813	\$3,219,785	0%	\$3,220,000	\$3,220,000	0%
7/1/04-05	\$4,021,538	\$4,021,600	\$3,960,706	-2%	\$4,022,000	\$4,016,000	0%
7/1/05-06	\$6,276,936	\$6,296,006	\$6,154,983	-2%	\$6,415,000	\$6,255,000	-2%
7/1/06-07	\$5,659,494	\$5,680,284	\$5,675,078	0%	\$5,806,000	\$5,783,000	0%
7/1/07-08	\$3,706,443	\$3,722,858	\$3,622,959	-3%	\$3,819,000	\$3,704,000	-3%
7/1/08-09	\$4,472,522	\$4,496,580	\$4,222,129	-6%	\$4,633,000	\$4,333,000	-6%
7/1/09-10	\$5,800,333	\$5,838,502	\$5,809,304	-1%	\$6,048,000	\$6,045,000	0%
7/1/10-11	\$7,543,474	\$7,604,549	\$7,341,394	-3%	\$7,929,000	\$7,616,000	-4%
7/1/11-12	\$6,530,805	\$6,596,445	\$6,452,250	-2%	\$6,934,000	\$6,743,000	-3%
7/1/12-13	\$7,522,233	\$7,595,425	\$7,639,489	1%	\$7,960,000	\$7,941,000	0%
7/1/13-14	\$7,761,599	\$7,884,128	\$7,716,495	-2%	\$8,476,000	\$8,386,000	-1%
7/1/14-15	\$3,662,077	\$3,735,307	\$3,562,672	-5%	\$4,079,000	\$3,866,000	-5%
7/1/15-16	\$2,180,129	\$2,270,894	\$2,163,339	-5%	\$2,686,000	\$2,560,000	-5%
7/1/16-17	\$2,307,325	\$2,424,867	\$2,257,419	-7%	\$2,951,000	\$2,775,000	-6%
7/1/17-18	\$2,001,694	\$2,158,717	\$2,037,725	-6%	\$2,851,000	\$2,688,000	-6%
7/1/18-19	\$1,671,008	\$1,850,145	\$1,798,311	-3%	\$2,635,000	\$2,451,000	-7%
7/1/19-20	\$1,877,110	\$2,089,553	\$1,974,315	-6%	\$3,026,000	\$2,895,000	-4%
7/1/20-21	\$1,643,270	\$1,868,823	\$1,852,691	-1%	\$2,886,000	\$2,807,000	-3%
7/1/21-22	\$1,183,818	\$1,431,715	\$1,447,079	1%	\$2,601,000	\$2,530,000	-3%
7/1/22-23	--	\$1,762,619	\$1,216,807	-31%	\$3,028,000	\$2,694,000	-11%
<b>Total</b>	<b>\$104,709,422</b>	<b>\$108,216,798</b>	<b>\$105,665,359</b>	<b>-2.4%</b>	<b>\$117,674,000</b>	<b>\$114,950,000</b>	<b>-2.3%</b>
		<i>Variance in Incurred</i>	<b>(\$2,551,439)</b>		<i>Change in Ultimates</i>	<b>(\$2,724,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(I) Accident Period	(J) Paid Losses 6/30/2022	(K) Expected Paid Losses 6/30/2023	(L) Actual Paid Losses 6/30/2023	(M) Percent Difference	(N) Estimated Ultimate Losses 6/30/2022	(O) Estimated Ultimate Losses 6/30/2023	(P) Percent Difference
7/1/93-94	\$1,691,185	\$1,691,180	\$1,691,185	0%	\$1,691,000	\$1,691,000	0%
7/1/94-95	\$1,736,626	\$1,737,302	\$1,736,817	0%	\$1,761,000	\$1,768,000	0%
7/1/95-96	\$1,469,105	\$1,469,274	\$1,470,412	0%	\$1,475,000	\$1,481,000	0%
7/1/96-97	\$2,058,779	\$2,058,786	\$2,058,779	0%	\$2,059,000	\$2,059,000	0%
7/1/97-98	\$1,727,617	\$1,728,491	\$1,727,782	0%	\$1,756,000	\$1,728,000	-2%
7/1/98-99	\$3,229,401	\$3,234,722	\$3,241,586	0%	\$3,396,000	\$3,417,000	1%
7/1/99-00	\$3,392,781	\$3,393,386	\$3,337,774	-2%	\$3,411,000	\$3,338,000	-2%
7/1/00-01	\$3,190,218	\$3,190,210	\$3,190,218	0%	\$3,190,000	\$3,190,000	0%
7/1/01-02	\$3,285,601	\$3,304,610	\$3,313,666	0%	\$3,813,000	\$3,845,000	1%
7/1/02-03	\$3,049,287	\$3,051,837	\$3,051,419	0%	\$3,117,000	\$3,125,000	0%
7/1/03-04	\$3,219,785	\$3,219,793	\$3,219,785	0%	\$3,220,000	\$3,220,000	0%
7/1/04-05	\$3,494,258	\$3,516,096	\$3,742,565	6%	\$4,022,000	\$4,016,000	0%
7/1/05-06	\$5,755,328	\$5,784,044	\$5,766,204	0%	\$6,415,000	\$6,255,000	-2%
7/1/06-07	\$4,966,125	\$5,004,691	\$5,012,312	0%	\$5,806,000	\$5,783,000	0%
7/1/07-08	\$3,423,885	\$3,443,083	\$3,432,683	0%	\$3,819,000	\$3,704,000	-3%
7/1/08-09	\$3,996,651	\$4,029,484	\$4,005,490	-1%	\$4,633,000	\$4,333,000	-6%
7/1/09-10	\$5,226,985	\$5,272,139	\$5,255,167	0%	\$6,048,000	\$6,045,000	0%
7/1/10-11	\$6,785,950	\$6,853,263	\$6,895,717	1%	\$7,929,000	\$7,616,000	-4%
7/1/11-12	\$5,447,070	\$5,541,321	\$5,478,159	-1%	\$6,934,000	\$6,743,000	-3%
7/1/12-13	\$6,408,602	\$6,515,091	\$6,498,343	0%	\$7,960,000	\$7,941,000	0%
7/1/13-14	\$6,967,816	\$7,080,708	\$7,001,469	-1%	\$8,476,000	\$8,386,000	-1%
7/1/14-15	\$3,049,925	\$3,134,648	\$3,066,636	-2%	\$4,079,000	\$3,866,000	-5%
7/1/15-16	\$1,890,204	\$1,963,035	\$1,904,021	-3%	\$2,686,000	\$2,560,000	-5%
7/1/16-17	\$2,093,500	\$2,181,897	\$2,121,341	-3%	\$2,951,000	\$2,775,000	-6%
7/1/17-18	\$1,843,889	\$1,962,827	\$1,861,826	-5%	\$2,851,000	\$2,688,000	-6%
7/1/18-19	\$1,382,972	\$1,556,332	\$1,495,206	-4%	\$2,635,000	\$2,451,000	-7%
7/1/19-20	\$1,370,761	\$1,648,694	\$1,666,520	1%	\$3,026,000	\$2,895,000	-4%
7/1/20-21	\$1,168,373	\$1,537,533	\$1,521,996	-1%	\$2,886,000	\$2,807,000	-3%
7/1/21-22	\$542,572	\$1,175,451	\$1,098,906	-7%	\$2,601,000	\$2,530,000	-3%
7/1/22-23	--	\$711,289	\$562,404	-21%	\$3,028,000	\$2,694,000	-11%
<b>Total</b>	<b>\$93,865,252</b>	<b>\$96,991,215</b>	<b>\$96,426,390</b>	<b>-0.6%</b>	<b>\$117,674,000</b>	<b>\$114,950,000</b>	<b>-2.3%</b>
		<i>Variance in Paid</i>	<i>(\$564,825)</i>		<i>Change in Ultimates</i>	<i>(\$2,724,000)</i>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,153,839	\$3,153,856	\$3,153,839	0%	\$3,154,000	\$3,160,000	0%
7/1/94-95	\$3,218,255	\$3,218,228	\$3,218,255	0%	\$3,218,000	\$3,218,000	0%
7/1/95-96	\$3,295,009	\$3,295,008	\$3,295,009	0%	\$3,295,000	\$3,303,000	0%
7/1/96-97	\$1,996,690	\$1,996,725	\$1,996,690	0%	\$1,997,000	\$1,997,000	0%
7/1/97-98	\$2,822,547	\$2,822,600	\$2,822,547	0%	\$2,823,000	\$2,832,000	0%
7/1/98-99	\$3,682,683	\$3,682,721	\$3,682,683	0%	\$3,683,000	\$3,683,000	0%
7/1/99-00	\$3,219,427	\$3,219,375	\$3,219,427	0%	\$3,219,000	\$3,219,000	0%
7/1/00-01	\$2,970,607	\$2,970,656	\$2,972,653	0%	\$2,971,000	\$2,972,653	0%
7/1/01-02	\$3,574,270	\$3,574,235	\$3,574,270	0%	\$3,574,000	\$3,595,000	1%
7/1/02-03	\$4,140,285	\$4,140,247	\$4,276,184	3%	\$4,140,000	\$4,304,000	4%
7/1/03-04	\$4,003,216	\$4,003,187	\$4,008,216	0%	\$4,003,000	\$4,039,000	1%
7/1/04-05	\$5,489,015	\$5,497,672	\$5,489,015	0%	\$5,550,000	\$5,550,000	0%
7/1/05-06	\$5,663,105	\$5,673,947	\$5,663,105	0%	\$5,737,000	\$5,724,000	0%
7/1/06-07	\$5,624,197	\$5,637,372	\$5,721,488	1%	\$5,711,000	\$5,794,000	1%
7/1/07-08	\$5,487,527	\$5,503,316	\$5,536,240	1%	\$5,588,000	\$5,621,000	1%
7/1/08-09	\$5,119,998	\$5,138,402	\$4,770,963	-7%	\$5,233,000	\$4,876,000	-7%
7/1/09-10	\$4,928,383	\$4,969,704	\$4,930,883	-1%	\$5,173,000	\$5,146,000	-1%
7/1/10-11	\$4,962,475	\$4,990,621	\$4,967,475	0%	\$5,123,000	\$5,103,000	0%
7/1/11-12	\$5,591,497	\$5,632,200	\$5,653,292	0%	\$5,815,000	\$5,843,000	0%
7/1/12-13	\$3,713,425	\$3,748,352	\$3,822,577	2%	\$3,898,000	\$3,982,000	2%
7/1/13-14	\$3,441,361	\$3,483,760	\$3,479,855	0%	\$3,657,000	\$3,633,000	-1%
7/1/14-15	\$1,777,559	\$1,831,351	\$1,720,299	-6%	\$2,041,000	\$1,946,000	-5%
7/1/15-16	\$2,115,617	\$2,162,077	\$2,177,584	1%	\$2,335,000	\$2,361,000	1%
7/1/16-17	\$2,078,351	\$2,140,706	\$2,182,426	2%	\$2,363,000	\$2,440,000	3%
7/1/17-18	\$1,301,347	\$1,389,231	\$1,306,847	-6%	\$1,691,000	\$1,522,000	-10%
7/1/18-19	\$878,929	\$975,285	\$1,035,461	6%	\$1,297,000	\$1,268,000	-2%
7/1/19-20	\$1,654,302	\$1,793,161	\$1,658,751	-7%	\$2,251,000	\$2,131,000	-5%
7/1/20-21	\$1,655,538	\$1,826,072	\$1,717,408	-6%	\$2,395,000	\$2,248,000	-6%
7/1/21-22	\$899,477	\$1,121,771	\$832,470	-26%	\$1,900,000	\$1,549,000	-18%
7/1/22-23	--	\$1,245,180	\$436,341	-65%	\$2,227,000	\$1,486,000	-33%
<b>Total</b>	<b>\$98,458,931</b>	<b>\$100,837,015</b>	<b>\$99,322,252</b>	<b>-1.5%</b>	<b>\$106,062,000</b>	<b>\$104,546,000</b>	<b>-1.4%</b>
		<b>Variance in Incurred</b>	<b>(\$1,514,763)</b>		<b>Change in Ultimates</b>	<b>(\$1,516,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,016,925	\$3,020,687	\$3,020,056	0%	\$3,154,000	\$3,160,000	0%
7/1/94-95	\$3,218,255	\$3,218,248	\$3,218,255	0%	\$3,218,000	\$3,218,000	0%
7/1/95-96	\$3,236,165	\$3,237,892	\$3,237,310	0%	\$3,295,000	\$3,303,000	0%
7/1/96-97	\$1,996,690	\$1,996,699	\$1,996,690	0%	\$1,997,000	\$1,997,000	0%
7/1/97-98	\$2,804,458	\$2,805,043	\$2,806,125	0%	\$2,823,000	\$2,832,000	0%
7/1/98-99	\$3,682,683	\$3,682,694	\$3,682,683	0%	\$3,683,000	\$3,683,000	0%
7/1/99-00	\$3,219,427	\$3,219,412	\$3,219,427	0%	\$3,219,000	\$3,219,000	0%
7/1/00-01	\$2,970,607	\$2,970,621	\$2,972,653	0%	\$2,971,000	\$2,972,653	0%
7/1/01-02	\$3,554,404	\$3,555,130	\$3,555,407	0%	\$3,574,000	\$3,595,000	1%
7/1/02-03	\$4,099,184	\$4,100,767	\$4,115,961	0%	\$4,140,000	\$4,304,000	4%
7/1/03-04	\$4,003,216	\$4,003,207	\$4,003,494	0%	\$4,003,000	\$4,039,000	1%
7/1/04-05	\$5,382,808	\$5,389,950	\$5,388,133	0%	\$5,550,000	\$5,550,000	0%
7/1/05-06	\$5,240,375	\$5,262,723	\$5,256,703	0%	\$5,737,000	\$5,724,000	0%
7/1/06-07	\$4,862,784	\$4,903,109	\$4,896,595	0%	\$5,711,000	\$5,794,000	1%
7/1/07-08	\$5,060,765	\$5,087,334	\$5,092,519	0%	\$5,588,000	\$5,621,000	1%
7/1/08-09	\$4,326,443	\$4,375,048	\$4,335,013	-1%	\$5,233,000	\$4,876,000	-7%
7/1/09-10	\$4,661,619	\$4,690,908	\$4,671,795	0%	\$5,173,000	\$5,146,000	-1%
7/1/10-11	\$4,562,584	\$4,597,036	\$4,574,759	0%	\$5,123,000	\$5,103,000	0%
7/1/11-12	\$5,313,783	\$5,347,042	\$5,424,247	1%	\$5,815,000	\$5,843,000	0%
7/1/12-13	\$3,117,040	\$3,173,340	\$3,283,150	3%	\$3,898,000	\$3,982,000	2%
7/1/13-14	\$3,034,655	\$3,083,767	\$3,071,037	0%	\$3,657,000	\$3,633,000	-1%
7/1/14-15	\$1,620,042	\$1,656,744	\$1,720,299	4%	\$2,041,000	\$1,946,000	-5%
7/1/15-16	\$2,114,042	\$2,135,575	\$2,173,010	2%	\$2,335,000	\$2,361,000	1%
7/1/16-17	\$1,873,180	\$1,927,313	\$2,005,448	4%	\$2,363,000	\$2,440,000	3%
7/1/17-18	\$1,051,368	\$1,133,054	\$1,063,516	-6%	\$1,691,000	\$1,522,000	-10%
7/1/18-19	\$874,162	\$938,204	\$964,614	3%	\$1,297,000	\$1,268,000	-2%
7/1/19-20	\$1,439,268	\$1,590,788	\$1,489,146	-6%	\$2,251,000	\$2,131,000	-5%
7/1/20-21	\$990,881	\$1,334,847	\$1,265,364	-5%	\$2,395,000	\$2,248,000	-6%
7/1/21-22	\$326,207	\$904,894	\$700,616	-23%	\$1,900,000	\$1,549,000	-18%
7/1/22-23	--	\$555,655	\$218,081	-61%	\$2,227,000	\$1,486,000	-33%
<b>Total</b>	<b>\$91,654,023</b>	<b>\$93,897,732</b>	<b>\$93,422,107</b>	<b>-0.5%</b>	<b>\$106,062,000</b>	<b>\$104,546,000</b>	<b>-1.4%</b>
		<b>Variance in Paid</b>	<b>(\$475,625)</b>		<b>Change in Ultimates</b>	<b>(\$1,516,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,225,627	\$1,225,660	\$1,225,627	0%	\$1,226,000	\$1,226,000	0%
7/1/94-95	\$1,845,115	\$1,845,105	\$1,845,115	0%	\$1,845,000	\$1,845,000	0%
7/1/95-96	\$1,657,871	\$1,657,883	\$1,657,871	0%	\$1,658,000	\$1,665,000	0%
7/1/96-97	\$819,209	\$819,189	\$819,209	0%	\$819,000	\$819,000	0%
7/1/97-98	\$1,243,439	\$1,243,396	\$1,243,439	0%	\$1,243,000	\$1,243,000	0%
7/1/98-99	\$2,460,826	\$2,460,843	\$2,460,826	0%	\$2,461,000	\$2,461,000	0%
7/1/99-00	\$1,706,365	\$1,706,327	\$1,706,365	0%	\$1,706,000	\$1,706,000	0%
7/1/00-01	\$2,737,047	\$2,737,042	\$2,691,022	-2%	\$2,737,000	\$2,711,000	-1%
7/1/01-02	\$2,522,228	\$2,522,203	\$2,481,229	-2%	\$2,522,000	\$2,502,000	-1%
7/1/02-03	\$1,919,866	\$1,919,881	\$1,919,866	0%	\$1,920,000	\$1,938,000	1%
7/1/03-04	\$2,173,775	\$2,173,802	\$2,173,775	0%	\$2,174,000	\$2,196,000	1%
7/1/04-05	\$2,631,529	\$2,631,586	\$2,542,329	-3%	\$2,632,000	\$2,542,000	-3%
7/1/05-06	\$2,108,579	\$2,115,903	\$1,981,267	-6%	\$2,166,000	\$2,008,000	-7%
7/1/06-07	\$9,670,247	\$9,693,297	\$9,670,247	0%	\$9,844,000	\$9,818,000	0%
7/1/07-08	\$2,985,329	\$2,993,298	\$2,865,560	-4%	\$3,043,000	\$2,916,000	-4%
7/1/08-09	\$3,774,763	\$3,787,048	\$3,781,284	0%	\$3,860,000	\$3,858,000	0%
7/1/09-10	\$3,443,651	\$3,466,887	\$3,512,651	1%	\$3,598,000	\$3,625,000	1%
7/1/10-11	\$3,631,828	\$3,658,786	\$3,632,578	-1%	\$3,803,000	\$3,812,000	0%
7/1/11-12	\$4,446,568	\$4,474,859	\$4,409,123	-1%	\$4,618,000	\$4,555,000	-1%
7/1/12-13	\$2,163,546	\$2,181,116	\$2,159,339	-1%	\$2,265,000	\$2,245,000	-1%
7/1/13-14	\$1,711,514	\$1,729,617	\$1,717,283	-1%	\$1,811,000	\$1,800,000	-1%
7/1/14-15	\$2,632,603	\$2,669,238	\$2,628,679	-2%	\$2,824,000	\$2,783,000	-1%
7/1/15-16	\$1,845,888	\$1,917,234	\$1,840,384	-4%	\$2,200,000	\$2,147,000	-2%
7/1/16-17	\$1,361,551	\$1,428,436	\$1,361,399	-5%	\$1,677,000	\$1,616,000	-4%
7/1/17-18	\$1,299,817	\$1,392,300	\$1,270,314	-9%	\$1,715,000	\$1,580,000	-8%
7/1/18-19	\$1,629,066	\$1,743,726	\$1,587,151	-9%	\$2,121,000	\$1,946,000	-8%
7/1/19-20	\$1,060,888	\$1,223,019	\$1,005,953	-18%	\$1,731,000	\$1,445,000	-17%
7/1/20-21	\$940,864	\$1,124,517	\$944,457	-16%	\$1,683,000	\$1,415,000	-16%
7/1/21-22	\$806,416	\$1,059,097	\$879,049	-17%	\$1,831,000	\$1,534,000	-16%
7/1/22-23	--	\$1,207,792	\$1,020,888	-15%	\$2,088,000	\$1,733,000	-17%
<b>Total</b>	<b>\$68,456,012</b>	<b>\$70,809,084</b>	<b>\$69,034,277</b>	<b>-2.5%</b>	<b>\$75,821,000</b>	<b>\$73,690,000</b>	<b>-2.8%</b>
		<i>Variance in Incurred</i>	<b>(\$1,774,807)</b>		<i>Change in Ultimates</i>	<b>(\$2,131,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,225,627	\$1,225,637	\$1,225,627	0%	\$1,226,000	\$1,226,000	0%
7/1/94-95	\$1,845,115	\$1,845,112	\$1,845,115	0%	\$1,845,000	\$1,845,000	0%
7/1/95-96	\$1,650,832	\$1,651,034	\$1,652,051	0%	\$1,658,000	\$1,665,000	0%
7/1/96-97	\$819,209	\$819,203	\$819,209	0%	\$819,000	\$819,000	0%
7/1/97-98	\$1,243,439	\$1,243,425	\$1,243,439	0%	\$1,243,000	\$1,243,000	0%
7/1/98-99	\$2,460,826	\$2,460,831	\$2,460,826	0%	\$2,461,000	\$2,461,000	0%
7/1/99-00	\$1,706,365	\$1,706,353	\$1,706,365	0%	\$1,706,000	\$1,706,000	0%
7/1/00-01	\$2,375,217	\$2,387,507	\$2,420,216	1%	\$2,737,000	\$2,711,000	-1%
7/1/01-02	\$2,428,221	\$2,431,543	\$2,432,220	0%	\$2,522,000	\$2,502,000	-1%
7/1/02-03	\$1,853,943	\$1,856,389	\$1,858,486	0%	\$1,920,000	\$1,938,000	1%
7/1/03-04	\$2,029,989	\$2,035,571	\$2,032,694	0%	\$2,174,000	\$2,196,000	1%
7/1/04-05	\$2,540,509	\$2,544,231	\$2,542,329	0%	\$2,632,000	\$2,542,000	-3%
7/1/05-06	\$1,976,117	\$1,984,245	\$1,976,468	0%	\$2,166,000	\$2,008,000	-7%
7/1/06-07	\$7,980,640	\$8,064,784	\$8,592,518	7%	\$9,844,000	\$9,818,000	0%
7/1/07-08	\$2,273,514	\$2,310,288	\$2,360,627	2%	\$3,043,000	\$2,916,000	-4%
7/1/08-09	\$3,453,611	\$3,474,237	\$3,460,843	0%	\$3,860,000	\$3,858,000	0%
7/1/09-10	\$3,112,555	\$3,138,824	\$3,133,700	0%	\$3,598,000	\$3,625,000	1%
7/1/10-11	\$3,244,902	\$3,277,246	\$3,306,519	1%	\$3,803,000	\$3,812,000	0%
7/1/11-12	\$3,927,337	\$3,970,432	\$3,958,488	0%	\$4,618,000	\$4,555,000	-1%
7/1/12-13	\$1,779,739	\$1,812,538	\$1,791,519	-1%	\$2,265,000	\$2,245,000	-1%
7/1/13-14	\$1,711,514	\$1,718,850	\$1,714,341	0%	\$1,811,000	\$1,800,000	-1%
7/1/14-15	\$2,061,472	\$2,123,348	\$2,075,873	-2%	\$2,824,000	\$2,783,000	-1%
7/1/15-16	\$1,816,985	\$1,851,558	\$1,834,902	-1%	\$2,200,000	\$2,147,000	-2%
7/1/16-17	\$1,314,359	\$1,351,262	\$1,336,396	-1%	\$1,677,000	\$1,616,000	-4%
7/1/17-18	\$1,255,285	\$1,308,945	\$1,263,598	-3%	\$1,715,000	\$1,580,000	-8%
7/1/18-19	\$1,321,127	\$1,430,784	\$1,399,107	-2%	\$2,121,000	\$1,946,000	-8%
7/1/19-20	\$811,725	\$964,979	\$864,646	-10%	\$1,731,000	\$1,445,000	-17%
7/1/20-21	\$764,349	\$961,346	\$826,923	-14%	\$1,683,000	\$1,415,000	-16%
7/1/21-22	\$464,105	\$888,319	\$705,843	-21%	\$1,831,000	\$1,534,000	-16%
7/1/22-23	--	\$503,551	\$418,352	-17%	\$2,088,000	\$1,733,000	-17%
<b>Total</b>	<b>\$61,448,625</b>	<b>\$63,342,374</b>	<b>\$63,259,240</b>	<b>-0.1%</b>	<b>\$75,821,000</b>	<b>\$73,690,000</b>	<b>-2.8%</b>
		<i>Variance in Paid</i>	<b>(\$83,134)</b>		<i>Change in Ultimates</i>	<b>(\$2,131,000)</b>	

Column (B), (F): From previous actuarial report  
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 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1



**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,127,684	\$3,127,715	\$3,127,684	0%	\$3,128,000	\$3,128,000	0%
7/1/94-95	\$1,827,846	\$1,827,862	\$1,827,846	0%	\$1,828,000	\$1,828,000	0%
7/1/95-96	\$3,027,272	\$3,028,674	\$3,110,221	3%	\$3,041,000	\$3,122,000	3%
7/1/96-97	\$1,616,925	\$1,617,771	\$1,616,925	0%	\$1,625,000	\$1,624,000	0%
7/1/97-98	\$2,171,766	\$2,171,791	\$2,171,766	0%	\$2,172,000	\$2,182,000	0%
7/1/98-99	\$1,826,851	\$1,826,868	\$1,826,851	0%	\$1,827,000	\$1,827,000	0%
7/1/99-00	\$3,616,019	\$3,616,017	\$3,616,019	0%	\$3,616,000	\$3,616,000	0%
7/1/00-01	\$2,322,003	\$2,322,003	\$2,322,003	0%	\$2,322,000	\$2,322,000	0%
7/1/01-02	\$1,574,785	\$1,576,629	\$1,574,785	0%	\$1,590,000	\$1,587,000	0%
7/1/02-03	\$3,047,102	\$3,047,089	\$3,047,102	0%	\$3,047,000	\$3,075,000	1%
7/1/03-04	\$2,017,605	\$2,020,886	\$2,017,605	0%	\$2,043,000	\$2,039,000	0%
7/1/04-05	\$5,361,116	\$5,371,520	\$5,521,591	3%	\$5,439,000	\$5,588,000	3%
7/1/05-06	\$1,995,058	\$1,999,750	\$1,995,058	0%	\$2,029,000	\$2,023,000	0%
7/1/06-07	\$3,475,145	\$3,485,003	\$3,475,145	0%	\$3,544,000	\$3,532,000	0%
7/1/07-08	\$2,248,957	\$2,256,682	\$2,162,583	-4%	\$2,301,000	\$2,205,000	-4%
7/1/08-09	\$1,725,158	\$1,732,528	\$1,725,158	0%	\$1,773,000	\$1,765,000	0%
7/1/09-10	\$3,039,421	\$3,055,513	\$3,091,481	1%	\$3,140,000	\$3,176,000	1%
7/1/10-11	\$2,728,697	\$2,746,876	\$2,907,561	6%	\$2,838,000	\$3,004,000	6%
7/1/11-12	\$4,135,437	\$4,177,922	\$4,143,663	-1%	\$4,381,000	\$4,381,000	0%
7/1/12-13	\$3,158,692	\$3,227,887	\$3,214,558	0%	\$3,543,000	\$3,524,000	-1%
7/1/13-14	\$3,582,038	\$3,632,437	\$3,562,713	-2%	\$3,851,000	\$3,780,000	-2%
7/1/14-15	\$2,134,191	\$2,188,730	\$2,113,300	-3%	\$2,414,000	\$2,365,000	-2%
7/1/15-16	\$1,730,170	\$1,772,858	\$1,748,919	-1%	\$1,941,000	\$1,913,000	-1%
7/1/16-17	\$2,473,521	\$2,544,938	\$2,905,008	14%	\$2,814,000	\$3,216,000	14%
7/1/17-18	\$1,171,555	\$1,251,230	\$1,197,544	-4%	\$1,540,000	\$1,425,000	-7%
7/1/18-19	\$3,534,744	\$3,695,167	\$3,468,062	-6%	\$4,260,000	\$4,209,000	-1%
7/1/19-20	\$1,389,972	\$1,583,473	\$1,378,639	-13%	\$2,256,000	\$2,069,000	-8%
7/1/20-21	\$1,335,555	\$1,647,714	\$1,579,378	-4%	\$2,746,000	\$2,489,000	-9%
7/1/21-22	\$1,610,294	\$1,928,151	\$1,380,537	-28%	\$3,104,000	\$2,620,000	-16%
7/1/22-23	--	\$1,710,320	\$950,731	-44%	\$3,250,000	\$2,344,000	-28%
<b>Total</b>	<b>\$73,005,581</b>	<b>\$76,192,003</b>	<b>\$74,780,436</b>	<b>-1.9%</b>	<b>\$83,403,000</b>	<b>\$81,978,000</b>	<b>-1.7%</b>
		<i>Variance in Incurred</i>	<b>(\$1,411,568)</b>		<i>Change in Ultimates</i>	<b>(\$1,425,000)</b>	

Columns (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,127,684	\$3,127,693	\$3,127,684	0%	\$3,128,000	\$3,128,000	0%
7/1/94-95	\$1,827,846	\$1,827,851	\$1,827,846	0%	\$1,828,000	\$1,828,000	0%
7/1/95-96	\$2,963,451	\$2,965,792	\$3,105,721	5%	\$3,041,000	\$3,122,000	3%
7/1/96-97	\$1,598,116	\$1,598,956	\$1,600,402	0%	\$1,625,000	\$1,624,000	0%
7/1/97-98	\$2,076,629	\$2,079,719	\$2,082,147	0%	\$2,172,000	\$2,182,000	0%
7/1/98-99	\$1,826,851	\$1,826,856	\$1,826,851	0%	\$1,827,000	\$1,827,000	0%
7/1/99-00	\$3,616,019	\$3,616,019	\$3,616,019	0%	\$3,616,000	\$3,616,000	0%
7/1/00-01	\$2,322,003	\$2,322,003	\$2,322,003	0%	\$2,322,000	\$2,322,000	0%
7/1/01-02	\$1,565,227	\$1,566,167	\$1,567,053	0%	\$1,590,000	\$1,587,000	0%
7/1/02-03	\$2,973,550	\$2,976,463	\$2,975,941	0%	\$3,047,000	\$3,075,000	1%
7/1/03-04	\$1,895,192	\$1,901,329	\$1,914,766	1%	\$2,043,000	\$2,039,000	0%
7/1/04-05	\$4,665,427	\$4,699,129	\$4,737,835	1%	\$5,439,000	\$5,588,000	3%
7/1/05-06	\$1,743,573	\$1,756,653	\$1,812,883	3%	\$2,029,000	\$2,023,000	0%
7/1/06-07	\$2,714,055	\$2,754,168	\$2,735,854	-1%	\$3,544,000	\$3,532,000	0%
7/1/07-08	\$1,884,851	\$1,906,131	\$1,896,132	-1%	\$2,301,000	\$2,205,000	-4%
7/1/08-09	\$1,725,158	\$1,727,755	\$1,725,158	0%	\$1,773,000	\$1,765,000	0%
7/1/09-10	\$2,762,380	\$2,784,227	\$2,793,241	0%	\$3,140,000	\$3,176,000	1%
7/1/10-11	\$2,705,016	\$2,713,251	\$2,711,723	0%	\$2,838,000	\$3,004,000	6%
7/1/11-12	\$3,817,909	\$3,855,426	\$3,840,229	0%	\$4,381,000	\$4,381,000	0%
7/1/12-13	\$3,057,038	\$3,092,081	\$3,064,262	-1%	\$3,543,000	\$3,524,000	-1%
7/1/13-14	\$2,892,022	\$2,967,382	\$2,929,350	-1%	\$3,851,000	\$3,780,000	-2%
7/1/14-15	\$1,962,072	\$2,001,097	\$1,967,996	-2%	\$2,414,000	\$2,365,000	-2%
7/1/15-16	\$1,452,921	\$1,499,714	\$1,485,260	-1%	\$1,941,000	\$1,913,000	-1%
7/1/16-17	\$2,032,704	\$2,116,932	\$2,105,261	-1%	\$2,814,000	\$3,216,000	14%
7/1/17-18	\$1,035,302	\$1,097,480	\$1,026,471	-6%	\$1,540,000	\$1,425,000	-7%
7/1/18-19	\$2,564,367	\$2,808,375	\$2,902,471	3%	\$4,260,000	\$4,209,000	-1%
7/1/19-20	\$1,145,347	\$1,337,987	\$1,271,780	-5%	\$2,256,000	\$2,069,000	-8%
7/1/20-21	\$1,164,044	\$1,511,323	\$1,319,139	-13%	\$2,746,000	\$2,489,000	-9%
7/1/21-22	\$496,679	\$1,293,215	\$1,039,036	-20%	\$3,104,000	\$2,620,000	-16%
7/1/22-23	--	\$703,421	\$297,735	-58%	\$3,250,000	\$2,344,000	-28%
<b>Total</b>	<b>\$65,613,434</b>	<b>\$68,434,597</b>	<b>\$67,628,249</b>	<b>-1.2%</b>	<b>\$83,403,000</b>	<b>\$81,978,000</b>	<b>-1.7%</b>
		<i>Variance in Paid</i>	<b>(\$806,348)</b>		<i>Change in Ultimates</i>	<b>(\$1,425,000)</b>	

Columns (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,198,127	\$1,198,127	\$1,198,127	0%	\$1,198,127	\$1,198,127	0%
7/1/94-95	\$1,575,448	\$1,575,448	\$1,575,482	0%	\$1,575,448	\$1,575,448	0%
7/1/95-96	\$2,615,495	\$2,615,495	\$2,517,749	-4%	\$2,615,495	\$2,517,749	-4%
7/1/96-97	\$2,369,793	\$2,369,793	\$2,369,793	0%	\$2,369,793	\$2,375,000	0%
7/1/97-98	\$1,262,727	\$1,262,727	\$1,262,727	0%	\$1,262,727	\$1,262,727	0%
7/1/98-99	\$831,226	\$831,226	\$831,226	0%	\$831,226	\$831,226	0%
7/1/99-00	\$2,406,454	\$2,406,454	\$2,406,454	0%	\$2,406,454	\$2,416,000	0%
7/1/00-01	\$1,835,135	\$1,835,135	\$1,835,135	0%	\$1,835,135	\$1,835,135	0%
7/1/01-02	\$1,838,965	\$1,838,965	\$1,838,965	0%	\$1,838,965	\$1,849,000	1%
7/1/02-03	\$1,290,330	\$1,290,330	\$1,290,330	0%	\$1,290,330	\$1,290,330	0%
7/1/03-04	\$1,943,065	\$1,943,065	\$1,943,065	0%	\$1,943,065	\$1,958,000	1%
7/1/04-05	\$1,721,185	\$1,721,185	\$1,721,185	0%	\$1,721,185	\$1,737,000	1%
7/1/05-06	\$1,528,140	\$1,528,140	\$1,528,140	0%	\$1,528,140	\$1,528,140	0%
7/1/06-07	\$1,674,837	\$1,674,837	\$1,674,837	0%	\$1,674,837	\$1,697,000	1%
7/1/07-08	\$1,019,471	\$1,019,471	\$1,019,471	0%	\$1,019,471	\$1,019,471	0%
7/1/08-09	\$1,337,573	\$1,343,538	\$1,327,634	-1%	\$1,370,000	\$1,353,000	-1%
7/1/09-10	\$2,061,735	\$2,069,795	\$2,061,735	0%	\$2,105,000	\$2,101,000	0%
7/1/10-11	\$1,638,711	\$1,661,955	\$1,638,711	-1%	\$1,762,000	\$1,749,000	-1%
7/1/11-12	\$1,431,199	\$1,448,694	\$1,431,199	-1%	\$1,523,000	\$1,509,000	-1%
7/1/12-13	\$2,576,753	\$2,605,268	\$2,576,753	-1%	\$2,725,000	\$2,691,000	-1%
7/1/13-14	\$1,808,992	\$1,839,414	\$1,844,485	0%	\$1,966,000	\$1,977,000	1%
7/1/14-15	\$940,919	\$968,190	\$1,058,914	9%	\$1,081,000	\$1,142,000	6%
7/1/15-16	\$1,457,876	\$1,495,133	\$1,458,067	-2%	\$1,649,000	\$1,608,000	-2%
7/1/16-17	\$574,571	\$609,247	\$561,694	-8%	\$753,000	\$683,000	-9%
7/1/17-18	\$1,101,344	\$1,157,146	\$1,114,503	-4%	\$1,391,000	\$1,318,000	-5%
7/1/18-19	\$1,338,614	\$1,425,520	\$1,401,014	-2%	\$1,797,000	\$1,725,000	-4%
7/1/19-20	\$1,454,819	\$1,546,731	\$1,462,317	-5%	\$1,952,000	\$1,829,000	-6%
7/1/20-21	\$1,133,830	\$1,237,040	\$1,018,666	-18%	\$1,713,000	\$1,505,000	-12%
7/1/21-22	\$1,278,350	\$1,393,811	\$769,956	-45%	\$1,960,000	\$1,484,000	-24%
7/1/22-23	--	\$1,270,855	\$1,148,513	-10%	\$1,974,000	\$1,974,000	0%
<b>Total</b>	<b>\$45,245,683</b>	<b>\$47,182,734</b>	<b>\$45,886,846</b>	<b>-2.7%</b>	<b>\$50,831,000</b>	<b>\$49,738,000</b>	<b>-2.2%</b>
		<i>Variance in Incurred</i>	<b>(\$1,295,888)</b>		<i>Change in Ultimates</i>	<b>(\$1,093,000)</b>	

Column (B), (F): From previous actuarial report  
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 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,198,127	\$1,198,127	\$1,198,127	0%	\$1,198,127	\$1,198,127	0%
7/1/94-95	\$1,575,448	\$1,575,448	\$1,575,482	0%	\$1,575,448	\$1,575,448	0%
7/1/95-96	\$2,517,749	\$2,520,544	\$2,517,749	0%	\$2,615,495	\$2,517,749	-4%
7/1/96-97	\$1,674,112	\$1,694,711	\$1,702,652	0%	\$2,369,793	\$2,375,000	0%
7/1/97-98	\$1,262,727	\$1,262,727	\$1,262,727	0%	\$1,262,727	\$1,262,727	0%
7/1/98-99	\$831,226	\$831,226	\$831,226	0%	\$831,226	\$831,226	0%
7/1/99-00	\$2,315,182	\$2,318,205	\$2,322,359	0%	\$2,406,454	\$2,416,000	0%
7/1/00-01	\$1,835,135	\$1,835,135	\$1,835,135	0%	\$1,835,135	\$1,835,135	0%
7/1/01-02	\$1,636,499	\$1,643,782	\$1,641,142	0%	\$1,838,965	\$1,849,000	1%
7/1/02-03	\$1,290,330	\$1,290,330	\$1,290,330	0%	\$1,290,330	\$1,290,330	0%
7/1/03-04	\$1,918,767	\$1,919,723	\$1,922,339	0%	\$1,943,065	\$1,958,000	1%
7/1/04-05	\$1,310,540	\$1,327,505	\$1,316,449	-1%	\$1,721,185	\$1,737,000	1%
7/1/05-06	\$1,528,140	\$1,528,140	\$1,528,140	0%	\$1,528,140	\$1,528,140	0%
7/1/06-07	\$1,566,035	\$1,571,025	\$1,570,387	0%	\$1,674,837	\$1,697,000	1%
7/1/07-08	\$1,019,471	\$1,019,471	\$1,019,471	0%	\$1,019,471	\$1,019,471	0%
7/1/08-09	\$1,327,634	\$1,329,818	\$1,327,634	0%	\$1,370,000	\$1,353,000	-1%
7/1/09-10	\$1,785,975	\$1,803,509	\$1,803,466	0%	\$2,105,000	\$2,101,000	0%
7/1/10-11	\$1,544,776	\$1,557,563	\$1,555,854	0%	\$1,762,000	\$1,749,000	-1%
7/1/11-12	\$1,296,100	\$1,310,481	\$1,301,143	-1%	\$1,523,000	\$1,509,000	-1%
7/1/12-13	\$2,045,010	\$2,091,697	\$2,076,602	-1%	\$2,725,000	\$2,691,000	-1%
7/1/13-14	\$1,613,910	\$1,640,282	\$1,664,278	1%	\$1,966,000	\$1,977,000	1%
7/1/14-15	\$793,918	\$817,580	\$800,423	-2%	\$1,081,000	\$1,142,000	6%
7/1/15-16	\$1,290,193	\$1,323,089	\$1,290,781	-2%	\$1,649,000	\$1,608,000	-2%
7/1/16-17	\$561,694	\$581,464	\$561,694	-3%	\$753,000	\$683,000	-9%
7/1/17-18	\$990,485	\$1,037,946	\$1,006,620	-3%	\$1,391,000	\$1,318,000	-5%
7/1/18-19	\$1,224,323	\$1,303,983	\$1,272,980	-2%	\$1,797,000	\$1,725,000	-4%
7/1/19-20	\$1,369,386	\$1,467,823	\$1,417,525	-3%	\$1,952,000	\$1,829,000	-6%
7/1/20-21	\$874,210	\$1,056,034	\$930,098	-12%	\$1,713,000	\$1,505,000	-12%
7/1/21-22	\$401,733	\$886,403	\$677,947	-24%	\$1,960,000	\$1,484,000	-24%
7/1/22-23	--	\$501,970	\$535,716	7%	\$1,974,000	\$1,974,000	0%
<b>Total</b>	<b>\$40,598,838</b>	<b>\$42,245,746</b>	<b>\$41,756,477</b>	<b>-1.2%</b>	<b>\$50,831,000</b>	<b>\$49,738,000</b>	<b>-2.2%</b>
		<i>Variance in Paid</i>	<i>(\$489,268)</i>		<i>Change in Ultimates</i>	<i>(\$1,093,000)</i>	

Column (B), (F): From previous actuarial report  
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 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
Prior	\$56,830,933	\$56,855,208	\$56,843,694	0%	\$57,139,000	\$57,168,000	0%
7/1/93-94	\$5,418,834	\$5,420,222	\$5,418,834	0%	\$5,436,000	\$5,452,000	0%
7/1/94-95	\$5,264,035	\$5,265,528	\$5,271,035	0%	\$5,282,000	\$5,306,000	0%
7/1/95-96	\$3,546,180	\$3,547,873	\$3,546,180	0%	\$3,566,000	\$3,566,000	0%
7/1/96-97	\$4,224,581	\$4,226,727	\$4,224,581	0%	\$4,249,000	\$4,258,000	0%
7/1/97-98	\$6,569,826	\$6,573,642	\$6,561,209	0%	\$6,612,000	\$6,618,000	0%
7/1/98-99	\$6,353,499	\$6,357,648	\$6,317,938	-1%	\$6,398,000	\$6,377,000	0%
7/1/99-00	\$8,924,758	\$8,929,493	\$8,957,165	0%	\$8,974,000	\$9,050,000	1%
7/1/00-01	\$8,480,338	\$8,487,353	\$8,483,338	0%	\$8,551,000	\$8,551,000	0%
7/1/01-02	\$8,373,885	\$8,379,846	\$8,365,700	0%	\$8,432,000	\$8,432,000	0%
7/1/02-03	\$8,399,765	\$8,408,064	\$8,399,765	0%	\$8,478,000	\$8,517,000	0%
7/1/03-04	\$10,878,779	\$10,891,215	\$10,885,419	0%	\$10,992,000	\$11,055,000	1%
7/1/04-05	\$9,707,633	\$9,720,654	\$9,706,545	0%	\$9,822,000	\$9,822,000	0%
7/1/05-06	\$5,111,172	\$5,124,738	\$5,111,172	0%	\$5,226,000	\$5,211,000	0%
7/1/06-07	\$10,006,129	\$10,037,657	\$9,822,406	-2%	\$10,263,000	\$10,040,000	-2%
7/1/07-08	\$11,289,685	\$11,332,243	\$11,428,117	1%	\$11,623,000	\$11,716,000	1%
7/1/08-09	\$7,240,975	\$7,287,658	\$7,115,860	-2%	\$7,592,000	\$7,491,000	-1%
7/1/09-10	\$11,183,808	\$11,245,692	\$11,319,858	1%	\$11,630,000	\$11,797,000	1%
7/1/10-11	\$9,135,190	\$9,217,132	\$9,108,370	-1%	\$9,701,000	\$9,611,000	-1%
7/1/11-12	\$8,919,964	\$9,028,690	\$8,905,824	-1%	\$9,638,000	\$9,612,000	0%
7/1/12-13	\$9,651,903	\$9,768,889	\$9,605,490	-2%	\$10,390,000	\$10,286,000	-1%
7/1/13-14	\$7,452,839	\$7,590,185	\$7,554,296	0%	\$8,280,000	\$8,264,000	0%
7/1/14-15	\$3,420,116	\$3,518,260	\$3,420,359	-3%	\$3,984,000	\$3,890,000	-2%
7/1/15-16	\$4,320,695	\$4,424,566	\$4,264,415	-4%	\$4,890,000	\$4,927,000	1%
7/1/16-17	\$4,864,757	\$5,009,069	\$4,901,945	-2%	\$5,620,000	\$5,704,000	1%
7/1/17-18	\$3,670,720	\$3,884,563	\$3,964,644	2%	\$4,742,000	\$4,793,000	1%
7/1/18-19	\$6,246,049	\$6,664,836	\$6,352,972	-5%	\$8,264,000	\$7,939,000	-4%
7/1/19-20	\$4,184,161	\$4,666,526	\$4,237,709	-9%	\$6,439,000	\$5,890,000	-9%
7/1/20-21	\$3,511,096	\$4,073,914	\$4,072,440	0%	\$6,101,000	\$6,084,000	0%
7/1/21-22	\$2,914,945	\$3,639,429	\$3,480,929	-4%	\$6,277,000	\$5,979,000	-5%
7/1/22-23	--	\$3,721,654	\$3,699,295	-1%	\$6,784,000	\$7,152,000	5%
<b>Total</b>	<b>\$256,097,251</b>	<b>\$263,299,171</b>	<b>\$261,347,506</b>	<b>-0.7%</b>	<b>\$281,375,000</b>	<b>\$280,558,000</b>	<b>-0.3%</b>
		<i>Variance in Incurred</i>	<b>(\$1,951,665)</b>		<i>Change in Ultimates</i>	<b>(\$817,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) =  $[(D) / (C)] - 1$   
 Column (G): Exhibit 3-A  
 Column (H) =  $[(G) / (F)] - 1$

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(I) Accident Period	(J) Paid Losses 6/30/2022	(K) Expected Paid Losses 6/30/2023	(L) Actual Paid Losses 6/30/2023	(M) Percent Difference	(N) Estimated Ultimate Losses 6/30/2022	(O) Estimated Ultimate Losses 6/30/2023	(P) Percent Difference
Prior	\$55,327,394	\$55,375,269	\$55,506,603	0%	\$57,139,000	\$57,168,000	0%
7/1/93-94	\$5,190,801	\$5,197,487	\$5,230,667	1%	\$5,436,000	\$5,452,000	0%
7/1/94-95	\$5,088,872	\$5,094,311	\$5,125,384	1%	\$5,282,000	\$5,306,000	0%
7/1/95-96	\$3,463,944	\$3,466,916	\$3,465,474	0%	\$3,566,000	\$3,566,000	0%
7/1/96-97	\$3,891,531	\$3,902,307	\$3,915,679	0%	\$4,249,000	\$4,258,000	0%
7/1/97-98	\$6,372,489	\$6,379,973	\$6,390,818	0%	\$6,612,000	\$6,618,000	0%
7/1/98-99	\$5,913,795	\$5,929,498	\$5,943,958	0%	\$6,398,000	\$6,377,000	0%
7/1/99-00	\$7,809,824	\$7,849,069	\$7,995,257	2%	\$8,974,000	\$9,050,000	1%
7/1/00-01	\$7,807,911	\$7,833,990	\$7,833,039	0%	\$8,551,000	\$8,551,000	0%
7/1/01-02	\$7,973,650	\$7,990,424	\$8,000,242	0%	\$8,432,000	\$8,432,000	0%
7/1/02-03	\$7,749,433	\$7,777,291	\$7,852,788	1%	\$8,478,000	\$8,517,000	0%
7/1/03-04	\$9,687,374	\$9,739,601	\$9,788,717	1%	\$10,992,000	\$11,055,000	1%
7/1/04-05	\$7,767,630	\$7,853,927	\$7,841,222	0%	\$9,822,000	\$9,822,000	0%
7/1/05-06	\$4,907,820	\$4,921,879	\$4,917,347	0%	\$5,226,000	\$5,211,000	0%
7/1/06-07	\$8,345,583	\$8,434,940	\$8,410,568	0%	\$10,263,000	\$10,040,000	-2%
7/1/07-08	\$10,023,106	\$10,101,994	\$10,088,270	0%	\$11,623,000	\$11,716,000	1%
7/1/08-09	\$6,573,040	\$6,626,384	\$6,602,965	0%	\$7,592,000	\$7,491,000	-1%
7/1/09-10	\$9,996,175	\$10,087,333	\$10,204,953	1%	\$11,630,000	\$11,797,000	1%
7/1/10-11	\$8,222,565	\$8,310,870	\$8,257,823	-1%	\$9,701,000	\$9,611,000	-1%
7/1/11-12	\$8,293,734	\$8,380,138	\$8,322,203	-1%	\$9,638,000	\$9,612,000	0%
7/1/12-13	\$8,503,517	\$8,634,787	\$8,622,658	0%	\$10,390,000	\$10,286,000	-1%
7/1/13-14	\$6,728,859	\$6,846,525	\$6,924,467	1%	\$8,280,000	\$8,264,000	0%
7/1/14-15	\$3,257,645	\$3,318,222	\$3,266,684	-2%	\$3,984,000	\$3,890,000	-2%
7/1/15-16	\$4,007,054	\$4,088,869	\$4,084,957	0%	\$4,890,000	\$4,927,000	1%
7/1/16-17	\$4,256,406	\$4,398,634	\$4,545,893	3%	\$5,620,000	\$5,704,000	1%
7/1/17-18	\$3,415,704	\$3,574,049	\$3,715,714	4%	\$4,742,000	\$4,793,000	1%
7/1/18-19	\$5,361,263	\$5,767,092	\$5,629,617	-2%	\$8,264,000	\$7,939,000	-4%
7/1/19-20	\$3,705,319	\$4,167,998	\$3,902,999	-6%	\$6,439,000	\$5,890,000	-9%
7/1/20-21	\$2,697,589	\$3,432,986	\$3,472,643	1%	\$6,101,000	\$6,084,000	0%
7/1/21-22	\$1,382,009	\$2,890,510	\$2,848,516	-1%	\$6,277,000	\$5,979,000	-5%
7/1/22-23	--	\$1,335,585	\$1,862,193	39%	\$6,784,000	\$7,152,000	5%
<b>Total</b>	<b>\$233,722,035</b>	<b>\$239,708,857</b>	<b>\$240,570,320</b>	<b>0.4%</b>	<b>\$281,375,000</b>	<b>\$280,558,000</b>	<b>-0.3%</b>
		<b>Variance in Paid</b>	<b>\$861,464</b>		<b>Change in Ultimates</b>	<b>(\$817,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) =  $[(D) / (C)] - 1$   
 Column (G): Exhibit 3-A  
 Column (H) =  $[(G) / (F)] - 1$

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/69 - 6/30/92	\$57,168,000	\$57,165,000	\$57,375,000	\$57,532,000	\$57,864,000
7/1/93-94	\$15,855,127	\$15,855,000	\$15,909,000	\$15,950,000	\$16,036,000
7/1/94-95	\$15,540,448	\$15,539,000	\$15,607,000	\$15,658,000	\$15,766,000
7/1/95-96	\$15,654,749	\$15,653,000	\$15,738,000	\$15,801,000	\$15,936,000
7/1/96-97	\$13,132,000	\$13,130,000	\$13,227,000	\$13,300,000	\$13,456,000
7/1/97-98	\$15,865,727	\$15,862,000	\$16,001,000	\$16,106,000	\$16,330,000
7/1/98-99	\$18,596,226	\$18,590,000	\$18,778,000	\$18,920,000	\$19,221,000
7/1/99-00	\$23,345,000	\$23,334,000	\$23,607,000	\$23,815,000	\$24,255,000
7/1/00-01	\$21,581,788	\$21,570,000	\$21,850,000	\$22,063,000	\$22,517,000
7/1/01-02	\$21,810,000	\$21,795,000	\$22,109,000	\$22,348,000	\$22,858,000
7/1/02-03	\$22,249,330	\$22,221,000	\$22,657,000	\$22,990,000	\$23,704,000
7/1/03-04	\$24,507,000	\$24,473,000	\$24,972,000	\$25,353,000	\$26,172,000
7/1/04-05	\$29,255,000	\$29,211,000	\$29,837,000	\$30,315,000	\$31,345,000
7/1/05-06	\$22,749,140	\$22,705,000	\$23,257,000	\$23,679,000	\$24,592,000
7/1/06-07	\$36,664,000	\$36,590,000	\$37,499,000	\$38,197,000	\$39,704,000
7/1/07-08	\$27,181,471	\$27,119,000	\$27,839,000	\$28,392,000	\$29,590,000
7/1/08-09	\$23,676,000	\$23,612,000	\$24,291,000	\$24,813,000	\$25,947,000
7/1/09-10	\$31,890,000	\$31,790,000	\$32,775,000	\$33,533,000	\$35,184,000
7/1/10-11	\$30,895,000	\$30,787,000	\$31,796,000	\$32,575,000	\$34,273,000
7/1/11-12	\$32,643,000	\$32,515,000	\$33,646,000	\$34,520,000	\$36,430,000
7/1/12-13	\$30,669,000	\$30,535,000	\$31,657,000	\$32,526,000	\$34,429,000
7/1/13-14	\$27,840,000	\$27,704,000	\$28,780,000	\$29,615,000	\$31,448,000
7/1/14-15	\$15,992,000	\$15,903,000	\$16,563,000	\$17,077,000	\$18,207,000
7/1/15-16	\$15,516,000	\$15,422,000	\$16,091,000	\$16,612,000	\$17,762,000
7/1/16-17	\$16,434,000	\$16,319,000	\$17,081,000	\$17,676,000	\$18,994,000
7/1/17-18	\$13,326,000	\$13,227,000	\$13,864,000	\$14,363,000	\$15,469,000
7/1/18-19	\$19,538,000	\$19,336,000	\$20,440,000	\$21,310,000	\$23,259,000
7/1/19-20	\$16,259,000	\$16,038,000	\$17,093,000	\$17,930,000	\$19,822,000
7/1/20-21	\$16,548,000	\$16,271,000	\$17,465,000	\$18,419,000	\$20,594,000
7/1/21-22	\$15,696,000	\$15,364,000	\$16,638,000	\$17,663,000	\$20,026,000
7/1/22-23	\$17,383,000	\$16,867,000	\$18,540,000	\$19,904,000	\$23,102,000
(1) All Years*	\$705,460,000	\$705,147,000	\$709,561,000	\$712,987,000	\$720,003,000
(2) Total Paid Losses		\$603,062,784			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
	\$102,398,000	\$102,084,000	\$106,498,000	\$109,924,000	\$116,940,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
	\$73,428,000	\$73,203,000	\$76,368,000	\$78,825,000	\$83,856,000

\* Totals are not summed, but are based on the combined distribution of all years experience

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$1,691,000	\$1,691,000	\$1,701,000	\$1,708,000	\$1,724,000
7/1/94-95	\$1,768,000	\$1,768,000	\$1,780,000	\$1,790,000	\$1,811,000
7/1/95-96	\$1,481,000	\$1,481,000	\$1,494,000	\$1,504,000	\$1,526,000
7/1/96-97	\$2,059,000	\$2,058,000	\$2,078,000	\$2,093,000	\$2,125,000
7/1/97-98	\$1,728,000	\$1,727,000	\$1,750,000	\$1,768,000	\$1,806,000
7/1/98-99	\$3,417,000	\$3,415,000	\$3,465,000	\$3,503,000	\$3,584,000
7/1/99-00	\$3,338,000	\$3,335,000	\$3,388,000	\$3,428,000	\$3,513,000
7/1/00-01	\$3,190,000	\$3,187,000	\$3,244,000	\$3,287,000	\$3,381,000
7/1/01-02	\$3,845,000	\$3,840,000	\$3,918,000	\$3,978,000	\$4,108,000
7/1/02-03	\$3,125,000	\$3,119,000	\$3,197,000	\$3,256,000	\$3,385,000
7/1/03-04	\$3,220,000	\$3,212,000	\$3,299,000	\$3,366,000	\$3,511,000
7/1/04-05	\$4,016,000	\$4,005,000	\$4,120,000	\$4,208,000	\$4,398,000
7/1/05-06	\$6,255,000	\$6,238,000	\$6,418,000	\$6,557,000	\$6,857,000
7/1/06-07	\$5,783,000	\$5,766,000	\$5,940,000	\$6,074,000	\$6,365,000
7/1/07-08	\$3,704,000	\$3,692,000	\$3,807,000	\$3,895,000	\$4,087,000
7/1/08-09	\$4,333,000	\$4,316,000	\$4,465,000	\$4,580,000	\$4,832,000
7/1/09-10	\$6,045,000	\$6,020,000	\$6,234,000	\$6,399,000	\$6,761,000
7/1/10-11	\$7,616,000	\$7,583,000	\$7,860,000	\$8,074,000	\$8,543,000
7/1/11-12	\$6,743,000	\$6,712,000	\$6,965,000	\$7,162,000	\$7,593,000
7/1/12-13	\$7,941,000	\$7,901,000	\$8,213,000	\$8,455,000	\$8,986,000
7/1/13-14	\$8,386,000	\$8,336,000	\$8,694,000	\$8,971,000	\$9,584,000
7/1/14-15	\$3,866,000	\$3,841,000	\$4,013,000	\$4,146,000	\$4,441,000
7/1/15-16	\$2,560,000	\$2,542,000	\$2,660,000	\$2,752,000	\$2,956,000
7/1/16-17	\$2,775,000	\$2,753,000	\$2,890,000	\$2,997,000	\$3,236,000
7/1/17-18	\$2,688,000	\$2,664,000	\$2,805,000	\$2,915,000	\$3,162,000
7/1/18-19	\$2,451,000	\$2,426,000	\$2,564,000	\$2,672,000	\$2,915,000
7/1/19-20	\$2,895,000	\$2,858,000	\$3,040,000	\$3,183,000	\$3,507,000
7/1/20-21	\$2,807,000	\$2,765,000	\$2,956,000	\$3,109,000	\$3,454,000
7/1/21-22	\$2,530,000	\$2,485,000	\$2,673,000	\$2,823,000	\$3,166,000
7/1/22-23	\$2,694,000	\$2,594,000	\$2,884,000	\$3,122,000	\$3,689,000
(1) All Years*	\$114,950,000	\$114,902,000	\$115,816,000	\$116,511,000	\$117,979,000
(2) Total Paid Losses		\$96,426,390			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected \$18,524,000	50th %-ile \$18,476,000	65th %-ile \$19,390,000	75th %-ile \$20,085,000	90th %-ile \$21,553,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected \$12,941,000	50th %-ile \$12,907,000	65th %-ile \$13,546,000	75th %-ile \$14,032,000	90th %-ile \$15,057,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%



**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$3,160,000	\$3,160,000	\$3,163,000	\$3,165,000	\$3,169,000
7/1/94-95	\$3,218,000	\$3,218,000	\$3,222,000	\$3,224,000	\$3,230,000
7/1/95-96	\$3,303,000	\$3,303,000	\$3,308,000	\$3,311,000	\$3,318,000
7/1/96-97	\$1,997,000	\$1,997,000	\$2,000,000	\$2,003,000	\$2,009,000
7/1/97-98	\$2,832,000	\$2,832,000	\$2,847,000	\$2,859,000	\$2,884,000
7/1/98-99	\$3,683,000	\$3,683,000	\$3,705,000	\$3,722,000	\$3,758,000
7/1/99-00	\$3,219,000	\$3,218,000	\$3,241,000	\$3,257,000	\$3,292,000
7/1/00-01	\$2,972,653	\$2,972,000	\$2,997,000	\$3,017,000	\$3,058,000
7/1/01-02	\$3,595,000	\$3,594,000	\$3,625,000	\$3,649,000	\$3,699,000
7/1/02-03	\$4,304,000	\$4,301,000	\$4,358,000	\$4,402,000	\$4,494,000
7/1/03-04	\$4,039,000	\$4,036,000	\$4,093,000	\$4,136,000	\$4,228,000
7/1/04-05	\$5,550,000	\$5,546,000	\$5,628,000	\$5,690,000	\$5,822,000
7/1/05-06	\$5,724,000	\$5,715,000	\$5,838,000	\$5,933,000	\$6,135,000
7/1/06-07	\$5,794,000	\$5,785,000	\$5,913,000	\$6,011,000	\$6,222,000
7/1/07-08	\$5,621,000	\$5,612,000	\$5,738,000	\$5,835,000	\$6,044,000
7/1/08-09	\$4,876,000	\$4,867,000	\$4,984,000	\$5,073,000	\$5,267,000
7/1/09-10	\$5,146,000	\$5,131,000	\$5,285,000	\$5,403,000	\$5,661,000
7/1/10-11	\$5,103,000	\$5,087,000	\$5,244,000	\$5,364,000	\$5,626,000
7/1/11-12	\$5,843,000	\$5,822,000	\$6,017,000	\$6,168,000	\$6,498,000
7/1/12-13	\$3,982,000	\$3,966,000	\$4,105,000	\$4,213,000	\$4,448,000
7/1/13-14	\$3,633,000	\$3,618,000	\$3,747,000	\$3,846,000	\$4,064,000
7/1/14-15	\$1,946,000	\$1,936,000	\$2,013,000	\$2,072,000	\$2,202,000
7/1/15-16	\$2,361,000	\$2,348,000	\$2,444,000	\$2,518,000	\$2,682,000
7/1/16-17	\$2,440,000	\$2,426,000	\$2,528,000	\$2,606,000	\$2,780,000
7/1/17-18	\$1,522,000	\$1,512,000	\$1,580,000	\$1,632,000	\$1,748,000
7/1/18-19	\$1,268,000	\$1,254,000	\$1,329,000	\$1,388,000	\$1,521,000
7/1/19-20	\$2,131,000	\$2,095,000	\$2,250,000	\$2,374,000	\$2,658,000
7/1/20-21	\$2,248,000	\$2,205,000	\$2,378,000	\$2,516,000	\$2,833,000
7/1/21-22	\$1,549,000	\$1,514,000	\$1,644,000	\$1,749,000	\$1,993,000
7/1/22-23	\$1,486,000	\$1,433,000	\$1,590,000	\$1,718,000	\$2,023,000
(1) All Years*	\$104,546,000	\$104,507,000	\$105,092,000	\$105,525,000	\$106,467,000
(2) Total Paid Losses		\$93,422,107			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected \$11,124,000	50th %-ile \$11,085,000	65th %-ile \$11,670,000	75th %-ile \$12,103,000	90th %-ile \$13,045,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected \$7,957,000	50th %-ile \$7,929,000	65th %-ile \$8,348,000	75th %-ile \$8,657,000	90th %-ile \$9,331,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$1,226,000	\$1,226,000	\$1,232,000	\$1,236,000	\$1,245,000
7/1/94-95	\$1,845,000	\$1,845,000	\$1,856,000	\$1,864,000	\$1,881,000
7/1/95-96	\$1,665,000	\$1,665,000	\$1,677,000	\$1,686,000	\$1,706,000
7/1/96-97	\$819,000	\$819,000	\$826,000	\$832,000	\$844,000
7/1/97-98	\$1,243,000	\$1,242,000	\$1,257,000	\$1,268,000	\$1,291,000
7/1/98-99	\$2,461,000	\$2,459,000	\$2,495,000	\$2,522,000	\$2,579,000
7/1/99-00	\$1,706,000	\$1,705,000	\$1,731,000	\$1,751,000	\$1,794,000
7/1/00-01	\$2,711,000	\$2,708,000	\$2,754,000	\$2,788,000	\$2,863,000
7/1/01-02	\$2,502,000	\$2,498,000	\$2,550,000	\$2,590,000	\$2,676,000
7/1/02-03	\$1,938,000	\$1,935,000	\$1,976,000	\$2,007,000	\$2,074,000
7/1/03-04	\$2,196,000	\$2,192,000	\$2,242,000	\$2,279,000	\$2,360,000
7/1/04-05	\$2,542,000	\$2,538,000	\$2,595,000	\$2,639,000	\$2,733,000
7/1/05-06	\$2,008,000	\$2,004,000	\$2,052,000	\$2,089,000	\$2,169,000
7/1/06-07	\$9,818,000	\$9,798,000	\$10,042,000	\$10,229,000	\$10,634,000
7/1/07-08	\$2,916,000	\$2,910,000	\$2,985,000	\$3,043,000	\$3,168,000
7/1/08-09	\$3,858,000	\$3,849,000	\$3,953,000	\$4,033,000	\$4,207,000
7/1/09-10	\$3,625,000	\$3,616,000	\$3,717,000	\$3,795,000	\$3,965,000
7/1/10-11	\$3,812,000	\$3,801,000	\$3,912,000	\$3,998,000	\$4,183,000
7/1/11-12	\$4,555,000	\$4,541,000	\$4,678,000	\$4,784,000	\$5,013,000
7/1/12-13	\$2,245,000	\$2,235,000	\$2,317,000	\$2,380,000	\$2,519,000
7/1/13-14	\$1,800,000	\$1,792,000	\$1,859,000	\$1,912,000	\$2,027,000
7/1/14-15	\$2,783,000	\$2,767,000	\$2,885,000	\$2,977,000	\$3,181,000
7/1/15-16	\$2,147,000	\$2,134,000	\$2,228,000	\$2,301,000	\$2,463,000
7/1/16-17	\$1,616,000	\$1,606,000	\$1,678,000	\$1,734,000	\$1,858,000
7/1/17-18	\$1,580,000	\$1,569,000	\$1,642,000	\$1,700,000	\$1,827,000
7/1/18-19	\$1,946,000	\$1,929,000	\$2,030,000	\$2,110,000	\$2,286,000
7/1/19-20	\$1,445,000	\$1,428,000	\$1,515,000	\$1,584,000	\$1,738,000
7/1/20-21	\$1,415,000	\$1,390,000	\$1,494,000	\$1,577,000	\$1,767,000
7/1/21-22	\$1,534,000	\$1,501,000	\$1,626,000	\$1,727,000	\$1,960,000
7/1/22-23	\$1,733,000	\$1,660,000	\$1,859,000	\$2,023,000	\$2,417,000
(1) All Years*	\$73,690,000	\$73,667,000	\$74,188,000	\$74,581,000	\$75,381,000
(2) Total Paid Losses		\$63,259,240			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected \$10,431,000	50th %-ile \$10,408,000	65th %-ile \$10,929,000	75th %-ile \$11,322,000	90th %-ile \$12,122,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected \$7,234,000	50th %-ile \$7,218,000	65th %-ile \$7,579,000	75th %-ile \$7,852,000	90th %-ile \$8,407,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$3,128,000	\$3,128,000	\$3,139,000	\$3,147,000	\$3,164,000
7/1/94-95	\$1,828,000	\$1,828,000	\$1,836,000	\$1,842,000	\$1,854,000
7/1/95-96	\$3,122,000	\$3,122,000	\$3,139,000	\$3,151,000	\$3,179,000
7/1/96-97	\$1,624,000	\$1,624,000	\$1,635,000	\$1,643,000	\$1,661,000
7/1/97-98	\$2,182,000	\$2,182,000	\$2,199,000	\$2,211,000	\$2,239,000
7/1/98-99	\$1,827,000	\$1,826,000	\$1,843,000	\$1,856,000	\$1,882,000
7/1/99-00	\$3,616,000	\$3,615,000	\$3,654,000	\$3,684,000	\$3,747,000
7/1/00-01	\$2,322,000	\$2,321,000	\$2,350,000	\$2,373,000	\$2,421,000
7/1/01-02	\$1,587,000	\$1,585,000	\$1,613,000	\$1,635,000	\$1,680,000
7/1/02-03	\$3,075,000	\$3,071,000	\$3,134,000	\$3,183,000	\$3,288,000
7/1/03-04	\$2,039,000	\$2,036,000	\$2,080,000	\$2,113,000	\$2,185,000
7/1/04-05	\$5,588,000	\$5,578,000	\$5,708,000	\$5,808,000	\$6,023,000
7/1/05-06	\$2,023,000	\$2,018,000	\$2,072,000	\$2,113,000	\$2,201,000
7/1/06-07	\$3,532,000	\$3,523,000	\$3,619,000	\$3,693,000	\$3,852,000
7/1/07-08	\$2,205,000	\$2,197,000	\$2,272,000	\$2,330,000	\$2,458,000
7/1/08-09	\$1,765,000	\$1,756,000	\$1,824,000	\$1,877,000	\$1,992,000
7/1/09-10	\$3,176,000	\$3,159,000	\$3,287,000	\$3,387,000	\$3,606,000
7/1/10-11	\$3,004,000	\$2,986,000	\$3,116,000	\$3,218,000	\$3,442,000
7/1/11-12	\$4,381,000	\$4,351,000	\$4,551,000	\$4,708,000	\$5,053,000
7/1/12-13	\$3,524,000	\$3,497,000	\$3,669,000	\$3,803,000	\$4,103,000
7/1/13-14	\$3,780,000	\$3,750,000	\$3,937,000	\$4,084,000	\$4,410,000
7/1/14-15	\$2,365,000	\$2,345,000	\$2,465,000	\$2,560,000	\$2,769,000
7/1/15-16	\$1,913,000	\$1,891,000	\$2,006,000	\$2,097,000	\$2,301,000
7/1/16-17	\$3,216,000	\$3,174,000	\$3,378,000	\$3,539,000	\$3,904,000
7/1/17-18	\$1,425,000	\$1,405,000	\$1,499,000	\$1,574,000	\$1,744,000
7/1/18-19	\$4,209,000	\$4,141,000	\$4,440,000	\$4,679,000	\$5,222,000
7/1/19-20	\$2,069,000	\$2,032,000	\$2,186,000	\$2,310,000	\$2,593,000
7/1/20-21	\$2,489,000	\$2,424,000	\$2,649,000	\$2,832,000	\$3,258,000
7/1/21-22	\$2,620,000	\$2,517,000	\$2,807,000	\$3,047,000	\$3,619,000
7/1/22-23	\$2,344,000	\$2,214,000	\$2,522,000	\$2,781,000	\$3,414,000
(1) All Years*	\$81,978,000	\$81,912,000	\$82,657,000	\$83,267,000	\$84,524,000
(2) Total Paid Losses		\$67,628,249			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected \$14,351,000	50th %-ile \$14,284,000	65th %-ile \$15,029,000	75th %-ile \$15,639,000	90th %-ile \$16,896,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected \$10,212,000	50th %-ile \$10,164,000	65th %-ile \$10,694,000	75th %-ile \$11,129,000	90th %-ile \$12,023,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$1,198,127	\$1,198,000	\$1,203,000	\$1,207,000	\$1,215,000
7/1/94-95	\$1,575,448	\$1,575,000	\$1,584,000	\$1,590,000	\$1,603,000
7/1/95-96	\$2,517,749	\$2,517,000	\$2,534,000	\$2,547,000	\$2,574,000
7/1/96-97	\$2,375,000	\$2,374,000	\$2,394,000	\$2,409,000	\$2,441,000
7/1/97-98	\$1,262,727	\$1,262,000	\$1,273,000	\$1,281,000	\$1,298,000
7/1/98-99	\$831,226	\$831,000	\$838,000	\$843,000	\$854,000
7/1/99-00	\$2,416,000	\$2,415,000	\$2,436,000	\$2,451,000	\$2,483,000
7/1/00-01	\$1,835,135	\$1,835,000	\$1,850,000	\$1,862,000	\$1,886,000
7/1/01-02	\$1,849,000	\$1,849,000	\$1,864,000	\$1,876,000	\$1,900,000
7/1/02-03	\$1,290,330	\$1,289,000	\$1,313,000	\$1,332,000	\$1,373,000
7/1/03-04	\$1,958,000	\$1,956,000	\$1,993,000	\$2,022,000	\$2,083,000
7/1/04-05	\$1,737,000	\$1,735,000	\$1,770,000	\$1,796,000	\$1,853,000
7/1/05-06	\$1,528,140	\$1,525,000	\$1,561,000	\$1,588,000	\$1,647,000
7/1/06-07	\$1,697,000	\$1,694,000	\$1,735,000	\$1,766,000	\$1,835,000
7/1/07-08	\$1,019,471	\$1,016,000	\$1,047,000	\$1,071,000	\$1,123,000
7/1/08-09	\$1,353,000	\$1,349,000	\$1,391,000	\$1,423,000	\$1,493,000
7/1/09-10	\$2,101,000	\$2,094,000	\$2,161,000	\$2,212,000	\$2,325,000
7/1/10-11	\$1,749,000	\$1,742,000	\$1,804,000	\$1,852,000	\$1,957,000
7/1/11-12	\$1,509,000	\$1,502,000	\$1,558,000	\$1,601,000	\$1,696,000
7/1/12-13	\$2,691,000	\$2,678,000	\$2,782,000	\$2,862,000	\$3,038,000
7/1/13-14	\$1,977,000	\$1,967,000	\$2,046,000	\$2,108,000	\$2,244,000
7/1/14-15	\$1,142,000	\$1,135,000	\$1,184,000	\$1,221,000	\$1,304,000
7/1/15-16	\$1,608,000	\$1,597,000	\$1,670,000	\$1,726,000	\$1,850,000
7/1/16-17	\$683,000	\$675,000	\$715,000	\$747,000	\$818,000
7/1/17-18	\$1,318,000	\$1,302,000	\$1,383,000	\$1,447,000	\$1,591,000
7/1/18-19	\$1,725,000	\$1,693,000	\$1,824,000	\$1,928,000	\$2,167,000
7/1/19-20	\$1,829,000	\$1,792,000	\$1,937,000	\$2,053,000	\$2,320,000
7/1/20-21	\$1,505,000	\$1,469,000	\$1,599,000	\$1,705,000	\$1,949,000
7/1/21-22	\$1,484,000	\$1,438,000	\$1,584,000	\$1,703,000	\$1,982,000
7/1/22-23	\$1,974,000	\$1,904,000	\$2,112,000	\$2,283,000	\$2,688,000
(1) All Years*	\$49,738,000	\$49,697,000	\$50,116,000	\$50,442,000	\$51,128,000
(2) Total Paid Losses		\$41,756,477			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected \$7,982,000	50th %-ile \$7,941,000	65th %-ile \$8,360,000	75th %-ile \$8,686,000	90th %-ile \$9,372,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected \$5,799,000	50th %-ile \$5,769,000	65th %-ile \$6,074,000	75th %-ile \$6,310,000	90th %-ile \$6,809,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$5,452,000	\$5,452,000	\$5,472,000	\$5,487,000	\$5,518,000
7/1/94-95	\$5,306,000	\$5,306,000	\$5,330,000	\$5,348,000	\$5,387,000
7/1/95-96	\$3,566,000	\$3,566,000	\$3,586,000	\$3,601,000	\$3,634,000
7/1/96-97	\$4,258,000	\$4,257,000	\$4,293,000	\$4,320,000	\$4,377,000
7/1/97-98	\$6,618,000	\$6,616,000	\$6,675,000	\$6,719,000	\$6,812,000
7/1/98-99	\$6,377,000	\$6,375,000	\$6,432,000	\$6,474,000	\$6,564,000
7/1/99-00	\$9,050,000	\$9,045,000	\$9,158,000	\$9,244,000	\$9,426,000
7/1/00-01	\$8,551,000	\$8,547,000	\$8,654,000	\$8,736,000	\$8,909,000
7/1/01-02	\$8,432,000	\$8,427,000	\$8,536,000	\$8,619,000	\$8,796,000
7/1/02-03	\$8,517,000	\$8,505,000	\$8,678,000	\$8,809,000	\$9,091,000
7/1/03-04	\$11,055,000	\$11,040,000	\$11,265,000	\$11,437,000	\$11,806,000
7/1/04-05	\$9,822,000	\$9,807,000	\$10,015,000	\$10,174,000	\$10,516,000
7/1/05-06	\$5,211,000	\$5,203,000	\$5,314,000	\$5,399,000	\$5,582,000
7/1/06-07	\$10,040,000	\$10,023,000	\$10,250,000	\$10,423,000	\$10,797,000
7/1/07-08	\$11,716,000	\$11,691,000	\$11,989,000	\$12,217,000	\$12,711,000
7/1/08-09	\$7,491,000	\$7,474,000	\$7,673,000	\$7,826,000	\$8,156,000
7/1/09-10	\$11,797,000	\$11,768,000	\$12,089,000	\$12,335,000	\$12,867,000
7/1/10-11	\$9,611,000	\$9,586,000	\$9,858,000	\$10,068,000	\$10,522,000
7/1/11-12	\$9,612,000	\$9,583,000	\$9,872,000	\$10,095,000	\$10,578,000
7/1/12-13	\$10,286,000	\$10,255,000	\$10,568,000	\$10,810,000	\$11,336,000
7/1/13-14	\$8,264,000	\$8,238,000	\$8,494,000	\$8,691,000	\$9,119,000
7/1/14-15	\$3,890,000	\$3,877,000	\$4,002,000	\$4,099,000	\$4,311,000
7/1/15-16	\$4,927,000	\$4,907,000	\$5,081,000	\$5,216,000	\$5,511,000
7/1/16-17	\$5,704,000	\$5,679,000	\$5,887,000	\$6,048,000	\$6,400,000
7/1/17-18	\$4,793,000	\$4,771,000	\$4,952,000	\$5,092,000	\$5,399,000
7/1/18-19	\$7,939,000	\$7,886,000	\$8,247,000	\$8,528,000	\$9,151,000
7/1/19-20	\$5,890,000	\$5,829,000	\$6,161,000	\$6,423,000	\$7,009,000
7/1/20-21	\$6,084,000	\$6,011,000	\$6,382,000	\$6,675,000	\$7,334,000
7/1/21-22	\$5,979,000	\$5,896,000	\$6,289,000	\$6,601,000	\$7,308,000
7/1/22-23	\$7,152,000	\$7,036,000	\$7,544,000	\$7,949,000	\$8,873,000
(1) All Years*	\$223,390,000	\$223,304,000	\$224,690,000	\$225,674,000	\$227,793,000
(2) Total Paid Losses		\$185,063,717			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected \$38,325,000	50th %-ile \$38,240,000	65th %-ile \$39,626,000	75th %-ile \$40,610,000	90th %-ile \$42,729,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected \$27,624,000	50th %-ile \$27,563,000	65th %-ile \$28,562,000	75th %-ile \$29,271,000	90th %-ile \$30,798,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

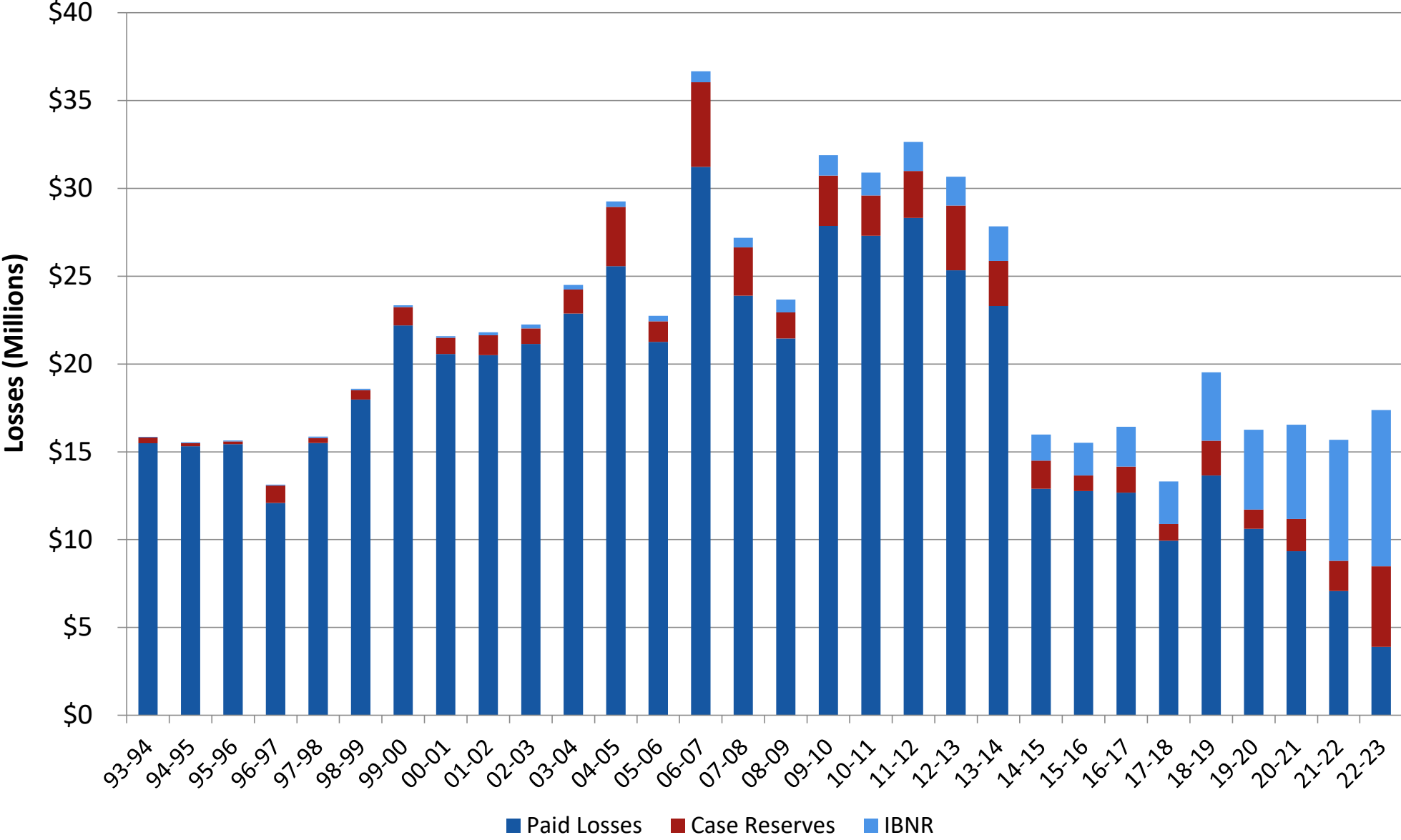
**Reconciliation of Required Reserves to Previous Actuarial Report  
Workers Compensation**

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(1)	Undiscounted Required Reserves as of June 30, 2022	\$108,913,000
(2)	7/1/22-23 Ultimate Losses Selected in Prior Report	\$19,351,000
(3)	Change in Ultimate Losses on years 7/1/93-94 through 7/1/22-23	(\$9,735,000)
(4)	Change in Ultimate Losses on years prior to 7/1/93-94	\$29,000
(5)	Losses Paid During 7/1/22-23	\$16,160,578
(6)	Required Reserves as of June 30, 2023	\$102,398,000

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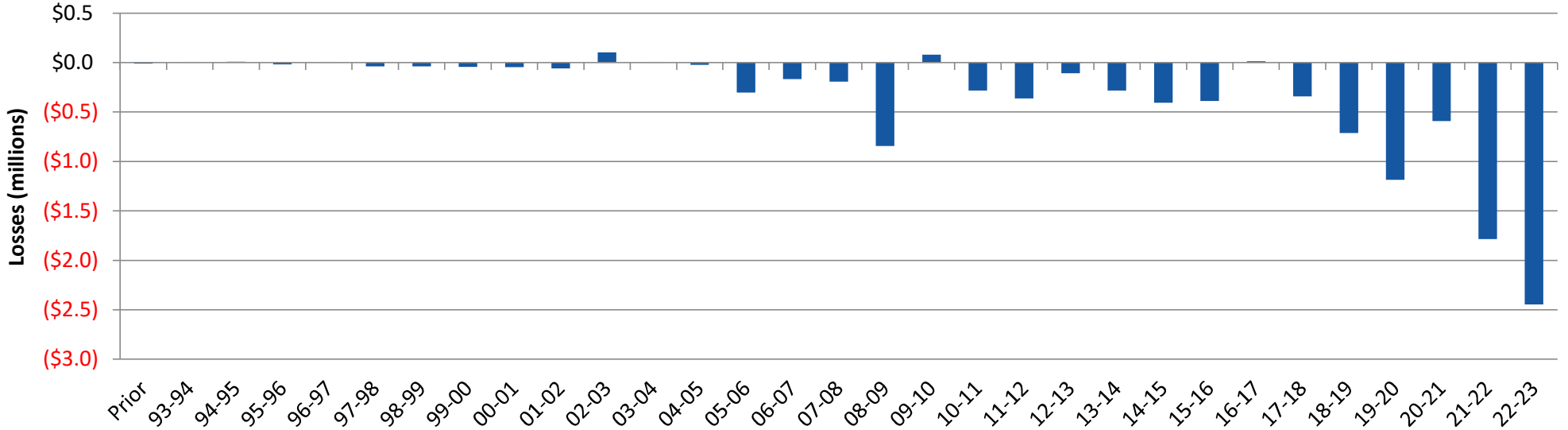
### Ultimate and Outstanding Losses as of June 30, 2023



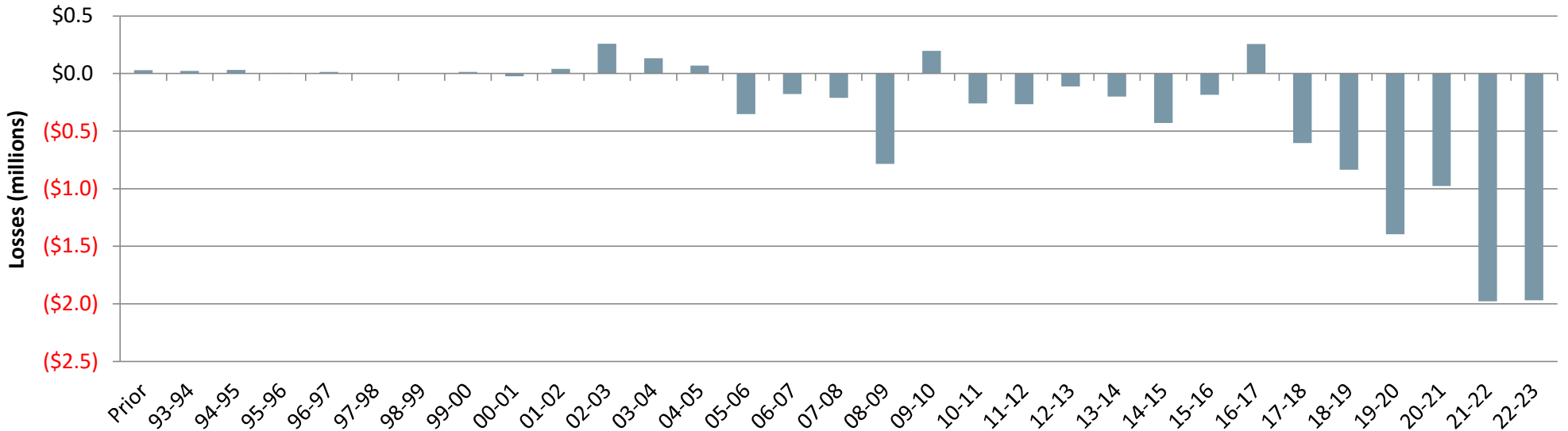
# Comparison to Prior Analysis

Graph 2

## Actual Minus Expected Reported Losses

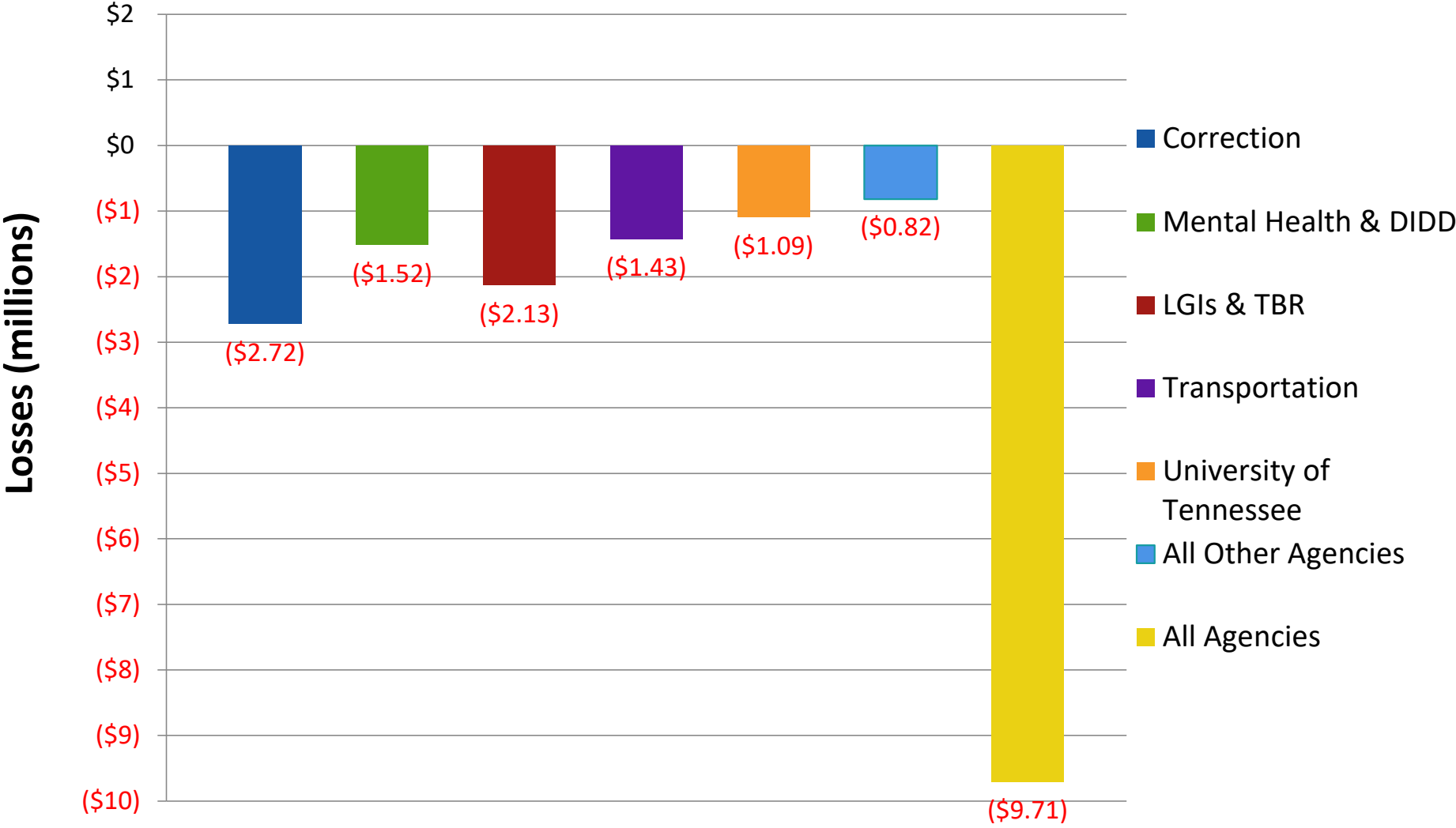


## Change in Estimated Ultimate Losses



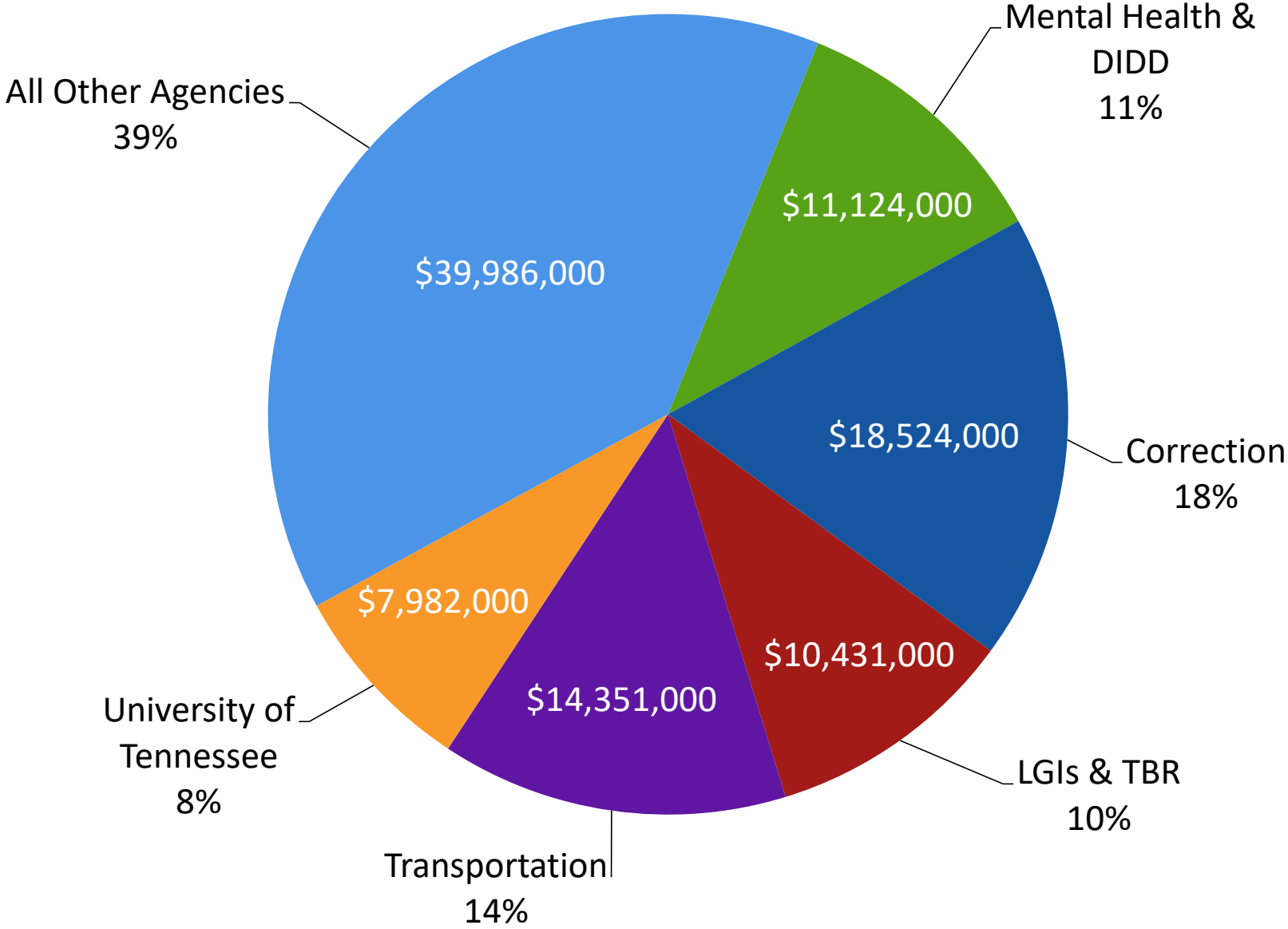


### Change in Ultimate Losses\*



\* Incurred through 6/30/23

# Undiscounted Outstanding Losses As of June 30, 2023



## Section 2

# Considerations

## Background

With a population of about 7.0 million, the State of Tennessee is the 15<sup>th</sup> largest state in the United States. The State of Tennessee's Department of Treasury maintains a risk management fund which has allowed the State to self-insure for General Liability, Automobile Liability, Medical Malpractice, and Workers Compensation. The State of Tennessee first engaged Select Actuarial Services to provide actuarial consulting services in 2012.

## Scope

Select Actuarial Services has prepared this report for the State of Tennessee at the request of Brian Derrick, Department of Treasury. The specific objectives are (a) to estimate ultimate and outstanding losses for the accident periods beginning July 1, 1993, through June 30, 2023, as of June 30, 2023, (b) to estimate outstanding losses for accident periods prior to July 1, 1993, as of June 30, 2023, and (c) to analyze the variability inherent in the loss experience by deriving loss estimates at various confidence levels or risk margins.

This report is an actuarial analysis of data, conditions, and practices communicated as of September 14, 2023, to Select Actuarial Services as described in this report. While Select Actuarial Services believes these communications to be reliable, it has not attempted to audit the information and cannot guarantee the accuracy of any information supplied. However, the data have been reviewed for reasonableness and internal consistency, comparing the claims experience from year to year, and comparing to prior evaluations.

It must be understood that the evaluation of ultimate levels of past liabilities requires estimation of future transactions. In projecting future loss emergence, we have assumed that historical patterns, with specific adjustments as noted, are predictive of future loss emergence. We have not anticipated any extraordinary changes to the social, legal and economic environment that may affect the frequency, cost or future reporting and settlement patterns of claims. In addition, our estimates do not include any provision for future claims arising out of causes not represented in the current data. Actual results may differ significantly from the estimates provided in this analysis.

## Use and Distribution

The actuarial estimates in this report are based upon appropriate actuarial assumptions and procedures described in the section of this report entitled "Description of Exhibits." Select Actuarial Services assumes no responsibility for any loss or damage that might arise from the use of or reliance upon this report other than for the purposes set forth herein.

This report was prepared for the use of and is only to be relied upon by the management of the State of Tennessee. This report may also be provided to State's auditors and insurance brokers. No portion of the report may be provided to any other party without Select Actuarial Services' prior consent. In the event that such consent is provided, the report must be provided in its entirety. We recommend that any such party have its own actuary review this report to ensure that the party understands the assumptions and uncertainties inherent in our estimates.

## Qualifications and Standards of Practice

Cheryl White and Jack Pipa are independent consultants to the State of Tennessee. Cheryl White and Jack Pipa are both Fellows of the Casualty Actuarial Society and Members of the American Academy of Actuaries. Both actuaries meet the Qualification Standards of the American Academy of Actuaries for property/casualty actuarial opinions. This report is prepared in accordance with Actuarial Standards of Practice No. 23, *Data Quality*, No. 41, *Actuarial Communications*, No. 43, *Property/Casualty Unpaid Claim Estimates*, and No. 56, *Modeling*.

## Coverage

The State of Tennessee does not purchase insurance against the risk of loss due to Workers Compensation claims. This report considers pure losses only – it does not include provisions for the cost of settling claims.

In 1999, the UT hospital (UHS) became private and is no longer part of the state claims award fund. Some UHS claims were included in the loss data provided by the State; however, since the State is fully reimbursed by UHS for the cost of these claims, this report does not consider those losses.

## Available Data

Loss information was provided by Michelle Simpson, Corvel Corporation. Exposure information was provided by Sarah Gregory, the State of Tennessee. Loss information included reported and paid losses by accident period from July 1, 1993, through June 30, 2023, as of June 30, 2023, but included pure loss information only. Loss information at other evaluation dates was taken from the previous actuarial report.

Some loss data was available for claims prior to July 1, 1993, as of June 30, 2023. By comparing this available data to the data in the previous actuarial report, we were able to determine the total incurred and paid losses for claims that were not included in the data we received. All of the unavailable claims were closed as of June 30, 2012, and we have assumed that they remained closed as June 30, 2023, and that the total incurred and paid amounts remained unchanged.

A projection of administrative expenses for the 2024/25 forecast year was provided by Brian Derrick, the State of Tennessee. These expenses are allocated to budget codes within each agency in the forecast report.

Payroll information was provided for the current year and prior payroll figures for each agency were also taken from the previous actuarial report.

## Development

Development is defined as the change over time in certain quantities pertaining to a given set of incidents. As claims for a given program year are reported, adjusted, litigated, and ultimately paid out, the number of claims, along with the paid losses and case reserves on those claims, will change.

Ideally, a client's own development patterns should be utilized in order to reflect its unique claims reporting procedures, claims administration arrangements, and settlement philosophy. Because the State's historical losses are available at multiple evaluation dates, the State's experience is utilized, supplemented by that of the insurance industry in TN (NCCI).

## Actuarial Central Estimate

The estimates of ultimate losses at the "expected" level in this analysis are actuarial central estimates - estimates that represent an expected value over the range of reasonably possible outcomes. Such a range of reasonably possible outcomes may not include all conceivable outcomes. For example, it would not include conceivable extreme events where the contribution of such events to an expected value estimate is not reliably measurable.

## Loss Models

Statistical distributions are often used by the insurance industry to model the loss generating process. Loss development patterns and aggregate historical losses are modeled using lognormal distributions fit to the reported loss development data. These distributions are discussed in Section 3 of this report.

## Discounting

In order to reflect the time value of money, outstanding losses are discounted to reflect anticipated future investment earnings. Two key assumptions in this procedure are the pattern which loss payments will follow, for which the State's selected pattern is used, and the rate of return earned on investible loss reserves, for which a rate of 4.0 percent is utilized. This rate was provided by the State and we express no opinion as to its appropriateness.

## Subrogation and Recoveries

We have used data net of recoveries throughout this analysis. The effect of such recoveries is therefore implicit in our calculations and no other reductions for collateral sources have been incorporated into the estimates.

## Definitions

**Accident Period:** All of the events with occurrence dates during a period specified make up the corresponding accident period. The dollars associated with those events total the accident period's losses, although they may be paid long after the end of the accident period. Losses are grouped by accident period throughout this analysis.

**Ultimate Losses:** The total amount that will eventually be paid on all losses for a particular accident period. Our estimate of the ultimate losses for an accident period is the sum of the paid losses, the case reserves, and the IBNR reserve.

**Paid Losses:** Dollars paid as of the latest available evaluation on losses incurred through the latest available evaluation.

**Case Reserves:** Reserves established on individual claims by the claims adjusters, as of the latest available evaluation. The case reserve plus the amount paid to date represents the adjuster's best estimate of the ultimate value of a particular claim.

**Reported Losses:** Paid losses plus case reserves as of the latest available evaluation.

**IBNR Reserve:** ("Incurred **B**ut **N**ot **R**eported") This is the dollar amount which we estimate will be added to the reported losses between the date when the losses were compiled and final settlement of all claims for the accident period. Some of these additional dollars will be added to claims which are already known and currently open but which will finally cost more than they are currently reserved for. Other of these dollars are associated with claims which are known and closed but will be reopened before final closure. The balance of the IBNR reserve is for late-reported events.

**Outstanding Losses:** The losses not yet paid. Outstanding losses equal the difference between the ultimate losses and the paid losses. They are also the sum of the case reserves and the IBNR reserve.

**Loss Development:** The change in the paid losses or the reported losses over time. As more information is provided, individual claim estimates get closer and closer to the ultimate value of the claims. The increase in the total reported losses through time is the reported loss development. Similarly, as losses are paid out over time, the increase in total paid losses is the paid loss development.

## Section 3

### Description of Exhibits & Appendices

#### Exhibit 1: Summary of Experience

Exhibit 1 summarizes the number of reported claims, open claims, paid and incurred losses, and payroll for each accident period, evaluated as of June 30, 2023. The payroll for fiscal years is estimated by interpolating between historic calendar year payroll figures.

#### Exhibit 2: Estimation of Ultimate Losses

In Exhibit 2-A, estimates of ultimate losses are calculated using loss development methods. These methods use the paid and incurred losses shown in Exhibit 1 and the development factors derived in Appendix A. The losses are projected to an ultimate basis using the selected loss development factors.

Additional estimates of ultimate losses are calculated in Exhibit 2-B using the Bornhuetter-Ferguson technique. For each year, estimates for outstanding losses are derived using estimated ultimate losses from the previous actuarial report as of June 30, 2022, or the current forecast report. Losses incurred and paid to date are then added to the estimated IBNR and unpaid values to derive estimated ultimate losses.

Exhibit 2-C estimates ultimate losses using the Incremental Paid Method. Incremental payments are used in pages 1 and 2 of Exhibit 2-C to project future payments. Incremental payments are first shown by accident year by maturity of the payment year. Assuming that the number of ultimate reported claims is reasonably stable from year to year, we divide the incremental payments by the ultimate claim counts and apply cost trend factors (see Appendix B of the forecast report) to calculate the average payments per claim at each maturity at 2024/25 cost levels.

We then take the selected average payment per claim at 2024/25 cost levels, detrended to each accident year's cost level, and multiply by the number of estimated ultimate claims to project the payments yet to be made on each accident year from 2007/08 through 2022/23.

Page 3 of Exhibit 2-C compiles the expected additional payments calculated using the incremental payment method on pages 1 and 2. For 2007/08 through 2022/23, expected additional payments are added to the payments to date to produce an estimate of ultimate losses.

#### Exhibit 3: Selection of Ultimate Losses and Comparison to Prior

The results of the five estimation methods are compared in Exhibit 3-A, along with the previous estimate of ultimate losses. A selection of our best estimate of the ultimate cost for each occurrence period is made based on the reasonableness of the various estimates when compared to loss experience

to date and the reasonableness of the estimates of ultimate and resulting unreported losses from year to year.

Exhibit 3-B displays with percentage differences the estimated ultimate losses derived in the previous actuarial report as of June 30, 2022, versus estimated ultimate losses as of June 30, 2023. Also compared are actual versus expected incurred and paid losses for each accident period. The expected values are derived using the data and assumptions made in the previous actuarial report.

## Exhibit 4: Calculation of Outstanding Losses

Estimated required reserves as of June 30, 2023, are calculated on Exhibit 4. Total required reserves are the difference between estimated ultimate losses and losses paid to date for each period. Similarly, unreported (“IBNR”) losses are the difference between estimated ultimate losses and incurred losses reported to date. The required reserves are discounted to reflect future anticipated investment earnings. The discount factors utilized rely upon the State’s payout patterns and an assumed discount rate of 4.0 percent (Appendix B).

## Exhibit 5: Aggregate Distribution of Outstanding Losses

This exhibit displays the estimated ultimate retained losses for the current and prior accident periods at various percentiles or confidence levels. The procedure utilized in deriving the results presented in this exhibit consists of modeling the development patterns displayed in Appendix A4 by a lognormal distribution. The variation that is estimated in this modeling technique is the variation inherent in the historical experience; it does not include potential variation due to unanticipated changes in the environment or to misestimation of parameters.

Losses paid to date are subtracted from the estimated ultimate losses at various percentiles for all years combined to derive the distribution of outstanding losses. Finally, the outstanding losses at various percentiles are discounted at 4.0%.

## Exhibit 6: Frequency, Severity, and Cost Per Exposure

Estimates of the ultimate number of claims for each year are calculated in Exhibit 6. The claim frequency, or claims per payroll, is derived by dividing the ultimate number of claims by the payroll. The estimated ultimate average claim size, for each historical year is also derived by dividing the estimated ultimate losses by the ultimate number of claims. Finally, a cost per \$100 of payroll is determined by dividing the ultimate losses by the estimated fiscal year payroll.

## Appendix A: Loss and Claim Development Factors

The selected loss and claim development factors used in this analysis are based on the triangles shown in Appendix A. The selected factors are fit to an inverse power curve to extrapolate factors at the maturities needed. In Appendix A4 the variability in the reported loss development history is measured in order to select parameters for the lognormal distributions for each accident year.



## Appendix B: Discount Factors

Discount factors are used to adjust the outstanding losses to present value. The timing and amount of future payments is based on the paid loss development factors. A rate of 4.0 percent was provided by the State.

## Appendix C: Outstanding Losses for Prior Years

In this report, Appendix C follows Appendix B for All Other Agencies and shows the selected ultimate losses for claims occurring prior to July 1, 1993. Additionally, the calculation of outstanding losses at the undiscounted and discounted levels are show on this page.

## Section 4

### Exhibits & Appendices

<b>Exhibit 1</b>	Summary of Experience
<b>Exhibit 2</b>	Estimation of Ultimate Losses
<b>Exhibit 3</b>	Selection of Ultimate Losses and Comparison to Prior
<b>Exhibit 4</b>	Calculation of Outstanding Losses
<b>Exhibit 5</b>	Aggregate Distribution of Outstanding Losses
<b>Exhibit 6</b>	Frequency, Severity, and Cost Per Exposure
<b>Appendix A</b>	Loss and Claim Development Factors
<b>Appendix B</b>	Discount Factors
<b>Appendix C</b>	Estimated Ultimate and Outstanding Losses for Prior Years

**Summary of Experience  
Workers Compensation**

(A) Period Begin End		(B) Evaluation Date	(C) Maturity (months)	(D) Reported Claims	(E) Open Claims	(F) Paid Losses	(G) Case Reserves	(H) Incurred Losses	(I) Historic Calendar Year Payroll (Hundreds)	(J) Estimated Fiscal Year Payroll (Hundreds)
07/01/93	06/30/94	6/30/23	360	369	0	\$1,691,185	\$0	\$1,691,185	--	--
07/01/94	06/30/95	6/30/23	348	371	1	\$1,736,817	\$24,090	\$1,760,907	--	--
07/01/95	06/30/96	6/30/23	336	379	1	\$1,470,412	\$4,522	\$1,474,934	--	--
07/01/96	06/30/97	6/30/23	324	329	0	\$2,058,779	\$0	\$2,058,779	--	--
07/01/97	06/30/98	6/30/23	312	336	0	\$1,727,782	\$0	\$1,727,782	--	--
07/01/98	06/30/99	6/30/23	300	367	1	\$3,241,586	\$154,281	\$3,395,867	--	--
07/01/99	06/30/00	6/30/23	288	416	0	\$3,337,774	\$0	\$3,337,774	--	--
07/01/00	06/30/01	6/30/23	276	413	0	\$3,190,218	\$0	\$3,190,218	--	--
07/01/01	06/30/02	6/30/23	264	447	2	\$3,313,666	\$497,021	\$3,810,687	--	--
07/01/02	06/30/03	6/30/23	252	413	2	\$3,051,419	\$40,878	\$3,092,297	--	--
07/01/03	06/30/04	6/30/23	240	389	0	\$3,219,785	\$0	\$3,219,785	--	--
07/01/04	06/30/05	6/30/23	228	436	3	\$3,742,565	\$218,141	\$3,960,706	--	--
07/01/05	06/30/06	6/30/23	216	477	2	\$5,766,204	\$388,779	\$6,154,983	--	--
07/01/06	06/30/07	6/30/23	204	459	6	\$5,012,312	\$662,765	\$5,675,078	--	--
07/01/07	06/30/08	6/30/23	192	441	1	\$3,432,683	\$190,276	\$3,622,959	--	--
07/01/08	06/30/09	6/30/23	180	459	3	\$4,005,490	\$216,639	\$4,222,129	--	--
07/01/09	06/30/10	6/30/23	168	435	5	\$5,255,167	\$554,137	\$5,809,304	\$1,529,648	\$1,492,215
07/01/10	06/30/11	6/30/23	156	497	6	\$6,895,717	\$445,677	\$7,341,394	\$1,454,783	\$1,496,308
07/01/11	06/30/12	6/30/23	144	508	6	\$5,478,159	\$974,091	\$6,452,250	\$1,537,834	\$1,555,015
07/01/12	06/30/13	6/30/23	132	594	8	\$6,498,343	\$1,141,146	\$7,639,489	\$1,572,196	\$1,793,811
07/01/13	06/30/14	6/30/23	120	612	6	\$7,001,469	\$715,026	\$7,716,495	\$2,015,425	\$2,062,017
07/01/14	06/30/15	6/30/23	108	598	4	\$3,066,636	\$496,036	\$3,562,672	\$2,108,608	\$2,055,128
07/01/15	06/30/16	6/30/23	96	570	4	\$1,904,021	\$259,318	\$2,163,339	\$2,001,647	\$2,005,304
07/01/16	06/30/17	6/30/23	84	559	2	\$2,121,341	\$136,077	\$2,257,419	\$2,008,961	\$2,044,133
07/01/17	06/30/18	6/30/23	72	654	6	\$1,861,826	\$175,899	\$2,037,725	\$2,079,305	\$2,114,477
07/01/18	06/30/19	6/30/23	60	580	10	\$1,495,206	\$303,104	\$1,798,311	\$2,149,650	\$2,125,612
07/01/19	06/30/20	6/30/23	48	522	11	\$1,666,520	\$307,796	\$1,974,315	\$2,101,574	\$2,173,745
07/01/20	06/30/21	6/30/23	36	496	16	\$1,521,996	\$330,695	\$1,852,691	\$2,245,916	\$2,182,142
07/01/21	06/30/22	6/30/23	24	388	21	\$1,098,906	\$348,172	\$1,447,079	\$2,118,368	\$2,262,149
07/01/22	06/30/23	6/30/23	12	461	102	\$562,404	\$654,403	\$1,216,807	\$2,405,930	\$2,619,025
<b>Total</b>				13,975	229	\$96,426,390	\$9,238,969	\$105,665,359	\$27,329,845	\$27,981,080

- Loss information and payroll (hundreds) provided by The State of Tennessee, Risk Management Division  
- Loss information contains only pure losses, net of recoveries  
Column (J): Interpolation of (I)

**Estimation of Ultimate Losses  
Workers Compensation**

<i>Incurring Loss Development</i>				<i>Paid Loss Development</i>			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses	Incurred Develop. Factor	Estimated Ultimate Losses	Accident Period	Paid Losses	Paid Develop. Factor	Estimated Ultimate Losses
7/1/93-94	\$1,691,185	1.003	\$1,697,000	7/1/93-94	\$1,691,185	1.083	\$1,831,000
7/1/94-95	\$1,760,907	1.004	\$1,768,000	7/1/94-95	\$1,736,817	1.085	\$1,885,000
7/1/95-96	\$1,474,934	1.004	\$1,481,000	7/1/95-96	\$1,470,412	1.088	\$1,600,000
7/1/96-97	\$2,058,779	1.005	\$2,069,000	7/1/96-97	\$2,058,779	1.091	\$2,246,000
7/1/97-98	\$1,727,782	1.005	\$1,737,000	7/1/97-98	\$1,727,782	1.094	\$1,890,000
7/1/98-99	\$3,395,867	1.006	\$3,417,000	7/1/98-99	\$3,241,586	1.097	\$3,556,000
7/1/99-00	\$3,337,774	1.007	\$3,361,000	7/1/99-00	\$3,337,774	1.101	\$3,673,000
7/1/00-01	\$3,190,218	1.008	\$3,216,000	7/1/00-01	\$3,190,218	1.104	\$3,523,000
7/1/01-02	\$3,810,687	1.009	\$3,845,000	7/1/01-02	\$3,313,666	1.109	\$3,673,000
7/1/02-03	\$3,092,297	1.010	\$3,125,000	7/1/02-03	\$3,051,419	1.113	\$3,396,000
7/1/03-04	\$3,219,785	1.012	\$3,259,000	7/1/03-04	\$3,219,785	1.118	\$3,600,000
7/1/04-05	\$3,960,706	1.014	\$4,016,000	7/1/04-05	\$3,742,565	1.123	\$4,204,000
7/1/05-06	\$6,154,983	1.016	\$6,255,000	7/1/05-06	\$5,766,204	1.129	\$6,513,000
7/1/06-07	\$5,675,078	1.019	\$5,783,000	7/1/06-07	\$5,012,312	1.136	\$5,695,000
7/1/07-08	\$3,622,959	1.022	\$3,704,000	7/1/07-08	\$3,432,683	1.144	\$3,926,000
7/1/08-09	\$4,222,129	1.026	\$4,333,000	7/1/08-09	\$4,005,490	1.152	\$4,615,000
7/1/09-10	\$5,809,304	1.031	\$5,991,000	7/1/09-10	\$5,255,167	1.162	\$6,105,000
7/1/10-11	\$7,341,394	1.037	\$7,616,000	7/1/10-11	\$6,895,717	1.173	\$8,087,000
7/1/11-12	\$6,452,250	1.045	\$6,743,000	7/1/11-12	\$5,478,159	1.186	\$6,495,000
7/1/12-13	\$7,639,489	1.055	\$8,057,000	7/1/12-13	\$6,498,343	1.201	\$7,802,000
7/1/13-14	\$7,716,495	1.067	\$8,233,000	7/1/13-14	\$7,001,469	1.219	\$8,533,000
7/1/14-15	\$3,562,672	1.083	\$3,857,000	7/1/14-15	\$3,066,636	1.241	\$3,805,000
7/1/15-16	\$2,163,339	1.103	\$2,387,000	7/1/15-16	\$1,904,021	1.268	\$2,415,000
7/1/16-17	\$2,257,419	1.130	\$2,552,000	7/1/16-17	\$2,121,341	1.304	\$2,765,000
7/1/17-18	\$2,037,725	1.167	\$2,377,000	7/1/17-18	\$1,861,826	1.351	\$2,515,000
7/1/18-19	\$1,798,311	1.216	\$2,187,000	7/1/18-19	\$1,495,206	1.418	\$2,120,000
7/1/19-20	\$1,974,315	1.284	\$2,535,000	7/1/19-20	\$1,666,520	1.521	\$2,534,000
7/1/20-21	\$1,852,691	1.380	\$2,557,000	7/1/20-21	\$1,521,996	1.701	\$2,590,000
7/1/21-22	\$1,447,079	1.518	\$2,197,000	7/1/21-22	\$1,098,906	2.113	\$2,322,000
7/1/22-23	\$1,216,807	1.722	\$2,096,000	7/1/22-23	\$562,404	4.291	\$2,413,000
<b>Total</b>	<b>\$105,665,359</b>		<b>\$112,451,000</b>	<b>Total</b>	<b>\$96,426,390</b>		<b>\$116,327,000</b>

Columns (B), (F): Exhibit 1  
 Column (C): Appendix A1  
 Column (D) = (B) \* (C)  
 Column (G): Appendix A2  
 Column (H) = (F) \* (G)

**Estimation of Ultimate Losses  
Workers Compensation**

*Incurred Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Incurred Develop. Factor	Estimated Percent Unpaid	Estimated Unreported Losses	Incurred Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$1,691,000	1.003	0.3%	\$5,808	\$1,691,185	\$1,697,000
7/1/94-95	\$1,761,000	1.004	0.4%	\$6,756	\$1,760,907	\$1,768,000
7/1/95-96	\$1,475,000	1.004	0.4%	\$6,339	\$1,474,934	\$1,481,000
7/1/96-97	\$2,059,000	1.005	0.5%	\$9,939	\$2,058,779	\$2,069,000
7/1/97-98	\$1,756,000	1.005	0.5%	\$9,548	\$1,727,782	\$1,737,000
7/1/98-99	\$3,396,000	1.006	0.6%	\$20,861	\$3,395,867	\$3,417,000
7/1/99-00	\$3,411,000	1.007	0.7%	\$23,752	\$3,337,774	\$3,362,000
7/1/00-01	\$3,190,000	1.008	0.8%	\$25,266	\$3,190,218	\$3,215,000
7/1/01-02	\$3,813,000	1.009	0.9%	\$34,466	\$3,810,687	\$3,845,000
7/1/02-03	\$3,117,000	1.010	1.0%	\$32,273	\$3,092,297	\$3,125,000
7/1/03-04	\$3,220,000	1.012	1.2%	\$38,347	\$3,219,785	\$3,258,000
7/1/04-05	\$4,022,000	1.014	1.4%	\$55,318	\$3,960,706	\$4,016,000
7/1/05-06	\$6,415,000	1.016	1.6%	\$102,323	\$6,154,983	\$6,257,000
7/1/06-07	\$5,806,000	1.019	1.9%	\$107,889	\$5,675,078	\$5,783,000
7/1/07-08	\$3,819,000	1.022	2.2%	\$83,090	\$3,622,959	\$3,706,000
7/1/08-09	\$4,633,000	1.026	2.6%	\$118,617	\$4,222,129	\$4,341,000
7/1/09-10	\$6,048,000	1.031	3.0%	\$183,138	\$5,809,304	\$5,992,000
7/1/10-11	\$7,929,000	1.037	3.6%	\$285,532	\$7,341,394	\$7,627,000
7/1/11-12	\$6,934,000	1.045	4.3%	\$298,733	\$6,452,250	\$6,751,000
7/1/12-13	\$7,960,000	1.055	5.2%	\$412,712	\$7,639,489	\$8,052,000
7/1/13-14	\$8,476,000	1.067	6.3%	\$531,950	\$7,716,495	\$8,248,000
7/1/14-15	\$4,079,000	1.083	7.6%	\$311,752	\$3,562,672	\$3,874,000
7/1/15-16	\$2,686,000	1.103	9.4%	\$251,558	\$2,163,339	\$2,415,000
7/1/16-17	\$2,951,000	1.130	11.5%	\$340,577	\$2,257,419	\$2,598,000
7/1/17-18	\$2,851,000	1.167	14.3%	\$407,355	\$2,037,725	\$2,445,000
7/1/18-19	\$2,635,000	1.216	17.8%	\$467,883	\$1,798,311	\$2,266,000
7/1/19-20	\$3,026,000	1.284	22.1%	\$669,306	\$1,974,315	\$2,644,000
7/1/20-21	\$2,886,000	1.380	27.5%	\$794,725	\$1,852,691	\$2,647,000
7/1/21-22	\$2,601,000	1.518	34.1%	\$887,796	\$1,447,079	\$2,335,000
7/1/22-23	\$3,041,000	1.722	41.9%	\$1,275,438	\$1,216,807	\$2,492,000
<b>Total</b>	<b>\$117,687,000</b>			<b>\$7,799,046</b>	<b>\$105,665,359</b>	<b>\$113,463,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)

**Estimation of Ultimate Losses  
Workers Compensation**

*Paid Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Paid Develop. Factor	Estimated Percent Unpaid	Estimated Unpaid Losses	Paid Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$1,691,000	1.083	7.6%	\$129,319	\$1,691,185	\$1,821,000
7/1/94-95	\$1,761,000	1.085	7.9%	\$138,380	\$1,736,817	\$1,875,000
7/1/95-96	\$1,475,000	1.088	8.1%	\$119,210	\$1,470,412	\$1,590,000
7/1/96-97	\$2,059,000	1.091	8.3%	\$171,319	\$2,058,779	\$2,230,000
7/1/97-98	\$1,756,000	1.094	8.6%	\$150,570	\$1,727,782	\$1,878,000
7/1/98-99	\$3,396,000	1.097	8.8%	\$300,422	\$3,241,586	\$3,542,000
7/1/99-00	\$3,411,000	1.101	9.1%	\$311,701	\$3,337,774	\$3,649,000
7/1/00-01	\$3,190,000	1.104	9.5%	\$301,514	\$3,190,218	\$3,492,000
7/1/01-02	\$3,813,000	1.109	9.8%	\$373,282	\$3,313,666	\$3,687,000
7/1/02-03	\$3,117,000	1.113	10.2%	\$316,541	\$3,051,419	\$3,368,000
7/1/03-04	\$3,220,000	1.118	10.6%	\$339,800	\$3,219,785	\$3,560,000
7/1/04-05	\$4,022,000	1.123	11.0%	\$441,862	\$3,742,565	\$4,184,000
7/1/05-06	\$6,415,000	1.129	11.5%	\$735,153	\$5,766,204	\$6,501,000
7/1/06-07	\$5,806,000	1.136	12.0%	\$695,619	\$5,012,312	\$5,708,000
7/1/07-08	\$3,819,000	1.144	12.6%	\$479,594	\$3,432,683	\$3,912,000
7/1/08-09	\$4,633,000	1.152	13.2%	\$611,560	\$4,005,490	\$4,617,000
7/1/09-10	\$6,048,000	1.162	13.9%	\$841,761	\$5,255,167	\$6,097,000
7/1/10-11	\$7,929,000	1.173	14.7%	\$1,167,783	\$6,895,717	\$8,063,000
7/1/11-12	\$6,934,000	1.186	15.7%	\$1,085,251	\$5,478,159	\$6,563,000
7/1/12-13	\$7,960,000	1.201	16.7%	\$1,330,318	\$6,498,343	\$7,829,000
7/1/13-14	\$8,476,000	1.219	17.9%	\$1,521,053	\$7,001,469	\$8,523,000
7/1/14-15	\$4,079,000	1.241	19.4%	\$791,302	\$3,066,636	\$3,858,000
7/1/15-16	\$2,686,000	1.268	21.1%	\$567,979	\$1,904,021	\$2,472,000
7/1/16-17	\$2,951,000	1.304	23.3%	\$687,144	\$2,121,341	\$2,808,000
7/1/17-18	\$2,851,000	1.351	26.0%	\$740,435	\$1,861,826	\$2,602,000
7/1/18-19	\$2,635,000	1.418	29.5%	\$776,423	\$1,495,206	\$2,272,000
7/1/19-20	\$3,026,000	1.521	34.2%	\$1,036,115	\$1,666,520	\$2,703,000
7/1/20-21	\$2,886,000	1.701	41.2%	\$1,189,791	\$1,521,996	\$2,712,000
7/1/21-22	\$2,601,000	2.113	52.7%	\$1,370,043	\$1,098,906	\$2,469,000
7/1/22-23	\$3,041,000	4.291	76.7%	\$2,332,329	\$562,404	\$2,895,000
<b>Total</b>	<b>\$117,687,000</b>			<b>\$21,053,572</b>	<b>\$96,426,390</b>	<b>\$117,480,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)



Projection of Incremental Payments  
Workers Compensation

Accident Period	Incremental Paid Losses							
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT
7/1/93-94	\$11,805	\$14,522	\$23,150	\$15,789	\$3,213	\$7,842	\$6,587	\$113,264
7/1/94-95	\$20,735	\$20,206	\$49,721	\$17,591	\$14,888	\$12,365	\$13,596	\$69,581
7/1/95-96	\$2,555	\$2,212	\$1,444	\$1,470	\$1,709	\$1,772	\$3,540	\$44,972
7/1/96-97	(\$358)	\$3,555	\$29,914	\$19,369	\$326	\$543	\$3,907	(\$115,935)
7/1/97-98	\$4,540	\$19,680	\$54,744	\$1,772	\$9,719	\$42,073	\$10,071	\$21,692
7/1/98-99	\$28,262	\$26,637	\$22,165	\$56,721	\$26,485	\$16,677	\$18,459	\$276,495
7/1/99-00	\$85,825	\$24,451	\$31,024	\$39,488	\$29,230	\$50,353	\$87,389	\$260,736
7/1/00-01	\$32,028	\$132,032	\$45,777	\$20,545	\$158,815	\$26,266	\$4,847	\$25,748
7/1/01-02	\$85,964	\$45,179	\$35,412	\$31,495	\$36,395	\$42,699	\$53,339	\$794,948
7/1/02-03	\$32,421	\$14,331	\$12,905	\$8,360	\$8,237	\$8,917	\$3,382	\$114,884
7/1/03-04	\$51,816	\$55,913	\$23,193	\$30,062	\$38,383	\$38,998	\$18,746	\$14,838
7/1/04-05	\$92,408	\$113,432	\$101,159	\$64,481	(\$127,354)	\$34,607	\$46,533	\$526,308
7/1/05-06	\$113,549	\$99,169	\$102,372	\$210,059	\$56,101	\$20,861	\$136,322	\$424,937
7/1/06-07	\$201,823	\$82,001	\$73,217	\$76,452	\$102,581	\$91,010	\$145,056	\$708,952
7/1/07-08	\$36,154	\$15,877	\$15,181	\$5,544	\$47,716	\$6,988	\$8,799	\$190,276
7/1/08-09	\$18,706	\$17,503	\$20,787	\$13,227	\$16,818	\$8,839		
7/1/09-10	\$22,460	\$19,245	\$16,306	\$22,415	\$28,182			
7/1/10-11	\$111,702	\$47,085	\$99,377	\$109,766				
7/1/11-12	\$61,166	\$68,577	\$31,089					
7/1/12-13	\$90,281	\$89,741						
7/1/13-14	\$33,653							
7/1/14-15								
7/1/15-16								
7/1/16-17								
7/1/17-18								
7/1/18-19								
7/1/19-20								
7/1/20-21								
7/1/21-22								
7/1/22-23								

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level								Trend Factor to 7/1/24-25
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/93-94	\$39	\$48	\$76	\$52	\$11	\$26	\$22	\$373	1.215
7/1/94-95	\$67	\$65	\$161	\$57	\$48	\$40	\$44	\$226	1.203
7/1/95-96	\$8	\$7	\$5	\$5	\$5	\$6	\$11	\$141	1.191
7/1/96-97	--	\$13	\$107	\$69	\$1	\$14	--	--	1.179
7/1/97-98	\$16	\$68	\$190	\$6	\$34	\$146	\$35	\$75	1.167
7/1/98-99	\$89	\$84	\$70	\$179	\$83	\$53	\$58	\$871	1.156
7/1/99-00	\$236	\$67	\$85	\$109	\$80	\$138	\$240	\$717	1.144
7/1/00-01	\$88	\$362	\$126	\$56	\$436	\$72	\$13	\$71	1.133
7/1/01-02	\$216	\$113	\$89	\$79	\$91	\$107	\$134	\$1,995	1.122
7/1/02-03	\$87	\$39	\$35	\$22	\$22	\$24	\$9	\$309	1.111
7/1/03-04	\$146	\$158	\$66	\$85	\$108	\$110	\$53	\$42	1.100
7/1/04-05	\$231	\$283	\$253	\$161	--	\$86	\$116	\$1,314	1.089
7/1/05-06	\$257	\$224	\$231	\$475	\$127	\$47	\$308	\$960	1.078
7/1/06-07	\$469	\$191	\$170	\$178	\$239	\$212	\$337	\$1,648	1.067
7/1/07-08	\$87	\$38	\$36	\$13	\$114	\$17	\$21	\$456	1.057
7/1/08-09	\$43	\$40	\$47	\$30	\$38	\$20			1.046
7/1/09-10	\$53	\$46	\$39	\$53	\$67				1.036
7/1/10-11	\$225	\$95	\$200	\$221					1.002
7/1/11-12	\$120	\$134	\$61						0.996
7/1/12-13	\$154	\$153							1.014
7/1/13-14	\$57								1.033
7/1/14-15									1.057
7/1/15-16									1.069
7/1/16-17									1.074
7/1/17-18									1.072
7/1/18-19									1.060
7/1/19-20									1.043
7/1/20-21									1.026
7/1/21-22									1.016
7/1/22-23									1.010
Average	\$134	\$111	\$108	\$103	\$94	\$69	\$94	\$657	
Avg Latest 5	\$122	\$94	\$77	\$99	\$117	\$76	\$167	\$884	
Prior	\$133	\$131	\$131	\$119	\$110	\$88	\$88	\$920	
All Agencies	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$764	
Selected	\$133	\$131	\$122	\$122	\$110	\$88	\$88	\$884	

Accident Period	Projected Incremental Payments								Total Unpaid
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/07-08								\$368,996	\$369,000
7/1/08-09							\$38,433	\$387,899	\$426,000
7/1/09-10						\$36,788	\$36,788	\$371,293	\$445,000
7/1/10-11					\$54,467	\$43,470	\$43,470	\$438,735	\$580,000
7/1/11-12				\$62,110	\$55,973	\$44,672	\$44,672	\$450,866	\$658,000
7/1/12-13			\$71,314	\$71,314	\$64,267	\$51,292	\$51,292	\$517,677	\$827,000
7/1/13-14		\$77,672	\$72,145	\$72,145	\$65,016	\$51,889	\$51,889	\$523,709	\$914,000
7/1/14-15	\$75,210	\$74,193	\$68,914	\$68,914	\$62,104	\$49,565	\$49,565	\$500,256	\$949,000
7/1/15-16	\$70,867	\$69,910	\$64,935	\$64,935	\$58,518	\$46,704	\$46,704	\$471,372	\$975,000
7/1/16-17	\$69,210	\$68,275	\$63,416	\$63,416	\$57,150	\$45,611	\$45,611	\$460,348	\$1,053,000
7/1/17-18	\$81,122	\$80,026	\$74,331	\$74,331	\$66,986	\$53,462	\$53,462	\$539,581	\$1,379,000
7/1/18-19	\$72,760	\$71,776	\$66,669	\$66,669	\$60,081	\$47,951	\$47,951	\$483,958	\$1,405,000
7/1/19-20	\$66,530	\$65,631	\$60,961	\$60,961	\$54,937	\$43,845	\$43,845	\$442,523	\$1,479,000
7/1/20-21	\$64,296	\$63,427	\$58,913	\$58,913	\$53,092	\$42,373	\$42,373	\$427,661	\$1,696,000
7/1/21-22	\$50,881	\$50,194	\$46,622	\$46,622	\$42,015	\$33,532	\$33,532	\$338,434	\$1,625,000
7/1/22-23	\$61,781	\$60,946	\$56,609	\$56,609	\$51,015	\$40,716	\$40,716	\$410,935	\$2,646,000



**Estimation of Ultimate Losses  
Incremental Paid Method  
Workers Compensation**

(A) Accident Period	(B) Paid Losses As of 6/30/23	(C) Estimated Unpaid Losses	(D) Estimate Ultimate Losses
7/1/07-08	\$3,432,683	\$369,000	\$3,802,000
7/1/08-09	\$4,005,490	\$426,000	\$4,431,000
7/1/09-10	\$5,255,167	\$445,000	\$5,700,000
7/1/10-11	\$6,895,717	\$580,000	\$7,476,000
7/1/11-12	\$5,478,159	\$658,000	\$6,136,000
7/1/12-13	\$6,498,343	\$827,000	\$7,325,000
7/1/13-14	\$7,001,469	\$914,000	\$7,915,000
7/1/14-15	\$3,066,636	\$949,000	\$4,016,000
7/1/15-16	\$1,904,021	\$975,000	\$2,879,000
7/1/16-17	\$2,121,341	\$1,053,000	\$3,174,000
7/1/17-18	\$1,861,826	\$1,379,000	\$3,241,000
7/1/18-19	\$1,495,206	\$1,405,000	\$2,900,000
7/1/19-20	\$1,666,520	\$1,479,000	\$3,146,000
7/1/20-21	\$1,521,996	\$1,696,000	\$3,218,000
7/1/21-22	\$1,098,906	\$1,625,000	\$2,724,000
7/1/22-23	\$562,404	\$2,646,000	\$3,208,000
<b>Total</b>	<b>\$53,865,885</b>	<b>\$17,426,000</b>	<b>\$71,291,000</b>

Column (B): Exhibit 1  
Column (C): Exhibit 2-C, page 1 and 2  
Column (D) = (B) + (C)

**Summary and Selection of Ultimate Losses  
Workers Compensation**

(A)	(B)	(C) Incurred Loss Development Method	(D) Paid Loss Development Method	(E) Incurred Bornhuetter- Ferguson Method	(F) Paid Bornhuetter- Ferguson Method	(G) Incremental Paid Method	(H) Selected Ultimate Losses
7/1/93-94	\$1,691,000	\$1,697,000	\$1,831,000	\$1,697,000	\$1,821,000		\$1,691,000
7/1/94-95	\$1,761,000	\$1,768,000	\$1,885,000	\$1,768,000	\$1,875,000		\$1,768,000
7/1/95-96	\$1,475,000	\$1,481,000	\$1,600,000	\$1,481,000	\$1,590,000		\$1,481,000
7/1/96-97	\$2,059,000	\$2,069,000	\$2,246,000	\$2,069,000	\$2,230,000		\$2,059,000
7/1/97-98	\$1,756,000	\$1,737,000	\$1,890,000	\$1,737,000	\$1,878,000		\$1,728,000
7/1/98-99	\$3,396,000	\$3,417,000	\$3,556,000	\$3,417,000	\$3,542,000		\$3,417,000
7/1/99-00	\$3,411,000	\$3,361,000	\$3,673,000	\$3,362,000	\$3,649,000		\$3,338,000
7/1/00-01	\$3,190,000	\$3,216,000	\$3,523,000	\$3,215,000	\$3,492,000		\$3,190,000
7/1/01-02	\$3,813,000	\$3,845,000	\$3,673,000	\$3,845,000	\$3,687,000		\$3,845,000
7/1/02-03	\$3,117,000	\$3,125,000	\$3,396,000	\$3,125,000	\$3,368,000		\$3,125,000
7/1/03-04	\$3,220,000	\$3,259,000	\$3,600,000	\$3,258,000	\$3,560,000		\$3,220,000
7/1/04-05	\$4,022,000	\$4,016,000	\$4,204,000	\$4,016,000	\$4,184,000		\$4,016,000
7/1/05-06	\$6,415,000	\$6,255,000	\$6,513,000	\$6,257,000	\$6,501,000		\$6,255,000
7/1/06-07	\$5,806,000	\$5,783,000	\$5,695,000	\$5,783,000	\$5,708,000		\$5,783,000
7/1/07-08	\$3,819,000	\$3,704,000	\$3,926,000	\$3,706,000	\$3,912,000	\$3,802,000	\$3,704,000
7/1/08-09	\$4,633,000	\$4,333,000	\$4,615,000	\$4,341,000	\$4,617,000	\$4,431,000	\$4,333,000
7/1/09-10	\$6,048,000	\$5,991,000	\$6,105,000	\$5,992,000	\$6,097,000	\$5,700,000	\$6,045,000
7/1/10-11	\$7,929,000	\$7,616,000	\$8,087,000	\$7,627,000	\$8,063,000	\$7,476,000	\$7,616,000
7/1/11-12	\$6,934,000	\$6,743,000	\$6,495,000	\$6,751,000	\$6,563,000	\$6,136,000	\$6,743,000
7/1/12-13	\$7,960,000	\$8,057,000	\$7,802,000	\$8,052,000	\$7,829,000	\$7,325,000	\$7,941,000
7/1/13-14	\$8,476,000	\$8,233,000	\$8,533,000	\$8,248,000	\$8,523,000	\$7,915,000	\$8,386,000
7/1/14-15	\$4,079,000	\$3,857,000	\$3,805,000	\$3,874,000	\$3,858,000	\$4,016,000	\$3,866,000
7/1/15-16	\$2,686,000	\$2,387,000	\$2,415,000	\$2,415,000	\$2,472,000	\$2,879,000	\$2,560,000
7/1/16-17	\$2,951,000	\$2,552,000	\$2,765,000	\$2,598,000	\$2,808,000	\$3,174,000	\$2,775,000
7/1/17-18	\$2,851,000	\$2,377,000	\$2,515,000	\$2,445,000	\$2,602,000	\$3,241,000	\$2,688,000
7/1/18-19	\$2,635,000	\$2,187,000	\$2,120,000	\$2,266,000	\$2,272,000	\$2,900,000	\$2,451,000
7/1/19-20	\$3,026,000	\$2,535,000	\$2,534,000	\$2,644,000	\$2,703,000	\$3,146,000	\$2,895,000
7/1/20-21	\$2,886,000	\$2,557,000	\$2,590,000	\$2,647,000	\$2,712,000	\$3,218,000	\$2,807,000
7/1/21-22	\$2,601,000	\$2,197,000	\$2,322,000	\$2,335,000	\$2,469,000	\$2,724,000	\$2,530,000
7/1/22-23	\$3,028,000	\$2,096,000	\$2,413,000	\$2,492,000	\$2,895,000	\$3,208,000	\$2,694,000
<b>Total</b>	<b>\$117,674,000</b>	<b>\$112,451,000</b>	<b>\$116,327,000</b>	<b>\$113,463,000</b>	<b>\$117,480,000</b>	<b>\$71,291,000</b>	<b>\$114,950,000</b>

Column (B): Previous actuarial report

Columns (C), (D): Exhibit 2-A

Columns (E), (F): Exhibit 2-B

Column (G): Exhibit 2-C

Column (H): Reported losses for 93-94, 96-97, 97-98, 99-00, 00-01, and 03-04

Column (C) for 94-95, 95-96, 98-99, 01-02, 02-03, 04-05 through 08-09, 10-11, and 11-12

Average of (E) and (F) for 09-10, 12-13 through 14-15, and 22-23

Average of (C), (E), and (G) for 15-16 through 18-19 and 20-21

Average of (E) and (G) for 19-20 and 21-22

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,691,185	\$1,691,166	\$1,691,185	0%	\$1,691,000	\$1,691,000	0%
7/1/94-95	\$1,760,907	\$1,760,917	\$1,760,907	0%	\$1,761,000	\$1,768,000	0%
7/1/95-96	\$1,474,934	\$1,474,941	\$1,474,934	0%	\$1,475,000	\$1,481,000	0%
7/1/96-97	\$2,058,779	\$2,058,804	\$2,058,779	0%	\$2,059,000	\$2,059,000	0%
7/1/97-98	\$1,755,612	\$1,755,656	\$1,727,782	-2%	\$1,756,000	\$1,728,000	-2%
7/1/98-99	\$3,395,867	\$3,395,882	\$3,395,867	0%	\$3,396,000	\$3,417,000	1%
7/1/99-00	\$3,410,688	\$3,410,725	\$3,337,774	-2%	\$3,411,000	\$3,338,000	-2%
7/1/00-01	\$3,190,218	\$3,190,191	\$3,190,218	0%	\$3,190,000	\$3,190,000	0%
7/1/01-02	\$3,813,017	\$3,813,015	\$3,810,687	0%	\$3,813,000	\$3,845,000	1%
7/1/02-03	\$3,116,623	\$3,116,671	\$3,092,297	-1%	\$3,117,000	\$3,125,000	0%
7/1/03-04	\$3,219,785	\$3,219,813	\$3,219,785	0%	\$3,220,000	\$3,220,000	0%
7/1/04-05	\$4,021,538	\$4,021,600	\$3,960,706	-2%	\$4,022,000	\$4,016,000	0%
7/1/05-06	\$6,276,936	\$6,296,006	\$6,154,983	-2%	\$6,415,000	\$6,255,000	-2%
7/1/06-07	\$5,659,494	\$5,680,284	\$5,675,078	0%	\$5,806,000	\$5,783,000	0%
7/1/07-08	\$3,706,443	\$3,722,858	\$3,622,959	-3%	\$3,819,000	\$3,704,000	-3%
7/1/08-09	\$4,472,522	\$4,496,580	\$4,222,129	-6%	\$4,633,000	\$4,333,000	-6%
7/1/09-10	\$5,800,333	\$5,838,502	\$5,809,304	-1%	\$6,048,000	\$6,045,000	0%
7/1/10-11	\$7,543,474	\$7,604,549	\$7,341,394	-3%	\$7,929,000	\$7,616,000	-4%
7/1/11-12	\$6,530,805	\$6,596,445	\$6,452,250	-2%	\$6,934,000	\$6,743,000	-3%
7/1/12-13	\$7,522,233	\$7,595,425	\$7,639,489	1%	\$7,960,000	\$7,941,000	0%
7/1/13-14	\$7,761,599	\$7,884,128	\$7,716,495	-2%	\$8,476,000	\$8,386,000	-1%
7/1/14-15	\$3,662,077	\$3,735,307	\$3,562,672	-5%	\$4,079,000	\$3,866,000	-5%
7/1/15-16	\$2,180,129	\$2,270,894	\$2,163,339	-5%	\$2,686,000	\$2,560,000	-5%
7/1/16-17	\$2,307,325	\$2,424,867	\$2,257,419	-7%	\$2,951,000	\$2,775,000	-6%
7/1/17-18	\$2,001,694	\$2,158,717	\$2,037,725	-6%	\$2,851,000	\$2,688,000	-6%
7/1/18-19	\$1,671,008	\$1,850,145	\$1,798,311	-3%	\$2,635,000	\$2,451,000	-7%
7/1/19-20	\$1,877,110	\$2,089,553	\$1,974,315	-6%	\$3,026,000	\$2,895,000	-4%
7/1/20-21	\$1,643,270	\$1,868,823	\$1,852,691	-1%	\$2,886,000	\$2,807,000	-3%
7/1/21-22	\$1,183,818	\$1,431,715	\$1,447,079	1%	\$2,601,000	\$2,530,000	-3%
7/1/22-23	--	\$1,762,619	\$1,216,807	-31%	\$3,028,000	\$2,694,000	-11%
<b>Total</b>	<b>\$104,709,422</b>	<b>\$108,216,798</b>	<b>\$105,665,359</b>	<b>-2.4%</b>	<b>\$117,674,000</b>	<b>\$114,950,000</b>	<b>-2.3%</b>
		<i>Variance in Incurred</i>	<b>(\$2,551,439)</b>		<i>Change in Ultimates</i>	<b>(\$2,724,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(I) Accident Period	(J) Paid Losses 6/30/2022	(K) Expected Paid Losses 6/30/2023	(L) Actual Paid Losses 6/30/2023	(M) Percent Difference	(N) Estimated Ultimate Losses 6/30/2022	(O) Estimated Ultimate Losses 6/30/2023	(P) Percent Difference
7/1/93-94	\$1,691,185	\$1,691,180	\$1,691,185	0%	\$1,691,000	\$1,691,000	0%
7/1/94-95	\$1,736,626	\$1,737,302	\$1,736,817	0%	\$1,761,000	\$1,768,000	0%
7/1/95-96	\$1,469,105	\$1,469,274	\$1,470,412	0%	\$1,475,000	\$1,481,000	0%
7/1/96-97	\$2,058,779	\$2,058,786	\$2,058,779	0%	\$2,059,000	\$2,059,000	0%
7/1/97-98	\$1,727,617	\$1,728,491	\$1,727,782	0%	\$1,756,000	\$1,728,000	-2%
7/1/98-99	\$3,229,401	\$3,234,722	\$3,241,586	0%	\$3,396,000	\$3,417,000	1%
7/1/99-00	\$3,392,781	\$3,393,386	\$3,337,774	-2%	\$3,411,000	\$3,338,000	-2%
7/1/00-01	\$3,190,218	\$3,190,210	\$3,190,218	0%	\$3,190,000	\$3,190,000	0%
7/1/01-02	\$3,285,601	\$3,304,610	\$3,313,666	0%	\$3,813,000	\$3,845,000	1%
7/1/02-03	\$3,049,287	\$3,051,837	\$3,051,419	0%	\$3,117,000	\$3,125,000	0%
7/1/03-04	\$3,219,785	\$3,219,793	\$3,219,785	0%	\$3,220,000	\$3,220,000	0%
7/1/04-05	\$3,494,258	\$3,516,096	\$3,742,565	6%	\$4,022,000	\$4,016,000	0%
7/1/05-06	\$5,755,328	\$5,784,044	\$5,766,204	0%	\$6,415,000	\$6,255,000	-2%
7/1/06-07	\$4,966,125	\$5,004,691	\$5,012,312	0%	\$5,806,000	\$5,783,000	0%
7/1/07-08	\$3,423,885	\$3,443,083	\$3,432,683	0%	\$3,819,000	\$3,704,000	-3%
7/1/08-09	\$3,996,651	\$4,029,484	\$4,005,490	-1%	\$4,633,000	\$4,333,000	-6%
7/1/09-10	\$5,226,985	\$5,272,139	\$5,255,167	0%	\$6,048,000	\$6,045,000	0%
7/1/10-11	\$6,785,950	\$6,853,263	\$6,895,717	1%	\$7,929,000	\$7,616,000	-4%
7/1/11-12	\$5,447,070	\$5,541,321	\$5,478,159	-1%	\$6,934,000	\$6,743,000	-3%
7/1/12-13	\$6,408,602	\$6,515,091	\$6,498,343	0%	\$7,960,000	\$7,941,000	0%
7/1/13-14	\$6,967,816	\$7,080,708	\$7,001,469	-1%	\$8,476,000	\$8,386,000	-1%
7/1/14-15	\$3,049,925	\$3,134,648	\$3,066,636	-2%	\$4,079,000	\$3,866,000	-5%
7/1/15-16	\$1,890,204	\$1,963,035	\$1,904,021	-3%	\$2,686,000	\$2,560,000	-5%
7/1/16-17	\$2,093,500	\$2,181,897	\$2,121,341	-3%	\$2,951,000	\$2,775,000	-6%
7/1/17-18	\$1,843,889	\$1,962,827	\$1,861,826	-5%	\$2,851,000	\$2,688,000	-6%
7/1/18-19	\$1,382,972	\$1,556,332	\$1,495,206	-4%	\$2,635,000	\$2,451,000	-7%
7/1/19-20	\$1,370,761	\$1,648,694	\$1,666,520	1%	\$3,026,000	\$2,895,000	-4%
7/1/20-21	\$1,168,373	\$1,537,533	\$1,521,996	-1%	\$2,886,000	\$2,807,000	-3%
7/1/21-22	\$542,572	\$1,175,451	\$1,098,906	-7%	\$2,601,000	\$2,530,000	-3%
7/1/22-23	--	\$711,289	\$562,404	-21%	\$3,028,000	\$2,694,000	-11%
<b>Total</b>	<b>\$93,865,252</b>	<b>\$96,991,215</b>	<b>\$96,426,390</b>	<b>-0.6%</b>	<b>\$117,674,000</b>	<b>\$114,950,000</b>	<b>-2.3%</b>
		<i>Variance in Paid</i>	<i>(\$564,825)</i>		<i>Change in Ultimates</i>	<i>(\$2,724,000)</i>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Incurred Losses	(D) Paid Losses	(E) Case Reserves	(F) IBNR Reserves	(G) Total Required Reserves	(H) Discount Factor at 4.0%	(I) Total Discounted Reserves at 4.0%
7/1/93-94	\$1,691,000	\$1,691,185	\$1,691,185	\$0	\$0	\$0	1.000	\$0
7/1/94-95	\$1,768,000	\$1,760,907	\$1,736,817	\$24,090	\$7,000	\$31,000	0.981	\$30,000
7/1/95-96	\$1,481,000	\$1,474,934	\$1,470,412	\$4,522	\$6,000	\$11,000	0.944	\$10,000
7/1/96-97	\$2,059,000	\$2,058,779	\$2,058,779	\$0	\$0	\$0	0.910	\$0
7/1/97-98	\$1,728,000	\$1,727,782	\$1,727,782	\$0	\$0	\$0	0.878	\$0
7/1/98-99	\$3,417,000	\$3,395,867	\$3,241,586	\$154,281	\$21,000	\$175,000	0.848	\$148,000
7/1/99-00	\$3,338,000	\$3,337,774	\$3,337,774	\$0	\$0	\$0	0.821	\$0
7/1/00-01	\$3,190,000	\$3,190,218	\$3,190,218	\$0	\$0	\$0	0.796	\$0
7/1/01-02	\$3,845,000	\$3,810,687	\$3,313,666	\$497,021	\$34,000	\$531,000	0.773	\$410,000
7/1/02-03	\$3,125,000	\$3,092,297	\$3,051,419	\$40,878	\$33,000	\$74,000	0.751	\$56,000
7/1/03-04	\$3,220,000	\$3,219,785	\$3,219,785	\$0	\$0	\$0	0.732	\$0
7/1/04-05	\$4,016,000	\$3,960,706	\$3,742,565	\$218,141	\$55,000	\$273,000	0.715	\$195,000
7/1/05-06	\$6,255,000	\$6,154,983	\$5,766,204	\$388,779	\$100,000	\$489,000	0.700	\$342,000
7/1/06-07	\$5,783,000	\$5,675,078	\$5,012,312	\$662,765	\$108,000	\$771,000	0.686	\$529,000
7/1/07-08	\$3,704,000	\$3,622,959	\$3,432,683	\$190,276	\$81,000	\$271,000	0.674	\$183,000
7/1/08-09	\$4,333,000	\$4,222,129	\$4,005,490	\$216,639	\$111,000	\$328,000	0.665	\$218,000
7/1/09-10	\$6,045,000	\$5,809,304	\$5,255,167	\$554,137	\$236,000	\$790,000	0.657	\$519,000
7/1/10-11	\$7,616,000	\$7,341,394	\$6,895,717	\$445,677	\$275,000	\$720,000	0.651	\$468,000
7/1/11-12	\$6,743,000	\$6,452,250	\$5,478,159	\$974,091	\$291,000	\$1,265,000	0.647	\$818,000
7/1/12-13	\$7,941,000	\$7,639,489	\$6,498,343	\$1,141,146	\$302,000	\$1,443,000	0.644	\$930,000
7/1/13-14	\$8,386,000	\$7,716,495	\$7,001,469	\$715,026	\$670,000	\$1,385,000	0.644	\$893,000
7/1/14-15	\$3,866,000	\$3,562,672	\$3,066,636	\$496,036	\$303,000	\$799,000	0.647	\$517,000
7/1/15-16	\$2,560,000	\$2,163,339	\$1,904,021	\$259,318	\$397,000	\$656,000	0.651	\$427,000
7/1/16-17	\$2,775,000	\$2,257,419	\$2,121,341	\$136,077	\$518,000	\$654,000	0.659	\$431,000
7/1/17-18	\$2,688,000	\$2,037,725	\$1,861,826	\$175,899	\$650,000	\$826,000	0.670	\$553,000
7/1/18-19	\$2,451,000	\$1,798,311	\$1,495,206	\$303,104	\$653,000	\$956,000	0.684	\$654,000
7/1/19-20	\$2,895,000	\$1,974,315	\$1,666,520	\$307,796	\$921,000	\$1,228,000	0.702	\$863,000
7/1/20-21	\$2,807,000	\$1,852,691	\$1,521,996	\$330,695	\$954,000	\$1,285,000	0.727	\$934,000
7/1/21-22	\$2,530,000	\$1,447,079	\$1,098,906	\$348,172	\$1,083,000	\$1,431,000	0.760	\$1,088,000
7/1/22-23	\$2,694,000	\$1,216,807	\$562,404	\$654,403	\$1,477,000	\$2,132,000	0.809	\$1,725,000
<b>Total</b>	<b>\$114,950,000</b>	<b>\$105,665,359</b>	<b>\$96,426,390</b>	<b>\$9,238,969</b>	<b>\$9,286,000</b>	<b>\$18,524,000</b>		<b>\$12,941,000</b>

Column (B): Exhibit 3-A  
Columns (C), (D): Exhibit 1  
Column (E) = (C) - (D)  
Column (F) = (B) - (C)  
Column (G) = (B) - (D)  
Column (H): Appendix B  
Column (I) = (G) \* (H)

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$1,691,000	\$1,691,000	\$1,701,000	\$1,708,000	\$1,724,000
7/1/94-95	\$1,768,000	\$1,768,000	\$1,780,000	\$1,790,000	\$1,811,000
7/1/95-96	\$1,481,000	\$1,481,000	\$1,494,000	\$1,504,000	\$1,526,000
7/1/96-97	\$2,059,000	\$2,058,000	\$2,078,000	\$2,093,000	\$2,125,000
7/1/97-98	\$1,728,000	\$1,727,000	\$1,750,000	\$1,768,000	\$1,806,000
7/1/98-99	\$3,417,000	\$3,415,000	\$3,465,000	\$3,503,000	\$3,584,000
7/1/99-00	\$3,338,000	\$3,335,000	\$3,388,000	\$3,428,000	\$3,513,000
7/1/00-01	\$3,190,000	\$3,187,000	\$3,244,000	\$3,287,000	\$3,381,000
7/1/01-02	\$3,845,000	\$3,840,000	\$3,918,000	\$3,978,000	\$4,108,000
7/1/02-03	\$3,125,000	\$3,119,000	\$3,197,000	\$3,256,000	\$3,385,000
7/1/03-04	\$3,220,000	\$3,212,000	\$3,299,000	\$3,366,000	\$3,511,000
7/1/04-05	\$4,016,000	\$4,005,000	\$4,120,000	\$4,208,000	\$4,398,000
7/1/05-06	\$6,255,000	\$6,238,000	\$6,418,000	\$6,557,000	\$6,857,000
7/1/06-07	\$5,783,000	\$5,766,000	\$5,940,000	\$6,074,000	\$6,365,000
7/1/07-08	\$3,704,000	\$3,692,000	\$3,807,000	\$3,895,000	\$4,087,000
7/1/08-09	\$4,333,000	\$4,316,000	\$4,465,000	\$4,580,000	\$4,832,000
7/1/09-10	\$6,045,000	\$6,020,000	\$6,234,000	\$6,399,000	\$6,761,000
7/1/10-11	\$7,616,000	\$7,583,000	\$7,860,000	\$8,074,000	\$8,543,000
7/1/11-12	\$6,743,000	\$6,712,000	\$6,965,000	\$7,162,000	\$7,593,000
7/1/12-13	\$7,941,000	\$7,901,000	\$8,213,000	\$8,455,000	\$8,986,000
7/1/13-14	\$8,386,000	\$8,336,000	\$8,694,000	\$8,971,000	\$9,584,000
7/1/14-15	\$3,866,000	\$3,841,000	\$4,013,000	\$4,146,000	\$4,441,000
7/1/15-16	\$2,560,000	\$2,542,000	\$2,660,000	\$2,752,000	\$2,956,000
7/1/16-17	\$2,775,000	\$2,753,000	\$2,890,000	\$2,997,000	\$3,236,000
7/1/17-18	\$2,688,000	\$2,664,000	\$2,805,000	\$2,915,000	\$3,162,000
7/1/18-19	\$2,451,000	\$2,426,000	\$2,564,000	\$2,672,000	\$2,915,000
7/1/19-20	\$2,895,000	\$2,858,000	\$3,040,000	\$3,183,000	\$3,507,000
7/1/20-21	\$2,807,000	\$2,765,000	\$2,956,000	\$3,109,000	\$3,454,000
7/1/21-22	\$2,530,000	\$2,485,000	\$2,673,000	\$2,823,000	\$3,166,000
7/1/22-23	\$2,694,000	\$2,594,000	\$2,884,000	\$3,122,000	\$3,689,000
(1) All Years*	\$114,950,000	\$114,902,000	\$115,816,000	\$116,511,000	\$117,979,000

(2) Total Paid Losses \$96,426,390

<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(3) All Years*	\$18,524,000	\$18,476,000	\$19,390,000	\$20,085,000	\$21,553,000

<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(4) All Years*	\$12,941,000	\$12,907,000	\$13,546,000	\$14,032,000	\$15,057,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Estimated Ultimate Claim Counts, Average Claim Size, and Cost Per \$100 Payroll  
Workers Compensation**

(A) Accident Period	(B) Number of Claims	(C) Claim Development Factor	(D) Estimated Ultimate Claims	(E) Estimated Ultimate Losses	(F) Severity*	(G) Estimated Fiscal Year Payroll (Hundreds)	(H) Claims Per \$1 Million Payroll	(I) Cost Per \$100 Payroll
7/1/93-94	369	1.000	369	\$1,691,000	\$4,600	--	--	--
7/1/94-95	371	1.000	371	\$1,768,000	\$4,800	--	--	--
7/1/95-96	379	1.000	379	\$1,481,000	\$3,900	--	--	--
7/1/96-97	329	1.000	329	\$2,059,000	\$6,300	--	--	--
7/1/97-98	336	1.000	336	\$1,728,000	\$5,100	--	--	--
7/1/98-99	367	1.000	367	\$3,417,000	\$9,300	--	--	--
7/1/99-00	416	1.000	416	\$3,338,000	\$8,000	--	--	--
7/1/00-01	413	1.000	413	\$3,190,000	\$7,700	--	--	--
7/1/01-02	447	1.000	447	\$3,845,000	\$8,600	--	--	--
7/1/02-03	413	1.000	413	\$3,125,000	\$7,600	--	--	--
7/1/03-04	389	1.000	389	\$3,220,000	\$8,300	--	--	--
7/1/04-05	436	1.000	436	\$4,016,000	\$9,200	--	--	--
7/1/05-06	477	1.000	477	\$6,255,000	\$13,100	--	--	--
7/1/06-07	459	1.000	459	\$5,783,000	\$12,600	--	--	--
7/1/07-08	441	1.000	441	\$3,704,000	\$8,400	--	--	--
7/1/08-09	459	1.000	459	\$4,333,000	\$9,400	--	--	--
7/1/09-10	435	1.000	435	\$6,045,000	\$13,900	\$1,492,215	2.9	\$4.05
7/1/10-11	497	1.000	497	\$7,616,000	\$15,300	\$1,496,308	3.3	\$5.09
7/1/11-12	508	1.000	508	\$6,743,000	\$13,300	\$1,555,015	3.3	\$4.34
7/1/12-13	594	1.000	594	\$7,941,000	\$13,400	\$1,793,811	3.3	\$4.43
7/1/13-14	612	1.000	612	\$8,386,000	\$13,700	\$2,062,017	3.0	\$4.07
7/1/14-15	598	1.000	598	\$3,866,000	\$6,500	\$2,055,128	2.9	\$1.88
7/1/15-16	570	1.000	570	\$2,560,000	\$4,500	\$2,005,304	2.8	\$1.28
7/1/16-17	559	1.000	559	\$2,775,000	\$5,000	\$2,044,133	2.7	\$1.36
7/1/17-18	654	1.000	654	\$2,688,000	\$4,100	\$2,114,477	3.1	\$1.27
7/1/18-19	580	1.000	580	\$2,451,000	\$4,200	\$2,125,612	2.7	\$1.15
7/1/19-20	522	1.000	522	\$2,895,000	\$5,500	\$2,173,745	2.4	\$1.33
7/1/20-21	496	1.001	496	\$2,807,000	\$5,700	\$2,182,142	2.3	\$1.29
7/1/21-22	388	1.002	389	\$2,530,000	\$6,500	\$2,262,149	1.7	\$1.12
7/1/22-23	461	1.018	469	\$2,694,000	\$5,700	\$2,619,025	1.8	\$1.03
<b>Total</b>	<b>13,975</b>		<b>13,985</b>	<b>\$114,950,000</b>	<b>\$8,200</b>	<b>\$27,981,080</b>	<b>2.7</b>	<b>\$2.22</b>

\* Estimated ultimate average claim size

Columns (B), (G): Exhibit 1

Column (C): Appendix A3

Column (D) = (B) \* (C)

Column (E): Exhibit 3-A

Column (F) = (E) / (D)

Column (G): Exhibit 1

Column (H) = (D) / (G) \* 10,000

Column (I) = (E) / (G)







**Estimation of Cumulative Reported Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.809	-5.0930	-0.2123	25.939	0.0451	1.0811	360	1.003
24	1.511	-5.1641	-0.6722	26.668	0.4518	3.4711	348	1.004
36	1.333	-5.2305	-1.1002	27.358	1.2104	5.7544	336	1.004
48	1.266	-5.2927	-1.3245	28.013	1.7544	7.0103	324	1.005
60	1.211	-5.3513	-1.5537	28.636	2.4139	8.3142	312	1.005
72	1.167	-5.4066	-1.7918	29.232	3.2106	9.6877	300	1.006
84	1.131	-5.4591	-2.0297	29.802	4.1198	11.0805	288	1.007
96	1.105	-5.5089	-2.2531	30.348	5.0765	12.4122	276	1.008
108	1.088	-5.5564	-2.4313	30.873	5.9111	13.5091	264	1.009
120	1.072	-5.6017	-2.6358	31.379	6.9475	14.7649	252	1.010
132	1.057	-5.6450	-2.8594	31.866	8.1763	16.1416	240	1.012
144	1.047	-5.6866	-3.0559	32.337	9.3385	17.3775	228	1.014
156	1.037	-5.7265	-3.3046	32.792	10.9204	18.9237	216	1.016
168	1.030	-5.7648	-3.5150	33.233	12.3552	20.2633	204	1.019
180	1.025	-5.8018	-3.7040	33.660	13.7196	21.4897	192	1.022
							180	1.026
							168	1.031
							156	1.037
							144	1.045
							132	1.055
							120	1.067
							108	1.083
							96	1.103
							84	1.130
							72	1.167
							60	1.216
							48	1.284
							36	1.380
							24	1.518
							12	1.722
Sum		-82.2890	-32.4435	452.1371	85.6511	181.2814		
Average		-5.4859	-2.1629	30.1425	5.7101	12.0854		

N =	15		
A =	1.59E+10		
B =	4.676	R^2 =	0.99646
C =	151		

\* Appendix A1, page 1





**Estimation of Cumulative Paid Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	4.281	-1.5428	1.1880	2.380	1.4114	-1.8328	360	1.083
24	2.133	-2.8141	0.1251	7.919	0.0157	-0.3521	348	1.085
36	1.671	-3.3561	-0.3990	11.263	0.1592	1.3391	336	1.088
48	1.523	-3.7057	-0.6487	13.732	0.4208	2.4039	324	1.091
60	1.410	-3.9642	-0.8910	15.715	0.7939	3.5320	312	1.094
72	1.343	-4.1694	-1.0712	17.384	1.1474	4.4662	300	1.097
84	1.301	-4.3396	-1.2001	18.832	1.4403	5.2080	288	1.101
96	1.270	-4.4850	-1.3085	20.115	1.7122	5.8687	276	1.104
108	1.248	-4.6119	-1.3950	21.270	1.9461	6.4337	264	1.109
120	1.229	-4.7245	-1.4758	22.321	2.1780	6.9724	252	1.113
132	1.210	-4.8257	-1.5614	23.288	2.4379	7.5348	240	1.118
144	1.193	-4.9176	-1.6443	24.183	2.7037	8.0860	228	1.123
156	1.177	-5.0018	-1.7307	25.018	2.9953	8.6566	216	1.129
168	1.161	-5.0794	-1.8237	25.800	3.3257	9.2631	204	1.136
180	1.146	-5.1514	-1.9227	26.537	3.6966	9.9044	192	1.144
192	1.132	-5.2186	-2.0257	27.234	4.1034	10.5713	180	1.152
							168	1.162
							156	1.173
							144	1.186
							132	1.201
							120	1.219
							108	1.241
							96	1.268
							84	1.304
							72	1.351
							60	1.418
							48	1.521
							36	1.701
							24	2.113
							12	4.291
Sum		-67.9078	-17.7845	302.9917	30.4874	88.0551		
Average		-4.2442	-1.1115	18.9370	1.9055	5.5034		

N =	16		
A =	1.22E+01		
B =	0.851	R^2 =	0.99821
C =	-7		

\* Appendix A2, page 1



**Estimation of Cumulative Reported Claim Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.018	-2.4103	-4.0025	5.810	16.0199	9.6472	360	1.000
24	1.002	-3.1414	-6.0629	9.869	36.7585	19.0462	348	1.000
36	1.001	-3.5593	-7.2403	12.668	52.4220	25.7702	336	1.000
							324	1.000
							312	1.000
							300	1.000
							288	1.000
							276	1.000
							264	1.000
							252	1.000
							240	1.000
							228	1.000
							216	1.000
							204	1.000
							192	1.000
							180	1.000
							168	1.000
							156	1.000
							144	1.000
							132	1.000
							120	1.000
							108	1.000
							96	1.000
							84	1.000
							72	1.000
							60	1.000
							48	1.000
							36	1.001
							24	1.002
							12	1.018
Sum		-9.1110	-17.3057	28.3466	105.2005	54.4636		
Average		-3.0370	-5.7686	9.4489	35.0668	18.1545		

N =	3		
A =	1.63E+01		
B =	2.818	R^2 =	1.00000
C =	-1		

\* Appendix A3, page 1

**Loss Forecasting Model**  
**Analysis of Historical Loss Patterns**  
**Variation in Reported Loss Development**  
**Workers Compensation**

Year	Variation in Reported Losses:														
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180	180:192
7/1/93-94					0.076	0.000	0.050	-0.007	0.000	0.085	0.000	0.000	-0.001	0.000	0.000
7/1/94-95				0.099	0.012	0.011	0.044	0.013	-0.013	0.006	0.053	0.002	0.001	0.004	0.011
7/1/95-96			0.030	-0.017	0.018	0.088	-0.067	-0.001	0.000	-0.001	0.000	0.005	0.000	0.000	0.000
7/1/96-97		0.159	0.120	0.033	-0.023	0.023	-0.012	0.004	-0.016	0.001	0.007	0.011	0.000	0.001	0.001
7/1/97-98	0.583	0.036	-0.002	-0.014	-0.063	-0.022	0.000	0.003	0.001	0.022	0.040	-0.004	0.001	0.024	0.000
7/1/98-99	0.491	0.265	0.025	0.208	-0.011	-0.004	0.008	0.002	0.007	0.004	-0.003	0.012	0.004	0.000	--
7/1/99-00	0.480	0.183	0.121	-0.019	0.001	-0.001	0.015	0.010	0.046	0.010	0.009	-0.008	0.010	--	--
7/1/00-01	0.464	0.141	-0.065	0.012	0.014	0.021	-0.005	-0.034	0.001	0.049	-0.009	-0.017	--	--	-0.191
7/1/01-02	0.441	0.085	-0.060	-0.058	0.000	-0.004	0.006	0.020	0.051	0.001	0.004	--	--	0.001	-0.018
7/1/02-03	0.422	0.111	0.004	0.059	-0.003	0.007	0.004	-0.011	-0.009	0.004	--	--	0.000	-0.023	0.003
7/1/03-04	0.369	0.117	0.105	-0.008	0.050	0.010	0.019	0.001	-0.029	--	--	0.000	0.003	0.035	0.000
7/1/04-05	0.245	0.082	0.039	0.029	0.048	0.006	0.037	0.041	--	--	-0.078	-0.001	-0.049	0.019	0.040
7/1/05-06	0.558	0.103	0.103	0.031	0.053	-0.026	-0.001	--	--	-0.013	-0.003	0.023	-0.010	0.000	0.050
7/1/06-07	0.188	0.243	0.098	0.052	0.029	0.028	--	--	-0.014	-0.007	0.002	-0.006	-0.063	-0.027	-0.038
7/1/07-08	0.129	0.137	0.012	0.059	0.048	--	--	-0.106	0.005	-0.001	0.000	0.006	0.002	0.001	-0.023
7/1/08-09	0.263	0.094	0.083	0.059	--	--	-0.155	-0.082	0.003	0.002	0.000	0.079	-0.003	-0.057	--
7/1/09-10	0.324	0.230	0.102	--	0.115	-0.058	0.096	-0.010	-0.019	-0.047	0.026	-0.023	0.002	--	--
7/1/10-11	0.266	0.126	--	0.149	-0.005	-0.186	0.039	-0.017	-0.022	-0.003	-0.032	-0.027	--	--	--
7/1/11-12	0.198	--	0.117	0.062	0.041	-0.072	0.034	0.002	0.004	0.096	-0.012	--	--	--	--
7/1/12-13	--	0.086	0.136	0.050	-0.036	0.017	0.060	0.067	-0.007	0.015	--	--	--	--	--
7/1/13-14	0.554	0.029	0.116	0.020	-0.064	-0.002	0.033	-0.014	-0.006	--	--	--	--	--	--
7/1/14-15	0.270	-0.053	0.003	0.041	0.131	0.033	0.014	-0.028	--	--	--	--	--	--	--
7/1/15-16	-0.152	0.178	0.013	-0.003	0.169	0.014	-0.008	--	--	--	--	--	--	--	--
7/1/16-17	-0.328	0.026	0.025	0.061	0.005	-0.022	--	--	--	--	--	--	--	--	--
7/1/17-18	0.220	0.115	0.038	0.015	0.017	--	--	--	--	--	--	--	--	--	--
7/1/18-19	0.174	0.156	-0.013	0.073	--	--	--	--	--	--	--	--	--	--	--
7/1/19-20	0.147	0.176	0.048	--	--	--	--	--	--	--	--	--	--	--	--
7/1/20-21	0.155	0.122	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/21-22	0.204	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- Excludes points impacted by change in reserving methodology

Variance	0.046	0.005	0.003	0.003	0.003	0.003	0.002	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.003
Sigma	0.292	0.197	0.183	0.173	0.164	0.154	0.145	0.136	0.131	0.130	0.125	0.122	0.120	0.118	0.116

Lognormal Parameters					
Year	Maturity	Ultimate Losses	Prior Sigma*	Selected Sigma	Mu
7/1/93-94	360	\$1,691,000		0.015	14.341
7/1/94-95	348	\$1,768,000	0.009	0.019	14.385
7/1/95-96	336	\$1,481,000	0.011	0.023	14.208
7/1/96-97	324	\$2,059,000	0.014	0.025	14.537
7/1/97-98	312	\$1,728,000	0.017	0.035	14.362
7/1/98-99	300	\$3,417,000	0.022	0.038	15.044
7/1/99-00	288	\$3,338,000	0.027	0.041	15.020
7/1/00-01	276	\$3,190,000	0.034	0.046	14.974
7/1/01-02	264	\$3,845,000	0.042	0.053	15.161
7/1/02-03	252	\$3,125,000	0.053	0.064	14.953
7/1/03-04	240	\$3,220,000	0.053	0.069	14.982
7/1/04-05	228	\$4,016,000	0.054	0.073	15.203
7/1/05-06	216	\$6,255,000	0.055	0.074	15.646
7/1/06-07	204	\$5,783,000	0.057	0.077	15.567
7/1/07-08	192	\$3,704,000	0.058	0.079	15.122
7/1/08-09	180	\$4,333,000	0.060	0.088	15.278
7/1/09-10	168	\$6,045,000	0.063	0.091	15.611
7/1/10-11	156	\$7,616,000	0.066	0.093	15.841
7/1/11-12	144	\$6,743,000	0.071	0.096	15.719
7/1/12-13	132	\$7,941,000	0.076	0.100	15.883
7/1/13-14	120	\$8,386,000	0.088	0.109	15.936
7/1/14-15	108	\$3,866,000	0.095	0.113	15.161
7/1/15-16	96	\$2,560,000	0.099	0.118	14.749
7/1/16-17	84	\$2,775,000	0.107	0.126	14.828
7/1/17-18	72	\$2,688,000	0.113	0.134	14.795
7/1/18-19	60	\$2,451,000	0.122	0.143	14.702
7/1/19-20	48	\$2,895,000	0.146	0.160	14.866
7/1/20-21	36	\$2,807,000	0.164	0.174	14.833
7/1/21-22	24	\$2,530,000	0.181	0.189	14.726
7/1/22-23	12	\$2,694,000	0.258	0.275	14.769

\* Prior sigma at indicated maturity



**Derivation of Discount Factors  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Maturity in Years at 6/30/2023	Cumulative Paid Loss Develop. Factor	% Losses Paid 6/30/2023	Midpoint Upcoming Period	% Losses Paid Upcoming Period	Column(F) Discounted 4.0%	Discount Factor at 4.0%
7/1/93-94	30	1.000	100.0%				<b>1.000</b>
7/1/94-95	29	1.085	92.1%	29.5	7.86%	0.0247	<b>0.981</b>
7/1/95-96	28	1.088	91.9%	28.5	0.22%	0.0007	<b>0.944</b>
7/1/96-97	27	1.091	91.7%	27.5	0.24%	0.0008	<b>0.910</b>
7/1/97-98	26	1.094	91.4%	26.5	0.25%	0.0009	<b>0.878</b>
7/1/98-99	25	1.097	91.2%	25.5	0.27%	0.0010	<b>0.848</b>
7/1/99-00	24	1.101	90.9%	24.5	0.29%	0.0011	<b>0.821</b>
7/1/00-01	23	1.104	90.5%	23.5	0.31%	0.0012	<b>0.796</b>
7/1/01-02	22	1.109	90.2%	22.5	0.34%	0.0014	<b>0.773</b>
7/1/02-03	21	1.113	89.8%	21.5	0.37%	0.0016	<b>0.751</b>
7/1/03-04	20	1.118	89.4%	20.5	0.40%	0.0018	<b>0.732</b>
7/1/04-05	19	1.123	89.0%	19.5	0.43%	0.0020	<b>0.715</b>
7/1/05-06	18	1.129	88.5%	18.5	0.47%	0.0023	<b>0.700</b>
7/1/06-07	17	1.136	88.0%	17.5	0.52%	0.0026	<b>0.686</b>
7/1/07-08	16	1.144	87.4%	16.5	0.58%	0.0030	<b>0.674</b>
7/1/08-09	15	1.152	86.8%	15.5	0.64%	0.0035	<b>0.665</b>
7/1/09-10	14	1.162	86.1%	14.5	0.72%	0.0041	<b>0.657</b>
7/1/10-11	13	1.173	85.3%	13.5	0.81%	0.0048	<b>0.651</b>
7/1/11-12	12	1.186	84.3%	12.5	0.92%	0.0057	<b>0.647</b>
7/1/12-13	11	1.201	83.3%	11.5	1.06%	0.0068	<b>0.644</b>
7/1/13-14	10	1.219	82.1%	10.5	1.23%	0.0082	<b>0.644</b>
7/1/14-15	9	1.241	80.6%	9.5	1.45%	0.0100	<b>0.647</b>
7/1/15-16	8	1.268	78.9%	8.5	1.75%	0.0125	<b>0.651</b>
7/1/16-17	7	1.304	76.7%	7.5	2.14%	0.0159	<b>0.659</b>
7/1/17-18	6	1.351	74.0%	6.5	2.69%	0.0208	<b>0.670</b>
7/1/18-19	5	1.418	70.5%	5.5	3.49%	0.0282	<b>0.684</b>
7/1/19-20	4	1.521	65.8%	4.5	4.77%	0.0400	<b>0.702</b>
7/1/20-21	3	1.701	58.8%	3.5	6.99%	0.0609	<b>0.727</b>
7/1/21-22	2	2.113	47.3%	2.5	11.45%	0.1038	<b>0.760</b>
7/1/22-23	1	4.291	23.3%	1.5	24.02%	0.2265	<b>0.809</b>

Column (C): Appendix A2, page 2

Column (D) = 1 / (C)

Column (E) = [ (B), current line + (B), previous line] / 2

Column (F) = (D), previous line - (D), current line

Column (G) = (F) x [ 1 + Interest Rate ]<sup>-(E)</sup>

Column (H) = [ 1 + Interest Rate ]<sup>-(B)</sup> / [ 1 - (D) ] x [ Downward Sum, (G) ]

**Summary of Experience  
Workers Compensation**

(A) Period Begin End		(B) Evaluation Date	(C) Maturity (months)	(D) Reported Claims	(E) Open Claims	(F) Paid Losses	(G) Case Reserves	(H) Incurred Losses	(I) Historic Calendar Year Payroll (Hundreds)	(J) Estimated Fiscal Year Payroll (Hundreds)
07/01/93	06/30/94	6/30/23	360	927	1	\$3,020,056	\$133,782	\$3,153,839	--	--
07/01/94	06/30/95	6/30/23	348	1,182	0	\$3,218,255	\$0	\$3,218,255	--	--
07/01/95	06/30/96	6/30/23	336	1,124	1	\$3,237,310	\$57,699	\$3,295,009	--	--
07/01/96	06/30/97	6/30/23	324	1,090	0	\$1,996,690	\$0	\$1,996,690	--	--
07/01/97	06/30/98	6/30/23	312	1,064	1	\$2,806,125	\$16,423	\$2,822,547	--	--
07/01/98	06/30/99	6/30/23	300	1,041	0	\$3,682,683	\$0	\$3,682,683	--	--
07/01/99	06/30/00	6/30/23	288	946	0	\$3,219,427	\$0	\$3,219,427	--	--
07/01/00	06/30/01	6/30/23	276	1,013	0	\$2,972,653	\$0	\$2,972,653	--	--
07/01/01	06/30/02	6/30/23	264	1,023	1	\$3,555,407	\$18,863	\$3,574,270	--	--
07/01/02	06/30/03	6/30/23	252	1,008	1	\$4,115,961	\$160,223	\$4,276,184	--	--
07/01/03	06/30/04	6/30/23	240	1,007	1	\$4,003,494	\$4,722	\$4,008,216	--	--
07/01/04	06/30/05	6/30/23	228	945	1	\$5,388,133	\$100,882	\$5,489,015	--	--
07/01/05	06/30/06	6/30/23	216	883	4	\$5,256,703	\$406,402	\$5,663,105	--	--
07/01/06	06/30/07	6/30/23	204	871	6	\$4,896,595	\$824,892	\$5,721,488	--	--
07/01/07	06/30/08	6/30/23	192	742	5	\$5,092,519	\$443,721	\$5,536,240	--	--
07/01/08	06/30/09	6/30/23	180	770	4	\$4,335,013	\$435,950	\$4,770,963	--	--
07/01/09	06/30/10	6/30/23	168	715	3	\$4,671,795	\$259,088	\$4,930,883	\$1,942,183	\$1,840,367
07/01/10	06/30/11	6/30/23	156	552	3	\$4,574,759	\$392,716	\$4,967,475	\$1,738,551	\$1,668,760
07/01/11	06/30/12	6/30/23	144	572	6	\$5,424,247	\$229,044	\$5,653,292	\$1,598,969	\$1,556,153
07/01/12	06/30/13	6/30/23	132	481	6	\$3,283,150	\$539,427	\$3,822,577	\$1,513,337	\$1,473,107
07/01/13	06/30/14	6/30/23	120	476	5	\$3,071,037	\$408,818	\$3,479,855	\$1,432,877	\$1,460,982
07/01/14	06/30/15	6/30/23	108	579	0	\$1,720,299	\$0	\$1,720,299	\$1,489,088	\$1,453,980
07/01/15	06/30/16	6/30/23	96	533	1	\$2,173,010	\$4,573	\$2,177,584	\$1,418,871	\$1,411,368
07/01/16	06/30/17	6/30/23	84	457	4	\$2,005,448	\$176,978	\$2,182,426	\$1,403,865	\$1,382,350
07/01/17	06/30/18	6/30/23	72	485	4	\$1,063,516	\$243,330	\$1,306,847	\$1,360,835	\$1,368,621
07/01/18	06/30/19	6/30/23	60	455	2	\$964,614	\$70,847	\$1,035,461	\$1,376,408	\$1,379,641
07/01/19	06/30/20	6/30/23	48	346	3	\$1,489,146	\$169,605	\$1,658,751	\$1,382,875	\$1,432,676
07/01/20	06/30/21	6/30/23	36	285	9	\$1,265,364	\$452,044	\$1,717,408	\$1,482,478	\$1,512,282
07/01/21	06/30/22	6/30/23	24	234	8	\$700,616	\$131,854	\$832,470	\$1,542,085	\$1,572,265
07/01/22	06/30/23	6/30/23	12	179	35	\$218,081	\$218,260	\$436,341	\$1,602,444	\$1,676,575
<b>Total</b>				<b>21,985</b>	<b>115</b>	<b>\$93,422,107</b>	<b>\$5,900,145</b>	<b>\$99,322,252</b>	<b>\$21,284,865</b>	<b>\$21,189,126</b>

- Loss information and payroll (hundreds) provided by The State of Tennessee, Risk Management Division  
- Loss information contains only pure losses, net of recoveries  
Column (J): Interpolation of (I)

**Estimation of Ultimate Losses  
Workers Compensation**

<i>Incurred Loss Development</i>				<i>Paid Loss Development</i>			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses	Incurred Develop. Factor	Estimated Ultimate Losses	Accident Period	Paid Losses	Paid Develop. Factor	Estimated Ultimate Losses
7/1/93-94	\$3,153,839	1.002	\$3,160,000	7/1/93-94	\$3,020,056	1.063	\$3,211,000
7/1/94-95	\$3,218,255	1.002	\$3,225,000	7/1/94-95	\$3,218,255	1.065	\$3,428,000
7/1/95-96	\$3,295,009	1.002	\$3,303,000	7/1/95-96	\$3,237,310	1.067	\$3,455,000
7/1/96-97	\$1,996,690	1.003	\$2,002,000	7/1/96-97	\$1,996,690	1.069	\$2,135,000
7/1/97-98	\$2,822,547	1.003	\$2,832,000	7/1/97-98	\$2,806,125	1.072	\$3,007,000
7/1/98-99	\$3,682,683	1.004	\$3,696,000	7/1/98-99	\$3,682,683	1.074	\$3,956,000
7/1/99-00	\$3,219,427	1.004	\$3,233,000	7/1/99-00	\$3,219,427	1.077	\$3,467,000
7/1/00-01	\$2,972,653	1.005	\$2,987,000	7/1/00-01	\$2,972,653	1.080	\$3,211,000
7/1/01-02	\$3,574,270	1.006	\$3,595,000	7/1/01-02	\$3,555,407	1.083	\$3,851,000
7/1/02-03	\$4,276,184	1.007	\$4,304,000	7/1/02-03	\$4,115,961	1.087	\$4,473,000
7/1/03-04	\$4,008,216	1.008	\$4,039,000	7/1/03-04	\$4,003,494	1.091	\$4,367,000
7/1/04-05	\$5,489,015	1.009	\$5,539,000	7/1/04-05	\$5,388,133	1.095	\$5,900,000
7/1/05-06	\$5,663,105	1.011	\$5,724,000	7/1/05-06	\$5,256,703	1.100	\$5,781,000
7/1/06-07	\$5,721,488	1.013	\$5,794,000	7/1/06-07	\$4,896,595	1.105	\$5,411,000
7/1/07-08	\$5,536,240	1.015	\$5,621,000	7/1/07-08	\$5,092,519	1.111	\$5,657,000
7/1/08-09	\$4,770,963	1.018	\$4,859,000	7/1/08-09	\$4,335,013	1.118	\$4,845,000
7/1/09-10	\$4,930,883	1.022	\$5,041,000	7/1/09-10	\$4,671,795	1.125	\$5,257,000
7/1/10-11	\$4,967,475	1.027	\$5,103,000	7/1/10-11	\$4,574,759	1.134	\$5,188,000
7/1/11-12	\$5,653,292	1.034	\$5,843,000	7/1/11-12	\$5,424,247	1.144	\$6,206,000
7/1/12-13	\$3,822,577	1.042	\$3,982,000	7/1/12-13	\$3,283,150	1.156	\$3,796,000
7/1/13-14	\$3,479,855	1.052	\$3,662,000	7/1/13-14	\$3,071,037	1.171	\$3,595,000
7/1/14-15	\$1,720,299	1.066	\$1,834,000	7/1/14-15	\$1,720,299	1.188	\$2,044,000
7/1/15-16	\$2,177,584	1.085	\$2,363,000	7/1/15-16	\$2,173,010	1.210	\$2,630,000
7/1/16-17	\$2,182,426	1.111	\$2,424,000	7/1/16-17	\$2,005,448	1.239	\$2,485,000
7/1/17-18	\$1,306,847	1.146	\$1,497,000	7/1/17-18	\$1,063,516	1.277	\$1,358,000
7/1/18-19	\$1,035,461	1.195	\$1,237,000	7/1/18-19	\$964,614	1.332	\$1,285,000
7/1/19-20	\$1,658,751	1.266	\$2,099,000	7/1/19-20	\$1,489,146	1.417	\$2,110,000
7/1/20-21	\$1,717,408	1.369	\$2,351,000	7/1/20-21	\$1,265,364	1.568	\$1,984,000
7/1/21-22	\$832,470	1.525	\$1,269,000	7/1/21-22	\$700,616	1.921	\$1,346,000
7/1/22-23	\$436,341	1.765	\$770,000	7/1/22-23	\$218,081	4.020	\$877,000
<b>Total</b>	<b>\$99,322,252</b>		<b>\$103,388,000</b>	<b>Total</b>	<b>\$93,422,107</b>		<b>\$106,316,000</b>

Columns (B), (F): Exhibit 1  
 Column (C): Appendix A1  
 Column (D) = (B) \* (C)  
 Column (G): Appendix A2  
 Column (H) = (F) \* (G)

**Estimation of Ultimate Losses  
Workers Compensation**

*Incurred Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Incurred Develop. Factor	Estimated Percent Unpaid	Estimated Unreported Losses	Incurred Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$3,154,000	1.002	0.2%	\$6,058	\$3,153,839	\$3,160,000
7/1/94-95	\$3,218,000	1.002	0.2%	\$6,989	\$3,218,255	\$3,225,000
7/1/95-96	\$3,295,000	1.002	0.2%	\$8,116	\$3,295,009	\$3,303,000
7/1/96-97	\$1,997,000	1.003	0.3%	\$5,597	\$1,996,690	\$2,002,000
7/1/97-98	\$2,823,000	1.003	0.3%	\$9,030	\$2,822,547	\$2,832,000
7/1/98-99	\$3,683,000	1.004	0.4%	\$13,493	\$3,682,683	\$3,696,000
7/1/99-00	\$3,219,000	1.004	0.4%	\$13,558	\$3,219,427	\$3,233,000
7/1/00-01	\$2,971,000	1.005	0.5%	\$14,442	\$2,972,653	\$2,987,000
7/1/01-02	\$3,574,000	1.006	0.6%	\$20,128	\$3,574,270	\$3,594,000
7/1/02-03	\$4,140,000	1.007	0.7%	\$27,128	\$4,276,184	\$4,303,000
7/1/03-04	\$4,003,000	1.008	0.8%	\$30,663	\$4,008,216	\$4,039,000
7/1/04-05	\$5,550,000	1.009	0.9%	\$49,935	\$5,489,015	\$5,539,000
7/1/05-06	\$5,737,000	1.011	1.1%	\$60,920	\$5,663,105	\$5,724,000
7/1/06-07	\$5,711,000	1.013	1.3%	\$71,953	\$5,721,488	\$5,793,000
7/1/07-08	\$5,588,000	1.015	1.5%	\$84,022	\$5,536,240	\$5,620,000
7/1/08-09	\$5,233,000	1.018	1.8%	\$94,462	\$4,770,963	\$4,865,000
7/1/09-10	\$5,173,000	1.022	2.2%	\$112,776	\$4,930,883	\$5,044,000
7/1/10-11	\$5,123,000	1.027	2.7%	\$135,772	\$4,967,475	\$5,103,000
7/1/11-12	\$5,815,000	1.034	3.2%	\$188,688	\$5,653,292	\$5,842,000
7/1/12-13	\$3,898,000	1.042	4.0%	\$155,973	\$3,822,577	\$3,979,000
7/1/13-14	\$3,657,000	1.052	5.0%	\$181,722	\$3,479,855	\$3,662,000
7/1/14-15	\$2,041,000	1.066	6.2%	\$126,892	\$1,720,299	\$1,847,000
7/1/15-16	\$2,335,000	1.085	7.8%	\$183,028	\$2,177,584	\$2,361,000
7/1/16-17	\$2,363,000	1.111	10.0%	\$235,168	\$2,182,426	\$2,418,000
7/1/17-18	\$1,691,000	1.146	12.7%	\$214,924	\$1,306,847	\$1,522,000
7/1/18-19	\$1,297,000	1.195	16.3%	\$211,523	\$1,035,461	\$1,247,000
7/1/19-20	\$2,251,000	1.266	21.0%	\$472,321	\$1,658,751	\$2,131,000
7/1/20-21	\$2,395,000	1.369	27.0%	\$645,740	\$1,717,408	\$2,363,000
7/1/21-22	\$1,900,000	1.525	34.4%	\$653,848	\$832,470	\$1,486,000
7/1/22-23	\$1,956,000	1.765	43.4%	\$848,038	\$436,341	\$1,284,000
<b>Total</b>	<b>\$105,791,000</b>			<b>\$4,882,905</b>	<b>\$99,322,252</b>	<b>\$104,204,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)

**Estimation of Ultimate Losses  
Workers Compensation**

*Paid Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Paid Develop. Factor	Estimated Percent Unpaid	Estimated Unpaid Losses	Paid Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$3,154,000	1.063	5.9%	\$187,357	\$3,020,056	\$3,207,000
7/1/94-95	\$3,218,000	1.065	6.1%	\$196,642	\$3,218,255	\$3,415,000
7/1/95-96	\$3,295,000	1.067	6.3%	\$207,329	\$3,237,310	\$3,445,000
7/1/96-97	\$1,997,000	1.069	6.5%	\$129,523	\$1,996,690	\$2,126,000
7/1/97-98	\$2,823,000	1.072	6.7%	\$188,931	\$2,806,125	\$2,995,000
7/1/98-99	\$3,683,000	1.074	6.9%	\$254,645	\$3,682,683	\$3,937,000
7/1/99-00	\$3,219,000	1.077	7.2%	\$230,236	\$3,219,427	\$3,450,000
7/1/00-01	\$2,971,000	1.080	7.4%	\$220,128	\$2,972,653	\$3,193,000
7/1/01-02	\$3,574,000	1.083	7.7%	\$274,716	\$3,555,407	\$3,830,000
7/1/02-03	\$4,140,000	1.087	8.0%	\$330,673	\$4,115,961	\$4,447,000
7/1/03-04	\$4,003,000	1.091	8.3%	\$332,856	\$4,003,494	\$4,336,000
7/1/04-05	\$5,550,000	1.095	8.7%	\$481,390	\$5,388,133	\$5,870,000
7/1/05-06	\$5,737,000	1.100	9.1%	\$520,169	\$5,256,703	\$5,777,000
7/1/06-07	\$5,711,000	1.105	9.5%	\$542,598	\$4,896,595	\$5,439,000
7/1/07-08	\$5,588,000	1.111	10.0%	\$557,868	\$5,092,519	\$5,650,000
7/1/08-09	\$5,233,000	1.118	10.5%	\$550,626	\$4,335,013	\$4,886,000
7/1/09-10	\$5,173,000	1.125	11.1%	\$575,627	\$4,671,795	\$5,247,000
7/1/10-11	\$5,123,000	1.134	11.8%	\$605,228	\$4,574,759	\$5,180,000
7/1/11-12	\$5,815,000	1.144	12.6%	\$732,726	\$5,424,247	\$6,157,000
7/1/12-13	\$3,898,000	1.156	13.5%	\$526,652	\$3,283,150	\$3,810,000
7/1/13-14	\$3,657,000	1.171	14.6%	\$533,036	\$3,071,037	\$3,604,000
7/1/14-15	\$2,041,000	1.188	15.8%	\$323,340	\$1,720,299	\$2,044,000
7/1/15-16	\$2,335,000	1.210	17.4%	\$405,785	\$2,173,010	\$2,579,000
7/1/16-17	\$2,363,000	1.239	19.3%	\$455,635	\$2,005,448	\$2,461,000
7/1/17-18	\$1,691,000	1.277	21.7%	\$367,060	\$1,063,516	\$1,431,000
7/1/18-19	\$1,297,000	1.332	24.9%	\$323,196	\$964,614	\$1,288,000
7/1/19-20	\$2,251,000	1.417	29.4%	\$662,075	\$1,489,146	\$2,151,000
7/1/20-21	\$2,395,000	1.568	36.2%	\$867,219	\$1,265,364	\$2,133,000
7/1/21-22	\$1,900,000	1.921	47.9%	\$910,772	\$700,616	\$1,611,000
7/1/22-23	\$1,956,000	4.020	75.1%	\$1,469,447	\$218,081	\$1,688,000
<b>Total</b>	<b>\$105,791,000</b>			<b>\$13,963,488</b>	<b>\$93,422,107</b>	<b>\$107,387,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)



**Projection of Incremental Payments  
Workers Compensation**

Accident Period	Incremental Paid Losses							
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT
7/1/93-94	\$36,181	\$27,281	\$33,982	\$27,808	\$17,963	\$21,291	\$25,404	\$432,555
7/1/94-95	\$3,819	\$2,882	\$2,454	\$4,745	\$6,555	\$10,953	\$9,890	\$126,131
7/1/95-96	\$56,867	\$39,507	\$27,446	\$26,008	\$40,015	\$19,550	\$22,073	\$274,362
7/1/96-97	\$5,683	\$562	\$122	\$482	\$16,000	\$0	\$123	\$443
7/1/97-98	\$18,379	\$22,212	\$19,938	\$58,712	\$90,615	\$27,577	\$35,203	\$126,057
7/1/98-99	\$37,056	\$46,008	\$37,556	\$35,485	\$33,503	\$21,752	\$18,685	\$47,371
7/1/99-00	\$1,088	\$0	\$0	(\$0)	\$0	\$0	\$0	\$589
7/1/00-01	\$80,919	\$23,526	\$27,999	\$14,985	\$11,881	\$17,742	\$1,766	\$3,395
7/1/01-02	\$14,479	\$10,282	\$814	\$1,839	\$3,518	\$49,141	\$633	\$28,053
7/1/02-03	\$25,745	\$31,917	\$24,179	\$111,570	\$32,069	\$27,813	\$30,504	\$265,515
7/1/03-04	\$26,734	\$3,898	\$39,090	\$109,024	\$21,870	\$32,149	\$25,242	\$5,904
7/1/04-05	\$11,421	\$23,452	\$19,415	\$28,452	\$15,382	\$33,575	\$8,782	\$141,185
7/1/05-06	\$74,310	\$93,563	\$213,480	\$180,666	\$26,318	\$128,065	\$15,001	\$436,013
7/1/06-07	\$34,185	\$61,107	\$44,834	\$57,587	\$42,539	\$30,832	\$39,513	\$858,704
7/1/07-08	\$39,049	\$66,975	\$83,842	\$24,031	\$95,020	\$28,094	\$31,754	\$443,721
7/1/08-09	\$21,654	\$15,952	\$17,443	\$34,258	\$11,034	\$8,570		
7/1/09-10	\$31,116	\$198,071	\$30,350	\$26,619	\$10,176			
7/1/10-11	\$21,404	\$11,795	\$15,632	\$12,175				
7/1/11-12	\$99,354	\$14,942	\$110,464					
7/1/12-13	\$66,389	\$166,110						
7/1/13-14	\$36,381							
7/1/14-15								
7/1/15-16								
7/1/16-17								
7/1/17-18								
7/1/18-19								
7/1/19-20								
7/1/20-21								
7/1/21-22								
7/1/22-23								

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level								Trend Factor to 7/1/24-25
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/93-94	\$47	\$36	\$45	\$36	\$24	\$28	\$33	\$567	1.215
7/1/94-95	\$4	\$3	\$2	\$5	\$7	\$11	\$10	\$128	1.203
7/1/95-96	\$60	\$42	\$29	\$28	\$42	\$21	\$23	\$291	1.191
7/1/96-97	\$6	\$1	\$0	\$1	\$17	\$0	\$0	\$0	1.179
7/1/97-98	\$20	\$24	\$22	\$64	\$99	\$30	\$39	\$138	1.167
7/1/98-99	\$41	\$51	\$42	\$39	\$37	\$24	\$21	\$53	1.156
7/1/99-00	\$1	\$0	\$0	--	\$0	\$0	\$0	\$1	1.144
7/1/00-01	\$90	\$26	\$31	\$17	\$13	\$20	\$2	\$4	1.133
7/1/01-02	\$16	\$11	\$1	\$2	\$4	\$54	\$1	\$31	1.122
7/1/02-03	\$28	\$35	\$27	\$123	\$35	\$31	\$34	\$293	1.111
7/1/03-04	\$29	\$4	\$43	\$119	\$24	\$35	\$28	\$6	1.100
7/1/04-05	\$13	\$27	\$22	\$33	\$18	\$39	\$10	\$163	1.089
7/1/05-06	\$91	\$114	\$261	\$221	\$32	\$156	\$18	\$532	1.078
7/1/06-07	\$42	\$75	\$55	\$71	\$52	\$38	\$48	\$1,052	1.067
7/1/07-08	\$56	\$95	\$119	\$34	\$135	\$40	\$45	\$632	1.057
7/1/08-09	\$29	\$22	\$24	\$47	\$15	\$12			1.046
7/1/09-10	\$45	\$287	\$44	\$39	\$15				1.036
7/1/10-11	\$39	\$21	\$28	\$22					1.002
7/1/11-12	\$173	\$26	\$192						0.996
7/1/12-13	\$140	\$350							1.014
7/1/13-14	\$79								1.033
7/1/14-15									1.057
7/1/15-16									1.069
7/1/16-17									1.074
7/1/17-18									1.072
7/1/18-19									1.060
7/1/19-20									1.043
7/1/20-21									1.026
7/1/21-22									1.016
7/1/22-23									1.010
Average	\$50	\$63	\$52	\$53	\$34	\$34	\$21	\$259	
Avg Latest 5	\$95	\$141	\$82	\$42	\$50	\$57	\$30	\$477	
Prior	\$85	\$70	\$70	\$68	\$68	\$45	\$27	\$615	
All Agencies	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$764	
Selected	\$95	\$95	\$82	\$67	\$61	\$45	\$30	\$620	

Accident Period	Projected Incremental Payments								Total Unpaid
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/07-08								\$435,629	\$436,000
7/1/08-09								\$456,589	\$479,000
7/1/09-10						\$31,100	\$20,656	\$428,216	\$480,000
7/1/10-11					\$33,684	\$24,832	\$16,493	\$341,911	\$417,000
7/1/11-12				\$38,557	\$35,093	\$25,870	\$17,183	\$356,212	\$473,000
7/1/12-13			\$38,671	\$31,838	\$28,977	\$21,362	\$14,188	\$294,135	\$429,000
7/1/13-14		\$43,853	\$37,576	\$30,936	\$28,157	\$20,757	\$13,787	\$285,807	\$461,000
7/1/14-15	\$52,147	\$52,147	\$44,682	\$36,787	\$33,482	\$24,682	\$16,394	\$339,857	\$600,000
7/1/15-16	\$47,454	\$47,454	\$40,661	\$33,476	\$30,469	\$22,461	\$14,919	\$309,274	\$595,000
7/1/16-17	\$40,518	\$40,518	\$34,718	\$28,583	\$26,015	\$19,178	\$12,738	\$264,068	\$571,000
7/1/17-18	\$43,080	\$43,080	\$36,914	\$30,391	\$27,660	\$20,391	\$13,544	\$280,767	\$679,000
7/1/18-19	\$40,874	\$40,874	\$35,023	\$28,834	\$26,244	\$19,347	\$12,850	\$266,388	\$748,000
7/1/19-20	\$31,579	\$31,579	\$27,059	\$22,277	\$20,276	\$14,947	\$9,928	\$205,810	\$677,000
7/1/20-21	\$26,456	\$26,456	\$22,669	\$18,663	\$16,987	\$12,522	\$8,317	\$172,422	\$682,000
7/1/21-22	\$21,974	\$21,974	\$18,829	\$15,502	\$14,109	\$10,401	\$6,908	\$143,215	\$732,000
7/1/22-23	\$17,120	\$17,120	\$14,669	\$12,077	\$10,992	\$8,103	\$5,382	\$111,574	\$848,000

**Estimation of Ultimate Losses  
Incremental Paid Method  
Workers Compensation**

(A) Accident Period	(B) Paid Losses As of 6/30/23	(C) Estimated Unpaid Losses	(D) Estimate Ultimate Losses
7/1/07-08	\$5,092,519	\$436,000	\$5,529,000
7/1/08-09	\$4,335,013	\$479,000	\$4,814,000
7/1/09-10	\$4,671,795	\$480,000	\$5,152,000
7/1/10-11	\$4,574,759	\$417,000	\$4,992,000
7/1/11-12	\$5,424,247	\$473,000	\$5,897,000
7/1/12-13	\$3,283,150	\$429,000	\$3,712,000
7/1/13-14	\$3,071,037	\$461,000	\$3,532,000
7/1/14-15	\$1,720,299	\$600,000	\$2,320,000
7/1/15-16	\$2,173,010	\$595,000	\$2,768,000
7/1/16-17	\$2,005,448	\$571,000	\$2,576,000
7/1/17-18	\$1,063,516	\$679,000	\$1,743,000
7/1/18-19	\$964,614	\$748,000	\$1,713,000
7/1/19-20	\$1,489,146	\$677,000	\$2,166,000
7/1/20-21	\$1,265,364	\$682,000	\$1,947,000
7/1/21-22	\$700,616	\$732,000	\$1,433,000
7/1/22-23	\$218,081	\$848,000	\$1,066,000
<b>Total</b>	<b>\$42,052,615</b>	<b>\$9,307,000</b>	<b>\$51,360,000</b>

Column (B): Exhibit 1  
Column (C): Exhibit 2-C, page 1 and 2  
Column (D) = (B) + (C)



**Summary and Selection of Ultimate Losses  
Workers Compensation**

(A)	(B)	(C) Incurred Loss Development Method	(D) Paid Loss Development Method	(E) Incurred Bornhuetter- Ferguson Method	(F) Paid Bornhuetter- Ferguson Method	(G) Incremental Paid Method	(H) Selected Ultimate Losses
7/1/93-94	\$3,154,000	\$3,160,000	\$3,211,000	\$3,160,000	\$3,207,000		\$3,160,000
7/1/94-95	\$3,218,000	\$3,225,000	\$3,428,000	\$3,225,000	\$3,415,000		\$3,218,000
7/1/95-96	\$3,295,000	\$3,303,000	\$3,455,000	\$3,303,000	\$3,445,000		\$3,303,000
7/1/96-97	\$1,997,000	\$2,002,000	\$2,135,000	\$2,002,000	\$2,126,000		\$1,997,000
7/1/97-98	\$2,823,000	\$2,832,000	\$3,007,000	\$2,832,000	\$2,995,000		\$2,832,000
7/1/98-99	\$3,683,000	\$3,696,000	\$3,956,000	\$3,696,000	\$3,937,000		\$3,683,000
7/1/99-00	\$3,219,000	\$3,233,000	\$3,467,000	\$3,233,000	\$3,450,000		\$3,219,000
7/1/00-01	\$2,971,000	\$2,987,000	\$3,211,000	\$2,987,000	\$3,193,000		\$2,972,653
7/1/01-02	\$3,574,000	\$3,595,000	\$3,851,000	\$3,594,000	\$3,830,000		\$3,595,000
7/1/02-03	\$4,140,000	\$4,304,000	\$4,473,000	\$4,303,000	\$4,447,000		\$4,304,000
7/1/03-04	\$4,003,000	\$4,039,000	\$4,367,000	\$4,039,000	\$4,336,000		\$4,039,000
7/1/04-05	\$5,550,000	\$5,539,000	\$5,900,000	\$5,539,000	\$5,870,000		\$5,550,000
7/1/05-06	\$5,737,000	\$5,724,000	\$5,781,000	\$5,724,000	\$5,777,000		\$5,724,000
7/1/06-07	\$5,711,000	\$5,794,000	\$5,411,000	\$5,793,000	\$5,439,000		\$5,794,000
7/1/07-08	\$5,588,000	\$5,621,000	\$5,657,000	\$5,620,000	\$5,650,000	\$5,529,000	\$5,621,000
7/1/08-09	\$5,233,000	\$4,859,000	\$4,845,000	\$4,865,000	\$4,886,000	\$4,814,000	\$4,876,000
7/1/09-10	\$5,173,000	\$5,041,000	\$5,257,000	\$5,044,000	\$5,247,000	\$5,152,000	\$5,146,000
7/1/10-11	\$5,123,000	\$5,103,000	\$5,188,000	\$5,103,000	\$5,180,000	\$4,992,000	\$5,103,000
7/1/11-12	\$5,815,000	\$5,843,000	\$6,206,000	\$5,842,000	\$6,157,000	\$5,897,000	\$5,843,000
7/1/12-13	\$3,898,000	\$3,982,000	\$3,796,000	\$3,979,000	\$3,810,000	\$3,712,000	\$3,982,000
7/1/13-14	\$3,657,000	\$3,662,000	\$3,595,000	\$3,662,000	\$3,604,000	\$3,532,000	\$3,633,000
7/1/14-15	\$2,041,000	\$1,834,000	\$2,044,000	\$1,847,000	\$2,044,000	\$2,320,000	\$1,946,000
7/1/15-16	\$2,335,000	\$2,363,000	\$2,630,000	\$2,361,000	\$2,579,000	\$2,768,000	\$2,361,000
7/1/16-17	\$2,363,000	\$2,424,000	\$2,485,000	\$2,418,000	\$2,461,000	\$2,576,000	\$2,440,000
7/1/17-18	\$1,691,000	\$1,497,000	\$1,358,000	\$1,522,000	\$1,431,000	\$1,743,000	\$1,522,000
7/1/18-19	\$1,297,000	\$1,237,000	\$1,285,000	\$1,247,000	\$1,288,000	\$1,713,000	\$1,268,000
7/1/19-20	\$2,251,000	\$2,099,000	\$2,110,000	\$2,131,000	\$2,151,000	\$2,166,000	\$2,131,000
7/1/20-21	\$2,395,000	\$2,351,000	\$1,984,000	\$2,363,000	\$2,133,000	\$1,947,000	\$2,248,000
7/1/21-22	\$1,900,000	\$1,269,000	\$1,346,000	\$1,486,000	\$1,611,000	\$1,433,000	\$1,549,000
7/1/22-23	\$2,227,000	\$770,000	\$877,000	\$1,284,000	\$1,688,000	\$1,066,000	\$1,486,000
<b>Total</b>	<b>\$106,062,000</b>	<b>\$103,388,000</b>	<b>\$106,316,000</b>	<b>\$104,204,000</b>	<b>\$107,387,000</b>	<b>\$51,360,000</b>	<b>\$104,546,000</b>

Column (B): Previous actuarial report

Columns (C), (D): Exhibit 2-A

Columns (E), (F): Exhibit 2-B

Column (G): Exhibit 2-C

Column (H): Column (C) for 93-94, 95-96, 97-98, 01-02 through 03-04, 05-06 through 07-08, and 10-11 through 12-13

Column (B) for 94-95, 96-97, 98-99, 99-00, and 04-05

Reported losses for 00-01

Average of (E) and (F) for 08-09, 09-10, 13-14, 14-15, 16-17, 18-19, and 20-21 through 22-23

Column (E) for 15-16, 17-18, and 19-20

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,153,839	\$3,153,856	\$3,153,839	0%	\$3,154,000	\$3,160,000	0%
7/1/94-95	\$3,218,255	\$3,218,228	\$3,218,255	0%	\$3,218,000	\$3,218,000	0%
7/1/95-96	\$3,295,009	\$3,295,008	\$3,295,009	0%	\$3,295,000	\$3,303,000	0%
7/1/96-97	\$1,996,690	\$1,996,725	\$1,996,690	0%	\$1,997,000	\$1,997,000	0%
7/1/97-98	\$2,822,547	\$2,822,600	\$2,822,547	0%	\$2,823,000	\$2,832,000	0%
7/1/98-99	\$3,682,683	\$3,682,721	\$3,682,683	0%	\$3,683,000	\$3,683,000	0%
7/1/99-00	\$3,219,427	\$3,219,375	\$3,219,427	0%	\$3,219,000	\$3,219,000	0%
7/1/00-01	\$2,970,607	\$2,970,656	\$2,972,653	0%	\$2,971,000	\$2,972,653	0%
7/1/01-02	\$3,574,270	\$3,574,235	\$3,574,270	0%	\$3,574,000	\$3,595,000	1%
7/1/02-03	\$4,140,285	\$4,140,247	\$4,276,184	3%	\$4,140,000	\$4,304,000	4%
7/1/03-04	\$4,003,216	\$4,003,187	\$4,008,216	0%	\$4,003,000	\$4,039,000	1%
7/1/04-05	\$5,489,015	\$5,497,672	\$5,489,015	0%	\$5,550,000	\$5,550,000	0%
7/1/05-06	\$5,663,105	\$5,673,947	\$5,663,105	0%	\$5,737,000	\$5,724,000	0%
7/1/06-07	\$5,624,197	\$5,637,372	\$5,721,488	1%	\$5,711,000	\$5,794,000	1%
7/1/07-08	\$5,487,527	\$5,503,316	\$5,536,240	1%	\$5,588,000	\$5,621,000	1%
7/1/08-09	\$5,119,998	\$5,138,402	\$4,770,963	-7%	\$5,233,000	\$4,876,000	-7%
7/1/09-10	\$4,928,383	\$4,969,704	\$4,930,883	-1%	\$5,173,000	\$5,146,000	-1%
7/1/10-11	\$4,962,475	\$4,990,621	\$4,967,475	0%	\$5,123,000	\$5,103,000	0%
7/1/11-12	\$5,591,497	\$5,632,200	\$5,653,292	0%	\$5,815,000	\$5,843,000	0%
7/1/12-13	\$3,713,425	\$3,748,352	\$3,822,577	2%	\$3,898,000	\$3,982,000	2%
7/1/13-14	\$3,441,361	\$3,483,760	\$3,479,855	0%	\$3,657,000	\$3,633,000	-1%
7/1/14-15	\$1,777,559	\$1,831,351	\$1,720,299	-6%	\$2,041,000	\$1,946,000	-5%
7/1/15-16	\$2,115,617	\$2,162,077	\$2,177,584	1%	\$2,335,000	\$2,361,000	1%
7/1/16-17	\$2,078,351	\$2,140,706	\$2,182,426	2%	\$2,363,000	\$2,440,000	3%
7/1/17-18	\$1,301,347	\$1,389,231	\$1,306,847	-6%	\$1,691,000	\$1,522,000	-10%
7/1/18-19	\$878,929	\$975,285	\$1,035,461	6%	\$1,297,000	\$1,268,000	-2%
7/1/19-20	\$1,654,302	\$1,793,161	\$1,658,751	-7%	\$2,251,000	\$2,131,000	-5%
7/1/20-21	\$1,655,538	\$1,826,072	\$1,717,408	-6%	\$2,395,000	\$2,248,000	-6%
7/1/21-22	\$899,477	\$1,121,771	\$832,470	-26%	\$1,900,000	\$1,549,000	-18%
7/1/22-23	--	\$1,245,180	\$436,341	-65%	\$2,227,000	\$1,486,000	-33%
<b>Total</b>	<b>\$98,458,931</b>	<b>\$100,837,015</b>	<b>\$99,322,252</b>	<b>-1.5%</b>	<b>\$106,062,000</b>	<b>\$104,546,000</b>	<b>-1.4%</b>
		<i>Variance in Incurred</i>	<b>(\$1,514,763)</b>		<i>Change in Ultimates</i>	<b>(\$1,516,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,016,925	\$3,020,687	\$3,020,056	0%	\$3,154,000	\$3,160,000	0%
7/1/94-95	\$3,218,255	\$3,218,248	\$3,218,255	0%	\$3,218,000	\$3,218,000	0%
7/1/95-96	\$3,236,165	\$3,237,892	\$3,237,310	0%	\$3,295,000	\$3,303,000	0%
7/1/96-97	\$1,996,690	\$1,996,699	\$1,996,690	0%	\$1,997,000	\$1,997,000	0%
7/1/97-98	\$2,804,458	\$2,805,043	\$2,806,125	0%	\$2,823,000	\$2,832,000	0%
7/1/98-99	\$3,682,683	\$3,682,694	\$3,682,683	0%	\$3,683,000	\$3,683,000	0%
7/1/99-00	\$3,219,427	\$3,219,412	\$3,219,427	0%	\$3,219,000	\$3,219,000	0%
7/1/00-01	\$2,970,607	\$2,970,621	\$2,972,653	0%	\$2,971,000	\$2,972,653	0%
7/1/01-02	\$3,554,404	\$3,555,130	\$3,555,407	0%	\$3,574,000	\$3,595,000	1%
7/1/02-03	\$4,099,184	\$4,100,767	\$4,115,961	0%	\$4,140,000	\$4,304,000	4%
7/1/03-04	\$4,003,216	\$4,003,207	\$4,003,494	0%	\$4,003,000	\$4,039,000	1%
7/1/04-05	\$5,382,808	\$5,389,950	\$5,388,133	0%	\$5,550,000	\$5,550,000	0%
7/1/05-06	\$5,240,375	\$5,262,723	\$5,256,703	0%	\$5,737,000	\$5,724,000	0%
7/1/06-07	\$4,862,784	\$4,903,109	\$4,896,595	0%	\$5,711,000	\$5,794,000	1%
7/1/07-08	\$5,060,765	\$5,087,334	\$5,092,519	0%	\$5,588,000	\$5,621,000	1%
7/1/08-09	\$4,326,443	\$4,375,048	\$4,335,013	-1%	\$5,233,000	\$4,876,000	-7%
7/1/09-10	\$4,661,619	\$4,690,908	\$4,671,795	0%	\$5,173,000	\$5,146,000	-1%
7/1/10-11	\$4,562,584	\$4,597,036	\$4,574,759	0%	\$5,123,000	\$5,103,000	0%
7/1/11-12	\$5,313,783	\$5,347,042	\$5,424,247	1%	\$5,815,000	\$5,843,000	0%
7/1/12-13	\$3,117,040	\$3,173,340	\$3,283,150	3%	\$3,898,000	\$3,982,000	2%
7/1/13-14	\$3,034,655	\$3,083,767	\$3,071,037	0%	\$3,657,000	\$3,633,000	-1%
7/1/14-15	\$1,620,042	\$1,656,744	\$1,720,299	4%	\$2,041,000	\$1,946,000	-5%
7/1/15-16	\$2,114,042	\$2,135,575	\$2,173,010	2%	\$2,335,000	\$2,361,000	1%
7/1/16-17	\$1,873,180	\$1,927,313	\$2,005,448	4%	\$2,363,000	\$2,440,000	3%
7/1/17-18	\$1,051,368	\$1,133,054	\$1,063,516	-6%	\$1,691,000	\$1,522,000	-10%
7/1/18-19	\$874,162	\$938,204	\$964,614	3%	\$1,297,000	\$1,268,000	-2%
7/1/19-20	\$1,439,268	\$1,590,788	\$1,489,146	-6%	\$2,251,000	\$2,131,000	-5%
7/1/20-21	\$990,881	\$1,334,847	\$1,265,364	-5%	\$2,395,000	\$2,248,000	-6%
7/1/21-22	\$326,207	\$904,894	\$700,616	-23%	\$1,900,000	\$1,549,000	-18%
7/1/22-23	--	\$555,655	\$218,081	-61%	\$2,227,000	\$1,486,000	-33%
<b>Total</b>	<b>\$91,654,023</b>	<b>\$93,897,732</b>	<b>\$93,422,107</b>	<b>-0.5%</b>	<b>\$106,062,000</b>	<b>\$104,546,000</b>	<b>-1.4%</b>
		<b>Variance in Paid</b>	<b>(\$475,625)</b>		<b>Change in Ultimates</b>	<b>(\$1,516,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Incurred Losses	(D) Paid Losses	(E) Case Reserves	(F) IBNR Reserves	(G) Total Required Reserves	(H) Discount Factor at 4.0%	(I) Total Discounted Reserves at 4.0%
7/1/93-94	\$3,160,000	\$3,153,839	\$3,020,056	\$133,782	\$6,000	\$140,000	1.000	\$140,000
7/1/94-95	\$3,218,000	\$3,218,255	\$3,218,255	\$0	\$0	\$0	0.981	\$0
7/1/95-96	\$3,303,000	\$3,295,009	\$3,237,310	\$57,699	\$8,000	\$66,000	0.944	\$62,000
7/1/96-97	\$1,997,000	\$1,996,690	\$1,996,690	\$0	\$0	\$0	0.910	\$0
7/1/97-98	\$2,832,000	\$2,822,547	\$2,806,125	\$16,423	\$9,000	\$26,000	0.878	\$23,000
7/1/98-99	\$3,683,000	\$3,682,683	\$3,682,683	\$0	\$0	\$0	0.849	\$0
7/1/99-00	\$3,219,000	\$3,219,427	\$3,219,427	\$0	\$0	\$0	0.822	\$0
7/1/00-01	\$2,972,653	\$2,972,653	\$2,972,653	\$0	\$0	\$0	0.797	\$0
7/1/01-02	\$3,595,000	\$3,574,270	\$3,555,407	\$18,863	\$21,000	\$40,000	0.774	\$31,000
7/1/02-03	\$4,304,000	\$4,276,184	\$4,115,961	\$160,223	\$28,000	\$188,000	0.753	\$142,000
7/1/03-04	\$4,039,000	\$4,008,216	\$4,003,494	\$4,722	\$31,000	\$36,000	0.734	\$26,000
7/1/04-05	\$5,550,000	\$5,489,015	\$5,388,133	\$100,882	\$61,000	\$162,000	0.717	\$116,000
7/1/05-06	\$5,724,000	\$5,663,105	\$5,256,703	\$406,402	\$61,000	\$467,000	0.702	\$328,000
7/1/06-07	\$5,794,000	\$5,721,488	\$4,896,595	\$824,892	\$73,000	\$897,000	0.689	\$618,000
7/1/07-08	\$5,621,000	\$5,536,240	\$5,092,519	\$443,721	\$85,000	\$528,000	0.678	\$358,000
7/1/08-09	\$4,876,000	\$4,770,963	\$4,335,013	\$435,950	\$105,000	\$541,000	0.669	\$362,000
7/1/09-10	\$5,146,000	\$4,930,883	\$4,671,795	\$259,088	\$215,000	\$474,000	0.661	\$313,000
7/1/10-11	\$5,103,000	\$4,967,475	\$4,574,759	\$392,716	\$136,000	\$528,000	0.656	\$346,000
7/1/11-12	\$5,843,000	\$5,653,292	\$5,424,247	\$229,044	\$190,000	\$419,000	0.653	\$273,000
7/1/12-13	\$3,982,000	\$3,822,577	\$3,283,150	\$539,427	\$159,000	\$699,000	0.651	\$455,000
7/1/13-14	\$3,633,000	\$3,479,855	\$3,071,037	\$408,818	\$153,000	\$562,000	0.652	\$366,000
7/1/14-15	\$1,946,000	\$1,720,299	\$1,720,299	\$0	\$226,000	\$226,000	0.655	\$148,000
7/1/15-16	\$2,361,000	\$2,177,584	\$2,173,010	\$4,573	\$183,000	\$188,000	0.661	\$124,000
7/1/16-17	\$2,440,000	\$2,182,426	\$2,005,448	\$176,978	\$258,000	\$435,000	0.670	\$291,000
7/1/17-18	\$1,522,000	\$1,306,847	\$1,063,516	\$243,330	\$215,000	\$458,000	0.682	\$312,000
7/1/18-19	\$1,268,000	\$1,035,461	\$964,614	\$70,847	\$233,000	\$303,000	0.697	\$211,000
7/1/19-20	\$2,131,000	\$1,658,751	\$1,489,146	\$169,605	\$472,000	\$642,000	0.718	\$461,000
7/1/20-21	\$2,248,000	\$1,717,408	\$1,265,364	\$452,044	\$531,000	\$983,000	0.745	\$732,000
7/1/21-22	\$1,549,000	\$832,470	\$700,616	\$131,854	\$717,000	\$848,000	0.781	\$662,000
7/1/22-23	\$1,486,000	\$436,341	\$218,081	\$218,260	\$1,050,000	\$1,268,000	0.834	\$1,057,000
<b>Total</b>	<b>\$104,546,000</b>	<b>\$99,322,252</b>	<b>\$93,422,107</b>	<b>\$5,900,145</b>	<b>\$5,226,000</b>	<b>\$11,124,000</b>		<b>\$7,957,000</b>

Column (B): Exhibit 3-A  
Columns (C), (D): Exhibit 1  
Column (E) = (C) - (D)  
Column (F) = (B) - (C)  
Column (G) = (B) - (D)  
Column (H): Appendix B  
Column (I) = (G) \* (H)

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$3,160,000	\$3,160,000	\$3,163,000	\$3,165,000	\$3,169,000
7/1/94-95	\$3,218,000	\$3,218,000	\$3,222,000	\$3,224,000	\$3,230,000
7/1/95-96	\$3,303,000	\$3,303,000	\$3,308,000	\$3,311,000	\$3,318,000
7/1/96-97	\$1,997,000	\$1,997,000	\$2,000,000	\$2,003,000	\$2,009,000
7/1/97-98	\$2,832,000	\$2,832,000	\$2,847,000	\$2,859,000	\$2,884,000
7/1/98-99	\$3,683,000	\$3,683,000	\$3,705,000	\$3,722,000	\$3,758,000
7/1/99-00	\$3,219,000	\$3,218,000	\$3,241,000	\$3,257,000	\$3,292,000
7/1/00-01	\$2,972,653	\$2,972,000	\$2,997,000	\$3,017,000	\$3,058,000
7/1/01-02	\$3,595,000	\$3,594,000	\$3,625,000	\$3,649,000	\$3,699,000
7/1/02-03	\$4,304,000	\$4,301,000	\$4,358,000	\$4,402,000	\$4,494,000
7/1/03-04	\$4,039,000	\$4,036,000	\$4,093,000	\$4,136,000	\$4,228,000
7/1/04-05	\$5,550,000	\$5,546,000	\$5,628,000	\$5,690,000	\$5,822,000
7/1/05-06	\$5,724,000	\$5,715,000	\$5,838,000	\$5,933,000	\$6,135,000
7/1/06-07	\$5,794,000	\$5,785,000	\$5,913,000	\$6,011,000	\$6,222,000
7/1/07-08	\$5,621,000	\$5,612,000	\$5,738,000	\$5,835,000	\$6,044,000
7/1/08-09	\$4,876,000	\$4,867,000	\$4,984,000	\$5,073,000	\$5,267,000
7/1/09-10	\$5,146,000	\$5,131,000	\$5,285,000	\$5,403,000	\$5,661,000
7/1/10-11	\$5,103,000	\$5,087,000	\$5,244,000	\$5,364,000	\$5,626,000
7/1/11-12	\$5,843,000	\$5,822,000	\$6,017,000	\$6,168,000	\$6,498,000
7/1/12-13	\$3,982,000	\$3,966,000	\$4,105,000	\$4,213,000	\$4,448,000
7/1/13-14	\$3,633,000	\$3,618,000	\$3,747,000	\$3,846,000	\$4,064,000
7/1/14-15	\$1,946,000	\$1,936,000	\$2,013,000	\$2,072,000	\$2,202,000
7/1/15-16	\$2,361,000	\$2,348,000	\$2,444,000	\$2,518,000	\$2,682,000
7/1/16-17	\$2,440,000	\$2,426,000	\$2,528,000	\$2,606,000	\$2,780,000
7/1/17-18	\$1,522,000	\$1,512,000	\$1,580,000	\$1,632,000	\$1,748,000
7/1/18-19	\$1,268,000	\$1,254,000	\$1,329,000	\$1,388,000	\$1,521,000
7/1/19-20	\$2,131,000	\$2,095,000	\$2,250,000	\$2,374,000	\$2,658,000
7/1/20-21	\$2,248,000	\$2,205,000	\$2,378,000	\$2,516,000	\$2,833,000
7/1/21-22	\$1,549,000	\$1,514,000	\$1,644,000	\$1,749,000	\$1,993,000
7/1/22-23	\$1,486,000	\$1,433,000	\$1,590,000	\$1,718,000	\$2,023,000

(1) All Years\* \$104,546,000 \$104,507,000 \$105,092,000 \$105,525,000 \$106,467,000

(2) Total Paid Losses \$93,422,107

<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(3) All Years*	\$11,124,000	\$11,085,000	\$11,670,000	\$12,103,000	\$13,045,000

<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(4) All Years*	\$7,957,000	\$7,929,000	\$8,348,000	\$8,657,000	\$9,331,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Estimated Ultimate Claim Counts, Average Claim Size, and Cost Per \$100 Payroll  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Accident Period	Number of Claims	Claim Development Factor	Estimated Ultimate Claims	Estimated Ultimate Losses	Severity*	Estimated Fiscal Year Payroll (Hundreds)	Claims Per \$1 Million Payroll	Cost Per \$100 Payroll
7/1/93-94	927	1.000	927	\$3,160,000	\$3,400	--	--	--
7/1/94-95	1,182	1.000	1,182	\$3,218,000	\$2,700	--	--	--
7/1/95-96	1,124	1.000	1,124	\$3,303,000	\$2,900	--	--	--
7/1/96-97	1,090	1.000	1,090	\$1,997,000	\$1,800	--	--	--
7/1/97-98	1,064	1.000	1,064	\$2,832,000	\$2,700	--	--	--
7/1/98-99	1,041	1.000	1,041	\$3,683,000	\$3,500	--	--	--
7/1/99-00	946	1.000	946	\$3,219,000	\$3,400	--	--	--
7/1/00-01	1,013	1.000	1,013	\$2,972,653	\$2,900	--	--	--
7/1/01-02	1,023	1.000	1,023	\$3,595,000	\$3,500	--	--	--
7/1/02-03	1,008	1.000	1,008	\$4,304,000	\$4,300	--	--	--
7/1/03-04	1,007	1.000	1,007	\$4,039,000	\$4,000	--	--	--
7/1/04-05	945	1.000	945	\$5,550,000	\$5,900	--	--	--
7/1/05-06	883	1.000	883	\$5,724,000	\$6,500	--	--	--
7/1/06-07	871	1.000	871	\$5,794,000	\$6,700	--	--	--
7/1/07-08	742	1.000	742	\$5,621,000	\$7,600	--	--	--
7/1/08-09	770	1.000	770	\$4,876,000	\$6,300	--	--	--
7/1/09-10	715	1.000	715	\$5,146,000	\$7,200	\$1,840,367	3.9	\$2.80
7/1/10-11	552	1.000	552	\$5,103,000	\$9,200	\$1,668,760	3.3	\$3.06
7/1/11-12	572	1.000	572	\$5,843,000	\$10,200	\$1,556,153	3.7	\$3.75
7/1/12-13	481	1.000	481	\$3,982,000	\$8,300	\$1,473,107	3.3	\$2.70
7/1/13-14	476	1.000	476	\$3,633,000	\$7,600	\$1,460,982	3.3	\$2.49
7/1/14-15	579	1.000	579	\$1,946,000	\$3,400	\$1,453,980	4.0	\$1.34
7/1/15-16	533	1.000	533	\$2,361,000	\$4,400	\$1,411,368	3.8	\$1.67
7/1/16-17	457	1.000	457	\$2,440,000	\$5,300	\$1,382,350	3.3	\$1.77
7/1/17-18	485	1.000	485	\$1,522,000	\$3,100	\$1,368,621	3.5	\$1.11
7/1/18-19	455	1.000	455	\$1,268,000	\$2,800	\$1,379,641	3.3	\$0.92
7/1/19-20	346	1.000	346	\$2,131,000	\$6,200	\$1,432,676	2.4	\$1.49
7/1/20-21	285	1.001	285	\$2,248,000	\$7,900	\$1,512,282	1.9	\$1.49
7/1/21-22	234	1.002	235	\$1,549,000	\$6,600	\$1,572,265	1.5	\$0.99
7/1/22-23	179	1.015	182	\$1,486,000	\$8,200	\$1,676,575	1.1	\$0.89
<b>Total</b>	<b>21,985</b>		<b>21,989</b>	<b>\$104,546,000</b>	<b>\$4,800</b>	<b>\$21,189,126</b>	<b>3.0</b>	<b>\$1.92</b>

\* Estimated ultimate average claim size

Columns (B), (G): Exhibit 1

Column (C): Appendix A3

Column (D) = (B) \* (C)

Column (E): Exhibit 3-A

Column (F) = (E) / (D)

Column (G): Exhibit 1

Column (H) = (D) / (G) \* 10,000

Column (I) = (E) / (G)



**Analysis of Reported Loss Development  
Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$2,835	\$2,860			\$2,900	\$2,923	\$3,171	\$3,172	\$3,172	\$3,172	\$3,236	\$3,236	\$3,209	\$3,184	\$3,184
7/1/94-95	\$3,107	\$3,107		\$3,140	\$3,140	\$3,390	\$3,390	\$3,390	\$3,390	\$3,390	\$3,272	\$3,320	\$3,221	\$3,221	\$3,221
7/1/95-96	\$3,026	\$3,039	\$3,054	\$3,074	\$3,595	\$3,541	\$3,541	\$3,283	\$3,308	\$3,309	\$3,309	\$3,309	\$3,295	\$3,295	
7/1/96-97	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	
7/1/97-98	\$2,725	\$2,756	\$2,886	\$2,953	\$2,953	\$2,953	\$2,922	\$2,846	\$2,871	\$2,871	\$2,871	\$2,871			
7/1/98-99	\$3,630	\$4,173	\$4,182	\$4,172	\$3,683	\$3,683	\$3,683	\$3,683	\$3,683	\$3,683	\$3,683				
7/1/99-00	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236				
7/1/00-01	\$2,967	\$2,969	\$2,969	\$2,969	\$2,971	\$2,971	\$2,971	\$2,971	\$2,971	\$2,971					
7/1/01-02	\$3,598	\$3,598	\$3,598	\$3,598	\$3,598	\$3,600	\$3,577	\$3,577							
7/1/02-03	\$4,396	\$4,549	\$4,549	\$4,495	\$4,308	\$4,174	\$4,310								
7/1/03-04	\$4,186	\$4,172	\$4,043	\$4,043	\$4,043	\$4,048									
7/1/04-05	\$5,676	\$5,677	\$5,664	\$5,502	\$5,502										
7/1/05-06	\$5,459	\$5,663	\$5,663	\$5,663											
7/1/06-07	\$5,940	\$5,624	\$5,721												
7/1/07-08	\$5,496	\$5,544													
7/1/08-09	\$4,773														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:*													
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:ULT
7/1/93-94	1.009				1.008	--	1.000	1.000	1.000	1.020	1.000	0.992	0.992	1.000
7/1/94-95	1.000			1.000	--	1.000	1.000	1.000	0.965	1.000	1.015	0.970	1.000	1.000
7/1/95-96	1.005	1.005	1.006	--	0.985	1.000	0.927	1.008	1.000	1.000	1.000	0.996	1.000	
7/1/96-97	1.000	1.000	--	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
7/1/97-98	1.011	--	1.023	1.000	1.000	0.990	0.974	1.009	1.000	1.000	1.000			
7/1/98-99	--	1.002	0.998	0.883	1.000	1.000	1.000	1.000	1.000	1.000				
7/1/99-00	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/00-01	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.001						
7/1/01-02	1.000	1.000	1.000	1.000	1.001	0.994	1.000							
7/1/02-03	1.035	1.000	0.988	0.958	0.969	1.033								
7/1/03-04	0.997	0.969	1.000	1.000	1.001									
7/1/04-05	1.000	0.998	0.971	1.000										
7/1/05-06	1.037	1.000	1.000											
7/1/06-07	0.947	1.017												
7/1/07-08	1.009													
7/1/08-09														
7/1/09-10														
7/1/10-11														
7/1/11-12														
7/1/12-13														
7/1/13-14														
7/1/14-15														
7/1/15-16														
7/1/16-17														
7/1/17-18														
7/1/18-19														
7/1/19-20														
7/1/20-21														
7/1/21-22														
<b>Average</b>	1.004	0.999	0.999	0.984	0.996	1.002	0.989	1.002	0.995	1.003	1.003	0.989	0.997	1.000
<b>Avg Latest 3</b>	0.998	1.005	0.990	0.986	0.990	1.009	1.000	1.000	1.000	1.000	1.000	0.989	0.997	
<b>Avg Latest 5</b>	0.998	0.997	0.992	0.992	0.994	1.005	0.995	1.002	1.000	1.000	1.003			
<b>Wtd Avg</b>	1.003	1.000	0.997	0.981	0.995	1.003	0.988	1.002	0.995	1.004	1.003	0.988	0.997	1.000
<b>Wtd Avg Latest 3</b>	0.996	1.005	0.989	0.987	0.989	1.011	1.000	1.000	1.000	1.000	1.000	0.987	0.997	
<b>Wtd Avg Latest 5</b>	0.997	0.998	0.991	0.991	0.993	1.006	0.995	1.002	1.000	1.000	1.003			
<b>State (All Agencies)</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior Impiled</b>	1.004	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000
<b>Industry**</b>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Cumulative</b>	1.019	1.017	1.016	1.015	1.014	1.013	1.012	1.011	1.011	1.011	1.010	1.010	1.010	1.010

\* Age to age development not shown on one diagonal due to change in reserving methodology

\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin



**Estimation of Cumulative Reported Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.776	-5.0530	-0.2530	25.533	0.0640	1.2782	360	1.002
24	1.507	-5.1269	-0.6795	26.285	0.4617	3.4837	348	1.002
36	1.364	-5.1957	-1.0095	26.995	1.0191	5.2450	336	1.002
48	1.273	-5.2600	-1.2985	27.668	1.6861	6.8301	324	1.003
60	1.193	-5.3205	-1.6460	28.308	2.7093	8.7575	312	1.003
72	1.149	-5.3775	-1.9050	28.918	3.6291	10.2442	300	1.004
84	1.114	-5.4315	-2.1709	29.501	4.7129	11.7913	288	1.004
96	1.082	-5.4827	-2.4951	30.060	6.2255	13.6797	276	1.005
108	1.067	-5.5314	-2.7010	30.596	7.2955	14.9403	264	1.006
120	1.054	-5.5778	-2.9266	31.112	8.5648	16.3238	252	1.007
132	1.040	-5.6222	-3.2140	31.609	10.3301	18.0699	240	1.008
144	1.032	-5.6647	-3.4281	32.088	11.7521	19.4192	228	1.009
156	1.026	-5.7054	-3.6355	32.552	13.2168	20.7419	216	1.011
168	1.022	-5.7446	-3.8040	33.000	14.4702	21.8522	204	1.013
180	1.019	-5.7822	-3.9482	33.434	15.5885	22.8297	192	1.015
							180	1.018
							168	1.022
							156	1.027
							144	1.034
							132	1.042
							120	1.052
							108	1.066
							96	1.085
							84	1.111
							72	1.146
							60	1.195
							48	1.266
							36	1.369
							24	1.525
							12	1.765
Sum		-81.8759	-35.1149	447.6576	101.7256	195.4868		
Average		-5.4584	-2.3410	29.8438	6.7817	13.0325		

N =	15		
A =	1.27E+11		
B =	5.113	R^2 =	0.99942
C =	144		

\* Appendix A1, page 1



**Analysis of Paid Loss Development  
Workers Compensation**

Year	Gross Paid Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$2,726	\$2,751			\$2,837	\$2,873	\$2,906	\$2,937	\$2,963	\$2,977	\$2,985	\$2,997	\$3,036	\$3,043	\$3,047
7/1/94-95	\$3,085	\$3,095		\$3,123	\$3,135	\$3,148	\$3,160	\$3,176	\$3,189	\$3,200	\$3,222	\$3,221	\$3,221	\$3,221	\$3,221
7/1/95-96	\$2,999	\$3,021	\$3,043	\$3,065	\$3,094	\$3,106	\$3,126	\$3,185	\$3,196	\$3,212	\$3,227	\$3,233	\$3,236	\$3,237	
7/1/96-97	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	\$2,009	
7/1/97-98	\$2,710	\$2,745	\$2,763	\$2,773	\$2,786	\$2,800	\$2,806	\$2,810	\$2,848	\$2,850	\$2,853	\$2,854			
7/1/98-99	\$3,617	\$3,635	\$3,652	\$3,678	\$3,683	\$3,683	\$3,683	\$3,683	\$3,683	\$3,683	\$3,683	\$3,683			
7/1/99-00	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236	\$3,236			
7/1/00-01	\$2,967	\$2,969	\$2,969	\$2,969	\$2,970	\$2,971	\$2,971	\$2,971	\$2,971	\$2,971	\$2,971	\$2,971			
7/1/01-02	\$3,549	\$3,549	\$3,550	\$3,551	\$3,552	\$3,554	\$3,558	\$3,559							
7/1/02-03	\$4,014	\$4,044	\$4,066	\$4,083	\$4,132	\$4,133	\$4,150								
7/1/03-04	\$4,017	\$4,042	\$4,043	\$4,043	\$4,043	\$4,043									
7/1/04-05	\$5,352	\$5,361	\$5,391	\$5,396	\$5,401										
7/1/05-06	\$5,212	\$5,227	\$5,240	\$5,257											
7/1/06-07	\$4,823	\$4,863	\$4,897												
7/1/07-08	\$5,069	\$5,101													
7/1/08-09	\$4,337														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.009				1.013	1.011	1.011	1.009	1.005	1.003	1.004	1.013	1.002	1.001	
7/1/94-95	1.003			1.004	1.004	1.004	1.005	1.004	1.003	1.007	1.000	1.000	1.000	1.000	
7/1/95-96	1.007	1.007	1.007	1.010	1.004	1.006	1.019	1.003	1.005	1.005	1.002	1.001	1.000		
7/1/96-97	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
7/1/97-98	1.013	1.007	1.004	1.004	1.005	1.002	1.001	1.014	1.001	1.001	1.001				
7/1/98-99	1.005	1.005	1.007	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
7/1/99-00	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/00-01	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001						
7/1/01-02	1.000	1.000	1.000	1.000	1.000	1.001	1.000								
7/1/02-03	1.008	1.005	1.004	1.012	1.000	1.004									
7/1/03-04	1.006	1.000	1.000	1.000	1.000										
7/1/04-05	1.002	1.006	1.001	1.001											
7/1/05-06	1.003	1.003	1.003												
7/1/06-07	1.008	1.007													
7/1/07-08	1.006														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	1.005	1.003	1.002	1.003	1.002	1.003	1.004	1.004	1.002	1.003	1.001	1.004	1.001	1.001	
<b>Avg Latest 5</b>	1.005	1.004	1.002	1.003	1.000	1.001	1.000	1.003	1.001	1.003	1.001				
<b>Wtd Avg</b>	1.005	1.004	1.002	1.003	1.002	1.003	1.004	1.004	1.002	1.003	1.001	1.004	1.001	1.001	
<b>Wtd Avg Latest 5</b>	1.005	1.004	1.002	1.003	1.000	1.001	1.000	1.003	1.001	1.003	1.001				
<b>State (All Agencies)</b>	1.012	1.010	1.008	1.008	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Prior</b>	1.006	1.005	1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.060
<b>Industry*</b>	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.052
<b>Selected</b>	1.006	1.005	1.005	1.005	1.005	1.004	1.004	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Cumulative</b>	1.120	1.114	1.108	1.103	1.098	1.093	1.088	1.083	1.079	1.074	1.070	1.068	1.065	1.062	1.060

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Estimation of Cumulative Paid Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X'	Y'	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
		LN(1/(X+C))	LN(Y-1)					
12	4.015	-1.4150	1.1037	2.002	1.2181	-1.5617	360	1.063
24	1.964	-2.7798	-0.0366	7.728	0.0013	0.1018	348	1.065
36	1.580	-3.3364	-0.5440	11.131	0.2959	1.8149	336	1.067
48	1.408	-3.6918	-0.8968	13.629	0.8043	3.3110	324	1.069
60	1.318	-3.9535	-1.1463	15.630	1.3140	4.5319	312	1.072
72	1.266	-4.1607	-1.3257	17.311	1.7574	5.5157	300	1.074
84	1.232	-4.3323	-1.4604	18.769	2.1328	6.3269	288	1.077
96	1.205	-4.4787	-1.5846	20.058	2.5111	7.0971	276	1.080
108	1.186	-4.6063	-1.6794	21.218	2.8205	7.7361	264	1.083
120	1.170	-4.7195	-1.7714	22.274	3.1379	8.3602	252	1.087
132	1.157	-4.8212	-1.8533	23.244	3.4346	8.9350	240	1.091
144	1.145	-4.9135	-1.9323	24.143	3.7339	9.4945	228	1.095
156	1.136	-4.9980	-1.9954	24.980	3.9817	9.9731	216	1.100
168	1.128	-5.0759	-2.0526	25.765	4.2131	10.4188	204	1.105
180	1.120	-5.1482	-2.1173	26.504	4.4830	10.9003	192	1.111
192	1.114	-5.2156	-2.1727	27.202	4.7208	11.3321	180	1.118
							168	1.125
							156	1.134
							144	1.144
							132	1.156
							120	1.171
							108	1.188
							96	1.210
							84	1.239
							72	1.277
							60	1.332
							48	1.417
							36	1.568
							24	1.921
							12	4.020
Sum		-67.6464	-21.4653	301.5886	40.5605	104.2875		
Average		-4.2279	-1.3416	18.8493	2.5350	6.5180		

N =	16		
A =	1.03E+01		
B =	0.868	R^2 =	0.99910
C =	-8		

\* Appendix A2, page 1



**Estimation of Cumulative Reported Claim Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.015	-2.7672	-4.2127	7.657	17.7468	11.6574	360	1.000
24	1.002	-3.3291	-6.0629	11.083	36.7585	20.1842	348	1.000
36	1.001	-3.6867	-7.2403	13.592	52.4220	26.6931	336	1.000
							324	1.000
							312	1.000
							300	1.000
							288	1.000
							276	1.000
							264	1.000
							252	1.000
							240	1.000
							228	1.000
							216	1.000
							204	1.000
							192	1.000
							180	1.000
							168	1.000
							156	1.000
							144	1.000
							132	1.000
							120	1.000
							108	1.000
							96	1.000
							84	1.000
							72	1.000
							60	1.000
							48	1.000
							36	1.001
							24	1.002
							12	1.015
Sum		-9.7831	-17.5159	32.3326	106.9273	58.5346		
Average		-3.2610	-5.8386	10.7775	35.6424	19.5115		

N =	3		
A =	1.34E+02		
B =	3.293	R^2 =	1.00000
C =	4		

\* Appendix A3, page 1

**Loss Forecasting Model**  
**Analysis of Historical Loss Patterns**  
**Variation in Reported Loss Development**  
**Workers Compensation**

Year	Variation in Reported Losses:														
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180	180:192
7/1/93-94					0.020	0.003	0.002	0.018	0.018	0.001	-0.006	0.002	0.003	0.004	0.009
7/1/94-95				0.050	-0.017	0.140	-0.004	-0.005	-0.106	0.000	0.000	0.000	0.000	0.000	0.000
7/1/95-96			0.069	0.023	0.015	0.022	0.024	-0.001	0.009	0.008	0.006	0.010	0.010	0.000	0.005
7/1/96-97		0.030	0.033	0.021	0.043	-0.003	-0.001	-0.007	0.000	0.000	-0.007	0.000	0.008	0.000	0.000
7/1/97-98	0.231	0.014	0.163	0.014	0.211	-0.065	0.005	0.000	-0.031	0.000	-0.003	0.036	0.031	-0.007	0.011
7/1/98-99	0.386	0.172	-0.021	0.458	-0.370	0.006	0.004	0.009	0.002	0.014	0.006	0.009	0.009	-0.003	--
7/1/99-00	0.326	0.176	0.028	-0.005	0.001	0.008	-0.014	-0.007	0.000	0.000	0.000	0.000	0.000	--	0.000
7/1/00-01	0.368	0.167	0.004	-0.027	-0.018	0.000	0.018	0.011	0.027	0.014	0.006	-0.003	--	-0.162	0.001
7/1/01-02	0.345	-0.007	0.057	0.014	-0.032	0.008	0.006	-0.001	0.006	0.003	-0.007	--	0.013	0.014	0.000
7/1/02-03	0.331	0.027	-0.003	0.040	0.015	0.021	0.013	0.010	0.027	0.003	--	0.095	-0.002	0.017	0.034
7/1/03-04	0.371	0.038	-0.009	0.021	0.001	0.023	0.000	0.028	-0.007	--	0.037	0.042	0.006	0.002	-0.003
7/1/04-05	0.330	0.050	0.099	0.010	0.016	0.032	0.002	0.006	--	0.059	0.001	-0.003	0.009	0.009	0.000
7/1/05-06	0.474	0.226	0.068	0.078	0.041	0.009	0.010	--	0.133	0.001	0.021	-0.015	-0.026	0.001	0.037
7/1/06-07	0.183	0.027	0.149	0.023	0.061	0.005	--	0.043	-0.009	0.006	0.002	-0.050	0.044	-0.025	-0.055
7/1/07-08	0.243	-0.001	0.090	0.010	-0.021	--	0.100	-0.022	0.050	0.008	0.024	0.015	-0.018	0.002	0.009
7/1/08-09	0.311	0.005	0.012	0.001	--	0.068	0.011	0.053	-0.027	0.000	0.000	0.081	-0.015	-0.071	--
7/1/09-10	0.211	0.022	0.066	--	0.099	-0.028	0.021	-0.024	0.005	0.031	0.004	0.001	0.001	--	--
7/1/10-11	0.321	-0.038	--	0.134	0.017	0.001	0.035	-0.021	-0.001	0.008	-0.092	0.001	--	--	--
7/1/11-12	-0.011	--	0.073	-0.080	0.110	0.043	0.031	0.002	-0.010	0.010	0.011	--	--	--	--
7/1/12-13	--	0.225	0.143	-0.105	-0.027	-0.026	0.036	0.028	0.015	0.029	--	--	--	--	--
7/1/13-14	0.419	0.181	0.014	-0.004	-0.006	0.002	0.037	-0.058	0.011	--	--	--	--	--	--
7/1/14-15	0.016	-0.068	0.031	-0.049	0.001	0.019	0.032	-0.033	--	--	--	--	--	--	--
7/1/15-16	0.072	-0.015	-0.040	-0.004	-0.017	0.001	0.029	--	--	--	--	--	--	--	--
7/1/16-17	0.085	0.171	0.165	0.047	0.129	0.049	--	--	--	--	--	--	--	--	--
7/1/17-18	-0.114	0.096	0.114	0.150	0.004	--	--	--	--	--	--	--	--	--	--
7/1/18-19	0.158	0.014	-0.015	0.164	--	--	--	--	--	--	--	--	--	--	--
7/1/19-20	0.184	0.156	0.003	--	--	--	--	--	--	--	--	--	--	--	--
7/1/20-21	0.374	0.037	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/21-22	-0.070	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- Excludes points impacted by change in reserving methodology

Variance	0.026	0.008	0.004	0.012	0.010	0.001	0.001	0.001	0.002	0.000	0.001	0.001	0.000	0.002	0.000
Sigma	0.269	0.215	0.195	0.186	0.151	0.113	0.106	0.104	0.100	0.091	0.090	0.086	0.079	0.077	0.062

Lognormal Parameters					
Year	Maturity	Ultimate Losses	Prior Sigma*	Sigma	Mu
7/1/93-94	360	\$3,160,000		0.002	14.966
7/1/94-95	348	\$3,218,000	0.009	0.003	14.984
7/1/95-96	336	\$3,303,000	0.011	0.004	15.010
7/1/96-97	324	\$1,997,000	0.014	0.005	14.507
7/1/97-98	312	\$2,832,000	0.017	0.014	14.856
7/1/98-99	300	\$3,683,000	0.021	0.016	15.119
7/1/99-00	288	\$3,219,000	0.027	0.018	14.984
7/1/00-01	276	\$2,972,653	0.033	0.022	14.905
7/1/01-02	264	\$3,595,000	0.042	0.023	15.095
7/1/02-03	252	\$4,304,000	0.052	0.034	15.274
7/1/03-04	240	\$4,039,000	0.052	0.036	15.211
7/1/04-05	228	\$5,550,000	0.053	0.038	15.529
7/1/05-06	216	\$5,724,000	0.054	0.055	15.559
7/1/06-07	204	\$5,794,000	0.055	0.057	15.571
7/1/07-08	192	\$5,621,000	0.056	0.058	15.540
7/1/08-09	180	\$4,876,000	0.058	0.062	15.398
7/1/09-10	168	\$5,146,000	0.060	0.077	15.451
7/1/10-11	156	\$5,103,000	0.062	0.079	15.442
7/1/11-12	144	\$5,843,000	0.065	0.086	15.577
7/1/12-13	132	\$3,982,000	0.069	0.090	15.193
7/1/13-14	120	\$3,633,000	0.069	0.091	15.101
7/1/14-15	108	\$1,946,000	0.092	0.100	14.476
7/1/15-16	96	\$2,361,000	0.093	0.104	14.669
7/1/16-17	84	\$2,440,000	0.094	0.106	14.702
7/1/17-18	72	\$1,522,000	0.112	0.113	14.229
7/1/18-19	60	\$1,268,000	0.182	0.151	14.042
7/1/19-20	48	\$2,131,000	0.226	0.186	14.555
7/1/20-21	36	\$2,248,000	0.234	0.195	14.606
7/1/21-22	24	\$1,549,000	0.251	0.215	14.230
7/1/22-23	12	\$1,486,000	0.281	0.269	14.175

\* Prior sigma at indicated maturity

**Derivation of Discount Factors  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Maturity in Years at 6/30/2023	Cumulative Paid Loss Develop. Factor	% Losses Paid 6/30/2023	Midpoint Upcoming Period	% Losses Paid Upcoming Period	Column(F) Discounted 4.0%	Discount Factor at 4.0%
7/1/93-94	30	1.000	100.0%				<b>1.000</b>
7/1/94-95	29	1.065	93.9%	29.5	6.11%	0.0192	<b>0.981</b>
7/1/95-96	28	1.067	93.7%	28.5	0.18%	0.0006	<b>0.944</b>
7/1/96-97	27	1.069	93.5%	27.5	0.19%	0.0007	<b>0.910</b>
7/1/97-98	26	1.072	93.3%	26.5	0.21%	0.0007	<b>0.878</b>
7/1/98-99	25	1.074	93.1%	25.5	0.22%	0.0008	<b>0.849</b>
7/1/99-00	24	1.077	92.8%	24.5	0.24%	0.0009	<b>0.822</b>
7/1/00-01	23	1.080	92.6%	23.5	0.26%	0.0010	<b>0.797</b>
7/1/01-02	22	1.083	92.3%	22.5	0.28%	0.0011	<b>0.774</b>
7/1/02-03	21	1.087	92.0%	21.5	0.30%	0.0013	<b>0.753</b>
7/1/03-04	20	1.091	91.7%	20.5	0.33%	0.0015	<b>0.734</b>
7/1/04-05	19	1.095	91.3%	19.5	0.36%	0.0017	<b>0.717</b>
7/1/05-06	18	1.100	90.9%	18.5	0.39%	0.0019	<b>0.702</b>
7/1/06-07	17	1.105	90.5%	17.5	0.43%	0.0022	<b>0.689</b>
7/1/07-08	16	1.111	90.0%	16.5	0.48%	0.0025	<b>0.678</b>
7/1/08-09	15	1.118	89.5%	15.5	0.54%	0.0029	<b>0.669</b>
7/1/09-10	14	1.125	88.9%	14.5	0.61%	0.0034	<b>0.661</b>
7/1/10-11	13	1.134	88.2%	13.5	0.69%	0.0040	<b>0.656</b>
7/1/11-12	12	1.144	87.4%	12.5	0.79%	0.0048	<b>0.653</b>
7/1/12-13	11	1.156	86.5%	11.5	0.91%	0.0058	<b>0.651</b>
7/1/13-14	10	1.171	85.4%	10.5	1.06%	0.0071	<b>0.652</b>
7/1/14-15	9	1.188	84.2%	9.5	1.27%	0.0087	<b>0.655</b>
7/1/15-16	8	1.210	82.6%	8.5	1.54%	0.0110	<b>0.661</b>
7/1/16-17	7	1.239	80.7%	7.5	1.90%	0.0142	<b>0.670</b>
7/1/17-18	6	1.277	78.3%	6.5	2.42%	0.0188	<b>0.682</b>
7/1/18-19	5	1.332	75.1%	5.5	3.21%	0.0259	<b>0.697</b>
7/1/19-20	4	1.417	70.6%	4.5	4.49%	0.0377	<b>0.718</b>
7/1/20-21	3	1.568	63.8%	3.5	6.80%	0.0593	<b>0.745</b>
7/1/21-22	2	1.921	52.1%	2.5	11.73%	0.1063	<b>0.781</b>
7/1/22-23	1	4.020	24.9%	1.5	27.19%	0.2564	<b>0.834</b>

Column (C): Appendix A2, page 2

Column (D) = 1 / (C)

Column (E) = [ (B), current line + (B), previous line] / 2

Column (F) = (D), previous line - (D), current line

Column (G) = (F) x [ 1 + Interest Rate ]<sup>-(E)</sup>

Column (H) = [ 1 + Interest Rate ]<sup>-(B)</sup> / [ 1 - (D) ] x [ Downward Sum, (G) ]



**Summary of Experience  
 Workers Compensation**

(A) Period Begin End		(B) Evaluation Date	(C) Maturity (months)	(D) Reported Claims	(E) Open Claims	(F) Paid Losses	(G) Case Reserves	(H) Incurred Losses	(I) Historic Calendar Year Payroll (Hundreds)	(J) Estimated Fiscal Year Payroll (Hundreds)
07/01/93	06/30/94	6/30/23	360	437	0	\$1,225,627	\$0	\$1,225,627	\$4,214,432	\$4,426,020
07/01/94	06/30/95	6/30/23	348	435	0	\$1,845,115	\$0	\$1,845,115	\$4,637,609	\$4,770,185
07/01/95	06/30/96	6/30/23	336	430	1	\$1,652,051	\$5,820	\$1,657,871	\$4,902,762	\$5,002,695
07/01/96	06/30/97	6/30/23	324	430	0	\$819,209	\$0	\$819,209	\$5,102,628	\$5,224,652
07/01/97	06/30/98	6/30/23	312	436	0	\$1,243,439	\$0	\$1,243,439	\$5,346,677	\$5,344,054
07/01/98	06/30/99	6/30/23	300	445	0	\$2,460,826	\$0	\$2,460,826	\$5,341,432	\$5,490,653
07/01/99	06/30/00	6/30/23	288	451	0	\$1,706,365	\$0	\$1,706,365	\$5,639,873	\$5,774,324
07/01/00	06/30/01	6/30/23	276	451	2	\$2,420,216	\$270,806	\$2,691,022	\$5,908,775	\$6,082,806
07/01/01	06/30/02	6/30/23	264	446	1	\$2,432,220	\$49,010	\$2,481,229	\$6,256,837	\$6,420,160
07/01/02	06/30/03	6/30/23	252	528	1	\$1,858,486	\$61,380	\$1,919,866	\$6,583,482	\$6,724,030
07/01/03	06/30/04	6/30/23	240	455	1	\$2,032,694	\$141,081	\$2,173,775	\$6,864,578	\$6,841,156
07/01/04	06/30/05	6/30/23	228	465	0	\$2,542,329	\$0	\$2,542,329	\$6,817,734	\$6,995,624
07/01/05	06/30/06	6/30/23	216	446	1	\$1,976,468	\$4,799	\$1,981,267	\$7,173,513	\$7,234,921
07/01/06	06/30/07	6/30/23	204	398	4	\$8,592,518	\$1,077,728	\$9,670,247	\$7,296,330	\$7,381,829
07/01/07	06/30/08	6/30/23	192	367	2	\$2,360,627	\$504,933	\$2,865,560	\$7,467,328	\$7,449,461
07/01/08	06/30/09	6/30/23	180	377	3	\$3,460,843	\$320,442	\$3,781,284	\$7,431,595	\$7,582,195
07/01/09	06/30/10	6/30/23	168	434	3	\$3,133,700	\$378,951	\$3,512,651	\$7,732,795	\$7,707,049
07/01/10	06/30/11	6/30/23	156	396	3	\$3,306,519	\$326,059	\$3,632,578	\$7,681,303	\$7,633,501
07/01/11	06/30/12	6/30/23	144	385	2	\$3,958,488	\$450,635	\$4,409,123	\$7,585,699	\$7,675,685
07/01/12	06/30/13	6/30/23	132	352	3	\$1,791,519	\$367,819	\$2,159,339	\$7,765,671	\$7,824,899
07/01/13	06/30/14	6/30/23	120	331	1	\$1,714,341	\$2,942	\$1,717,283	\$7,884,127	\$8,035,366
07/01/14	06/30/15	6/30/23	108	368	3	\$2,075,873	\$552,805	\$2,628,679	\$8,186,605	\$8,380,917
07/01/15	06/30/16	6/30/23	96	387	1	\$1,834,902	\$5,482	\$1,840,384	\$8,575,228	\$8,559,280
07/01/16	06/30/17	6/30/23	84	369	2	\$1,336,396	\$25,003	\$1,361,399	\$8,543,332	\$8,878,332
07/01/17	06/30/18	6/30/23	72	419	1	\$1,263,598	\$6,717	\$1,270,314	\$9,213,331	\$9,466,084
07/01/18	06/30/19	6/30/23	60	344	6	\$1,399,107	\$188,044	\$1,587,151	\$9,718,838	\$9,855,067
07/01/19	06/30/20	6/30/23	48	288	8	\$864,646	\$141,307	\$1,005,953	\$9,991,296	\$10,178,220
07/01/20	06/30/21	6/30/23	36	214	5	\$826,923	\$117,535	\$944,457	\$10,365,143	\$10,379,045
07/01/21	06/30/22	6/30/23	24	257	15	\$705,843	\$173,205	\$879,049	\$10,392,947	\$10,566,285
07/01/22	06/30/23	6/30/23	12	268	77	\$418,352	\$602,536	\$1,020,888	\$10,739,622	\$10,939,733
<b>Total</b>				<b>11,809</b>	<b>146</b>	<b>\$63,259,240</b>	<b>\$5,775,038</b>	<b>\$69,034,277</b>	<b>\$221,361,522</b>	<b>\$224,824,229</b>

- Loss information and payroll (hundreds) provided by The State of Tennessee, Risk Management Division  
 - Loss information contains only pure losses, net of recoveries  
 Column (J): Interpolation of (I)

**Estimation of Ultimate Losses  
 Workers Compensation**

<i>Incurring Loss Development</i>				<i>Paid Loss Development</i>			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses	Incurred Develop. Factor	Estimated Ultimate Losses	Accident Period	Paid Losses	Paid Develop. Factor	Estimated Ultimate Losses
7/1/93-94	\$1,225,627	1.004	\$1,230,000	7/1/93-94	\$1,225,627	1.091	\$1,337,000
7/1/94-95	\$1,845,115	1.004	\$1,853,000	7/1/94-95	\$1,845,115	1.093	\$2,017,000
7/1/95-96	\$1,657,871	1.005	\$1,665,000	7/1/95-96	\$1,652,051	1.096	\$1,810,000
7/1/96-97	\$819,209	1.005	\$823,000	7/1/96-97	\$819,209	1.099	\$900,000
7/1/97-98	\$1,243,439	1.005	\$1,250,000	7/1/97-98	\$1,243,439	1.102	\$1,370,000
7/1/98-99	\$2,460,826	1.006	\$2,476,000	7/1/98-99	\$2,460,826	1.105	\$2,720,000
7/1/99-00	\$1,706,365	1.007	\$1,718,000	7/1/99-00	\$1,706,365	1.109	\$1,892,000
7/1/00-01	\$2,691,022	1.007	\$2,711,000	7/1/00-01	\$2,420,216	1.113	\$2,693,000
7/1/01-02	\$2,481,229	1.008	\$2,502,000	7/1/01-02	\$2,432,220	1.117	\$2,716,000
7/1/02-03	\$1,919,866	1.009	\$1,938,000	7/1/02-03	\$1,858,486	1.121	\$2,084,000
7/1/03-04	\$2,173,775	1.010	\$2,196,000	7/1/03-04	\$2,032,694	1.126	\$2,289,000
7/1/04-05	\$2,542,329	1.012	\$2,572,000	7/1/04-05	\$2,542,329	1.132	\$2,877,000
7/1/05-06	\$1,981,267	1.013	\$2,008,000	7/1/05-06	\$1,976,468	1.138	\$2,248,000
7/1/06-07	\$9,670,247	1.015	\$9,818,000	7/1/06-07	\$8,592,518	1.144	\$9,831,000
7/1/07-08	\$2,865,560	1.018	\$2,916,000	7/1/07-08	\$2,360,627	1.152	\$2,718,000
7/1/08-09	\$3,781,284	1.020	\$3,858,000	7/1/08-09	\$3,460,843	1.160	\$4,014,000
7/1/09-10	\$3,512,651	1.024	\$3,596,000	7/1/09-10	\$3,133,700	1.169	\$3,664,000
7/1/10-11	\$3,632,578	1.028	\$3,734,000	7/1/10-11	\$3,306,519	1.180	\$3,902,000
7/1/11-12	\$4,409,123	1.033	\$4,555,000	7/1/11-12	\$3,958,488	1.192	\$4,720,000
7/1/12-13	\$2,159,339	1.040	\$2,245,000	7/1/12-13	\$1,791,519	1.207	\$2,162,000
7/1/13-14	\$1,717,283	1.048	\$1,800,000	7/1/13-14	\$1,714,341	1.224	\$2,099,000
7/1/14-15	\$2,628,679	1.059	\$2,783,000	7/1/14-15	\$2,075,873	1.245	\$2,585,000
7/1/15-16	\$1,840,384	1.073	\$1,975,000	7/1/15-16	\$1,834,902	1.271	\$2,333,000
7/1/16-17	\$1,361,399	1.092	\$1,487,000	7/1/16-17	\$1,336,396	1.305	\$1,744,000
7/1/17-18	\$1,270,314	1.119	\$1,421,000	7/1/17-18	\$1,263,598	1.349	\$1,704,000
7/1/18-19	\$1,587,151	1.157	\$1,836,000	7/1/18-19	\$1,399,107	1.411	\$1,974,000
7/1/19-20	\$1,005,953	1.212	\$1,220,000	7/1/19-20	\$864,646	1.505	\$1,301,000
7/1/20-21	\$944,457	1.298	\$1,226,000	7/1/20-21	\$826,923	1.667	\$1,379,000
7/1/21-22	\$879,049	1.434	\$1,261,000	7/1/21-22	\$705,843	2.030	\$1,433,000
7/1/22-23	\$1,020,888	1.668	\$1,703,000	7/1/22-23	\$418,352	3.908	\$1,635,000
<b>Total</b>	<b>\$69,034,277</b>		<b>\$72,376,000</b>	<b>Total</b>	<b>\$63,259,240</b>		<b>\$76,151,000</b>

Columns (B), (F): Exhibit 1  
 Column (C): Appendix A1  
 Column (D) = (B) \* (C)  
 Column (G): Appendix A2  
 Column (H) = (F) \* (G)

**Estimation of Ultimate Losses  
 Workers Compensation**

*Incurred Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Incurred Develop. Factor	Estimated Percent Unpaid	Estimated Unreported Losses	Incurred Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$1,226,000	1.004	0.4%	\$4,605	\$1,225,627	\$1,230,000
7/1/94-95	\$1,845,000	1.004	0.4%	\$7,564	\$1,845,115	\$1,853,000
7/1/95-96	\$1,658,000	1.005	0.4%	\$7,438	\$1,657,871	\$1,665,000
7/1/96-97	\$819,000	1.005	0.5%	\$4,032	\$819,209	\$823,000
7/1/97-98	\$1,243,000	1.005	0.5%	\$6,732	\$1,243,439	\$1,250,000
7/1/98-99	\$2,461,000	1.006	0.6%	\$14,710	\$2,460,826	\$2,476,000
7/1/99-00	\$1,706,000	1.007	0.7%	\$11,291	\$1,706,365	\$1,718,000
7/1/00-01	\$2,737,000	1.007	0.7%	\$20,125	\$2,691,022	\$2,711,000
7/1/01-02	\$2,522,000	1.008	0.8%	\$20,676	\$2,481,229	\$2,502,000
7/1/02-03	\$1,920,000	1.009	0.9%	\$17,618	\$1,919,866	\$1,937,000
7/1/03-04	\$2,174,000	1.010	1.0%	\$22,425	\$2,173,775	\$2,196,000
7/1/04-05	\$2,632,000	1.012	1.2%	\$30,658	\$2,542,329	\$2,573,000
7/1/05-06	\$2,166,000	1.013	1.3%	\$28,623	\$1,981,267	\$2,010,000
7/1/06-07	\$9,844,000	1.015	1.5%	\$148,355	\$9,670,247	\$9,819,000
7/1/07-08	\$3,043,000	1.018	1.7%	\$52,606	\$2,865,560	\$2,918,000
7/1/08-09	\$3,860,000	1.020	2.0%	\$77,015	\$3,781,284	\$3,858,000
7/1/09-10	\$3,598,000	1.024	2.3%	\$83,389	\$3,512,651	\$3,596,000
7/1/10-11	\$3,803,000	1.028	2.7%	\$103,126	\$3,632,578	\$3,736,000
7/1/11-12	\$4,618,000	1.033	3.2%	\$147,713	\$4,409,123	\$4,557,000
7/1/12-13	\$2,265,000	1.040	3.8%	\$86,199	\$2,159,339	\$2,246,000
7/1/13-14	\$1,811,000	1.048	4.6%	\$82,758	\$1,717,283	\$1,800,000
7/1/14-15	\$2,824,000	1.059	5.5%	\$156,559	\$2,628,679	\$2,785,000
7/1/15-16	\$2,200,000	1.073	6.8%	\$149,673	\$1,840,384	\$1,990,000
7/1/16-17	\$1,677,000	1.092	8.5%	\$141,722	\$1,361,399	\$1,503,000
7/1/17-18	\$1,715,000	1.119	10.6%	\$182,324	\$1,270,314	\$1,453,000
7/1/18-19	\$2,121,000	1.157	13.6%	\$287,515	\$1,587,151	\$1,875,000
7/1/19-20	\$1,731,000	1.212	17.5%	\$303,359	\$1,005,953	\$1,309,000
7/1/20-21	\$1,683,000	1.298	22.9%	\$386,023	\$944,457	\$1,330,000
7/1/21-22	\$1,831,000	1.434	30.3%	\$554,337	\$879,049	\$1,433,000
7/1/22-23	\$1,771,000	1.668	40.0%	\$709,038	\$1,020,888	\$1,730,000
<b>Total</b>	<b>\$75,504,000</b>			<b>\$3,848,208</b>	<b>\$69,034,277</b>	<b>\$72,882,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)

**Estimation of Ultimate Losses  
 Workers Compensation**

*Paid Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Paid Develop. Factor	Estimated Percent Unpaid	Estimated Unpaid Losses	Paid Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$1,226,000	1.091	8.3%	\$101,945	\$1,225,627	\$1,328,000
7/1/94-95	\$1,845,000	1.093	8.5%	\$157,321	\$1,845,115	\$2,002,000
7/1/95-96	\$1,658,000	1.096	8.8%	\$145,100	\$1,652,051	\$1,797,000
7/1/96-97	\$819,000	1.099	9.0%	\$73,629	\$819,209	\$893,000
7/1/97-98	\$1,243,000	1.102	9.2%	\$114,901	\$1,243,439	\$1,358,000
7/1/98-99	\$2,461,000	1.105	9.5%	\$234,155	\$2,460,826	\$2,695,000
7/1/99-00	\$1,706,000	1.109	9.8%	\$167,267	\$1,706,365	\$1,874,000
7/1/00-01	\$2,737,000	1.113	10.1%	\$276,866	\$2,420,216	\$2,697,000
7/1/01-02	\$2,522,000	1.117	10.4%	\$263,545	\$2,432,220	\$2,696,000
7/1/02-03	\$1,920,000	1.121	10.8%	\$207,561	\$1,858,486	\$2,066,000
7/1/03-04	\$2,174,000	1.126	11.2%	\$243,520	\$2,032,694	\$2,276,000
7/1/04-05	\$2,632,000	1.132	11.6%	\$306,012	\$2,542,329	\$2,848,000
7/1/05-06	\$2,166,000	1.138	12.1%	\$261,869	\$1,976,468	\$2,238,000
7/1/06-07	\$9,844,000	1.144	12.6%	\$1,240,157	\$8,592,518	\$9,833,000
7/1/07-08	\$3,043,000	1.152	13.2%	\$400,428	\$2,360,627	\$2,761,000
7/1/08-09	\$3,860,000	1.160	13.8%	\$531,942	\$3,460,843	\$3,993,000
7/1/09-10	\$3,598,000	1.169	14.5%	\$520,772	\$3,133,700	\$3,654,000
7/1/10-11	\$3,803,000	1.180	15.3%	\$580,072	\$3,306,519	\$3,887,000
7/1/11-12	\$4,618,000	1.192	16.1%	\$745,232	\$3,958,488	\$4,704,000
7/1/12-13	\$2,265,000	1.207	17.2%	\$388,458	\$1,791,519	\$2,180,000
7/1/13-14	\$1,811,000	1.224	18.3%	\$331,815	\$1,714,341	\$2,046,000
7/1/14-15	\$2,824,000	1.245	19.7%	\$556,274	\$2,075,873	\$2,632,000
7/1/15-16	\$2,200,000	1.271	21.3%	\$469,557	\$1,834,902	\$2,304,000
7/1/16-17	\$1,677,000	1.305	23.3%	\$391,576	\$1,336,396	\$1,728,000
7/1/17-18	\$1,715,000	1.349	25.9%	\$443,463	\$1,263,598	\$1,707,000
7/1/18-19	\$2,121,000	1.411	29.1%	\$617,389	\$1,399,107	\$2,016,000
7/1/19-20	\$1,731,000	1.505	33.5%	\$580,530	\$864,646	\$1,445,000
7/1/20-21	\$1,683,000	1.667	40.0%	\$673,537	\$826,923	\$1,500,000
7/1/21-22	\$1,831,000	2.030	50.7%	\$929,147	\$705,843	\$1,635,000
7/1/22-23	\$1,771,000	3.908	74.4%	\$1,317,870	\$418,352	\$1,736,000
<b>Total</b>	<b>\$75,504,000</b>			<b>\$13,271,909</b>	<b>\$63,259,240</b>	<b>\$76,529,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23  
 Column (C): Appendix A  
 Column (D) = 1 - 1 / (C)

Column (E) = (B) \* (D)  
 Column (F): Exhibit 1  
 Column (G) = (E) + (F)



**Projection of Incremental Payments  
Workers Compensation**

Accident Period	Incremental Paid Losses							
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT
7/1/93-94	\$3,631	\$3,378	\$4,208	\$6,995	\$3,424	\$4,155	\$9,273	\$71,726
7/1/94-95	\$3,654	\$10	\$0	\$2,019	\$1,368	\$224	\$1,201	\$551
7/1/95-96	\$3,121	\$2,053	\$1,957	\$2,674	\$2,505	\$3,107	\$4,162	\$26,609
7/1/96-97	\$2,545	\$807	\$485	\$2,588	\$16	\$34	\$8	\$0
7/1/97-98	\$135	\$0	\$0	\$0	\$0	(\$0)	\$233	\$761
7/1/98-99	\$10,941	\$23,541	\$21,725	\$12,549	\$13,943	\$10,788	\$260	\$10,127
7/1/99-00	\$29,839	\$0	\$0	\$6,570	\$870	\$441	\$1,185	\$2,950
7/1/00-01	\$35,966	\$38,984	\$39,935	\$46,128	\$36,442	\$56,645	\$55,738	\$718,209
7/1/01-02	\$4,197	\$21,410	\$72,581	\$4,355	\$1,245	\$29,925	\$5,488	\$343,502
7/1/02-03	\$15,825	\$30,369	\$21,782	\$19,631	\$20,235	\$17,005	\$15,936	\$157,477
7/1/03-04	\$6,755	\$894	\$2,731	\$5,316	\$9,510	\$4,673	\$4,186	\$155,996
7/1/04-05	\$17,344	\$13,529	\$9,048	\$7,308	\$7,107	\$8,533	\$5,881	\$55,974
7/1/05-06	\$25,287	\$75,928	\$21,362	\$13,958	\$12,885	\$43,954	\$68,482	\$11,638
7/1/06-07	\$590,301	\$395,256	\$379,268	\$435,549	\$546,990	\$878,375	\$589,981	\$1,689,607
7/1/07-08	\$33,771	\$34,593	\$80,913	\$21,294	\$28,210	\$42,127	\$87,114	\$504,933
7/1/08-09	\$45,930	\$122,529	\$14,114	\$39,092	\$213,899	\$7,232		
7/1/09-10	\$217,864	\$49,029	\$41,720	\$18,080	\$21,144			
7/1/10-11	\$22,688	\$13,470	\$12,988	\$61,617				
7/1/11-12	\$32,909	\$73,806	\$31,151					
7/1/12-13	\$13,001	\$11,781						
7/1/13-14	\$2,827							
7/1/14-15								
7/1/15-16								
7/1/16-17								
7/1/17-18								
7/1/18-19								
7/1/19-20								
7/1/20-21								
7/1/21-22								
7/1/22-23								

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level							Trend Factor to 7/1/24-25	
	108:120	120:132	132:144	144:156	156:168	168:180	180:192		192:ULT
7/1/93-94	\$10	\$9	\$12	\$19	\$10	\$12	\$26	\$199	1.215
7/1/94-95	\$10	\$0	\$0	\$6	\$4	\$1	\$3	\$2	1.203
7/1/95-96	\$9	\$6	\$5	\$7	\$7	\$9	\$12	\$74	1.191
7/1/96-97	\$7	\$2	\$1	\$7	\$0	\$0	\$0	\$0	1.179
7/1/97-98	\$0	\$0	\$0	\$0	\$0	—	\$1	\$2	1.167
7/1/98-99	\$28	\$61	\$56	\$33	\$36	\$28	\$1	\$26	1.156
7/1/99-00	\$76	\$0	\$0	\$17	\$2	\$1	\$3	\$7	1.144
7/1/00-01	\$90	\$98	\$100	\$116	\$92	\$142	\$140	\$1,804	1.133
7/1/01-02	\$11	\$54	\$183	\$11	\$3	\$75	\$14	\$864	1.122
7/1/02-03	\$33	\$64	\$46	\$41	\$43	\$36	\$34	\$331	1.111
7/1/03-04	\$16	\$2	\$7	\$13	\$23	\$11	\$10	\$377	1.100
7/1/04-05	\$41	\$32	\$21	\$17	\$17	\$20	\$14	\$131	1.089
7/1/05-06	\$61	\$183	\$52	\$34	\$31	\$106	\$166	\$28	1.078
7/1/06-07	\$1,583	\$1,060	\$1,017	\$1,168	\$1,467	\$2,355	\$1,582	\$4,530	1.067
7/1/07-08	\$97	\$100	\$233	\$61	\$81	\$121	\$251	\$1,454	1.057
7/1/08-09	\$127	\$340	\$39	\$108	\$594	\$20			1.046
7/1/09-10	\$520	\$117	\$100	\$43	\$50				1.036
7/1/10-11	\$57	\$34	\$33	\$156					1.002
7/1/11-12	\$85	\$191	\$81						0.996
7/1/12-13	\$37	\$34							1.014
7/1/13-14	\$9								1.033
7/1/14-15									1.057
7/1/15-16									1.069
7/1/16-17									1.074
7/1/17-18									1.072
7/1/18-19									1.060
7/1/19-20									1.043
7/1/20-21									1.026
7/1/21-22									1.016
7/1/22-23									1.010
Average	\$139	\$119	\$104	\$103	\$145	\$196	\$150	\$655	
Avg Latest 5	\$142	\$143	\$97	\$307	\$445	\$525	\$404	\$1,304	
Prior	\$133	\$131	\$119	\$107	\$88	\$88	\$75	\$703	
All Agencies	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$764	
Selected	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$764	

Accident Period	Projected Incremental Payments							Total Unpaid	
	108:120	120:132	132:144	144:156	156:168	168:180	180:192		192:ULT
7/1/07-08								\$265,233	\$265,000
7/1/08-09							\$27,073	\$275,185	\$302,000
7/1/09-10						\$36,703	\$31,478	\$319,960	\$388,000
7/1/10-11					\$36,952	\$34,636	\$29,705	\$301,939	\$403,000
7/1/11-12				\$40,543	\$36,120	\$33,856	\$29,036	\$295,137	\$435,000
7/1/12-13			\$39,022	\$36,399	\$32,427	\$30,395	\$26,068	\$264,969	\$429,000
7/1/13-14		\$42,009	\$36,030	\$33,608	\$29,941	\$28,064	\$24,069	\$244,650	\$438,000
7/1/14-15	\$46,283	\$45,658	\$39,159	\$36,527	\$32,541	\$30,502	\$26,160	\$265,900	\$523,000
7/1/15-16	\$48,115	\$47,465	\$40,710	\$37,973	\$33,830	\$31,709	\$27,195	\$276,426	\$593,000
7/1/16-17	\$45,686	\$45,069	\$38,654	\$36,056	\$32,122	\$30,109	\$25,822	\$262,471	\$630,000
7/1/17-18	\$51,973	\$51,271	\$43,974	\$41,018	\$36,542	\$34,252	\$29,375	\$298,588	\$804,000
7/1/18-19	\$43,154	\$42,571	\$36,512	\$34,058	\$30,342	\$28,440	\$24,391	\$247,924	\$768,000
7/1/19-20	\$36,707	\$36,210	\$31,057	\$28,969	\$25,808	\$24,191	\$20,747	\$210,881	\$745,000
7/1/20-21	\$27,741	\$27,366	\$23,471	\$21,893	\$19,504	\$18,282	\$15,679	\$159,371	\$684,000
7/1/21-22	\$33,702	\$33,247	\$28,515	\$26,598	\$23,696	\$22,211	\$19,049	\$193,621	\$985,000
7/1/22-23	\$36,004	\$35,517	\$30,462	\$28,415	\$25,314	\$23,728	\$20,350	\$206,845	\$1,499,000

**Estimation of Ultimate Losses  
 Incremental Paid Method  
 Workers Compensation**

(A) Accident Period	(B) Paid Losses As of 6/30/23	(C) Estimated Unpaid Losses	(D) Estimate Ultimate Losses
7/1/07-08	\$2,360,627	\$265,000	\$2,626,000
7/1/08-09	\$3,460,843	\$302,000	\$3,763,000
7/1/09-10	\$3,133,700	\$388,000	\$3,522,000
7/1/10-11	\$3,306,519	\$403,000	\$3,710,000
7/1/11-12	\$3,958,488	\$435,000	\$4,393,000
7/1/12-13	\$1,791,519	\$429,000	\$2,221,000
7/1/13-14	\$1,714,341	\$438,000	\$2,152,000
7/1/14-15	\$2,075,873	\$523,000	\$2,599,000
7/1/15-16	\$1,834,902	\$593,000	\$2,428,000
7/1/16-17	\$1,336,396	\$630,000	\$1,966,000
7/1/17-18	\$1,263,598	\$804,000	\$2,068,000
7/1/18-19	\$1,399,107	\$768,000	\$2,167,000
7/1/19-20	\$864,646	\$745,000	\$1,610,000
7/1/20-21	\$826,923	\$684,000	\$1,511,000
7/1/21-22	\$705,843	\$985,000	\$1,691,000
7/1/22-23	\$418,352	\$1,499,000	\$1,917,000
<b>Total</b>	<b>\$30,451,677</b>	<b>\$9,891,000</b>	<b>\$40,344,000</b>

Column (B): Exhibit 1  
 Column (C): Exhibit 2-C, page 1 and 2  
 Column (D) = (B) + (C)

**Summary and Selection of Ultimate Losses  
 Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Previous Ultimate	Incurred Loss Development Method	Paid Loss Development Method	Incurred Bornhuetter- Ferguson Method	Paid Bornhuetter- Ferguson Method	Incremental Paid Method	Selected Ultimate Losses
7/1/93-94	\$1,226,000	\$1,230,000	\$1,337,000	\$1,230,000	\$1,328,000		\$1,226,000
7/1/94-95	\$1,845,000	\$1,853,000	\$2,017,000	\$1,853,000	\$2,002,000		\$1,845,000
7/1/95-96	\$1,658,000	\$1,665,000	\$1,810,000	\$1,665,000	\$1,797,000		\$1,665,000
7/1/96-97	\$819,000	\$823,000	\$900,000	\$823,000	\$893,000		\$819,000
7/1/97-98	\$1,243,000	\$1,250,000	\$1,370,000	\$1,250,000	\$1,358,000		\$1,243,000
7/1/98-99	\$2,461,000	\$2,476,000	\$2,720,000	\$2,476,000	\$2,695,000		\$2,461,000
7/1/99-00	\$1,706,000	\$1,718,000	\$1,892,000	\$1,718,000	\$1,874,000		\$1,706,000
7/1/00-01	\$2,737,000	\$2,711,000	\$2,693,000	\$2,711,000	\$2,697,000		\$2,711,000
7/1/01-02	\$2,522,000	\$2,502,000	\$2,716,000	\$2,502,000	\$2,696,000		\$2,502,000
7/1/02-03	\$1,920,000	\$1,938,000	\$2,084,000	\$1,937,000	\$2,066,000		\$1,938,000
7/1/03-04	\$2,174,000	\$2,196,000	\$2,289,000	\$2,196,000	\$2,276,000		\$2,196,000
7/1/04-05	\$2,632,000	\$2,572,000	\$2,877,000	\$2,573,000	\$2,848,000		\$2,542,000
7/1/05-06	\$2,166,000	\$2,008,000	\$2,248,000	\$2,010,000	\$2,238,000		\$2,008,000
7/1/06-07	\$9,844,000	\$9,818,000	\$9,831,000	\$9,819,000	\$9,833,000		\$9,818,000
7/1/07-08	\$3,043,000	\$2,916,000	\$2,718,000	\$2,918,000	\$2,761,000	\$2,626,000	\$2,916,000
7/1/08-09	\$3,860,000	\$3,858,000	\$4,014,000	\$3,858,000	\$3,993,000	\$3,763,000	\$3,858,000
7/1/09-10	\$3,598,000	\$3,596,000	\$3,664,000	\$3,596,000	\$3,654,000	\$3,522,000	\$3,625,000
7/1/10-11	\$3,803,000	\$3,734,000	\$3,902,000	\$3,736,000	\$3,887,000	\$3,710,000	\$3,812,000
7/1/11-12	\$4,618,000	\$4,555,000	\$4,720,000	\$4,557,000	\$4,704,000	\$4,393,000	\$4,555,000
7/1/12-13	\$2,265,000	\$2,245,000	\$2,162,000	\$2,246,000	\$2,180,000	\$2,221,000	\$2,245,000
7/1/13-14	\$1,811,000	\$1,800,000	\$2,099,000	\$1,800,000	\$2,046,000	\$2,152,000	\$1,800,000
7/1/14-15	\$2,824,000	\$2,783,000	\$2,585,000	\$2,785,000	\$2,632,000	\$2,599,000	\$2,783,000
7/1/15-16	\$2,200,000	\$1,975,000	\$2,333,000	\$1,990,000	\$2,304,000	\$2,428,000	\$2,147,000
7/1/16-17	\$1,677,000	\$1,487,000	\$1,744,000	\$1,503,000	\$1,728,000	\$1,966,000	\$1,616,000
7/1/17-18	\$1,715,000	\$1,421,000	\$1,704,000	\$1,453,000	\$1,707,000	\$2,068,000	\$1,580,000
7/1/18-19	\$2,121,000	\$1,836,000	\$1,974,000	\$1,875,000	\$2,016,000	\$2,167,000	\$1,946,000
7/1/19-20	\$1,731,000	\$1,220,000	\$1,301,000	\$1,309,000	\$1,445,000	\$1,610,000	\$1,445,000
7/1/20-21	\$1,683,000	\$1,226,000	\$1,379,000	\$1,330,000	\$1,500,000	\$1,511,000	\$1,415,000
7/1/21-22	\$1,831,000	\$1,261,000	\$1,433,000	\$1,433,000	\$1,635,000	\$1,691,000	\$1,534,000
7/1/22-23	\$2,088,000	\$1,703,000	\$1,635,000	\$1,730,000	\$1,736,000	\$1,917,000	\$1,733,000
<b>Total</b>	<b>\$75,821,000</b>	<b>\$72,376,000</b>	<b>\$76,151,000</b>	<b>\$72,882,000</b>	<b>\$76,529,000</b>	<b>\$40,344,000</b>	<b>\$73,690,000</b>

Column (B): Previous actuarial report

Columns (C), (D): Exhibit 2-A

Columns (E), (F): Exhibit 2-B

Column (G): Exhibit 2-C

Column (H): Column (B) for 93-94, 94-95, and 96-97 through 99-00

Column (C) for 95-96, 00-01 through 03-04, 05-06 through 08-09, and 11-12 through 14-15  
 Reported losses for 04-05

Average of (E) and (F) for 09-10, 10-11, 15-16 through 18-19, and 20-21 through 22-23

Column (F) for 22-23



**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,225,627	\$1,225,660	\$1,225,627	0%	\$1,226,000	\$1,226,000	0%
7/1/94-95	\$1,845,115	\$1,845,105	\$1,845,115	0%	\$1,845,000	\$1,845,000	0%
7/1/95-96	\$1,657,871	\$1,657,883	\$1,657,871	0%	\$1,658,000	\$1,665,000	0%
7/1/96-97	\$819,209	\$819,189	\$819,209	0%	\$819,000	\$819,000	0%
7/1/97-98	\$1,243,439	\$1,243,396	\$1,243,439	0%	\$1,243,000	\$1,243,000	0%
7/1/98-99	\$2,460,826	\$2,460,843	\$2,460,826	0%	\$2,461,000	\$2,461,000	0%
7/1/99-00	\$1,706,365	\$1,706,327	\$1,706,365	0%	\$1,706,000	\$1,706,000	0%
7/1/00-01	\$2,737,047	\$2,737,042	\$2,691,022	-2%	\$2,737,000	\$2,711,000	-1%
7/1/01-02	\$2,522,228	\$2,522,203	\$2,481,229	-2%	\$2,522,000	\$2,502,000	-1%
7/1/02-03	\$1,919,866	\$1,919,881	\$1,919,866	0%	\$1,920,000	\$1,938,000	1%
7/1/03-04	\$2,173,775	\$2,173,802	\$2,173,775	0%	\$2,174,000	\$2,196,000	1%
7/1/04-05	\$2,631,529	\$2,631,586	\$2,542,329	-3%	\$2,632,000	\$2,542,000	-3%
7/1/05-06	\$2,108,579	\$2,115,903	\$1,981,267	-6%	\$2,166,000	\$2,008,000	-7%
7/1/06-07	\$9,670,247	\$9,693,297	\$9,670,247	0%	\$9,844,000	\$9,818,000	0%
7/1/07-08	\$2,985,329	\$2,993,298	\$2,865,560	-4%	\$3,043,000	\$2,916,000	-4%
7/1/08-09	\$3,774,763	\$3,787,048	\$3,781,284	0%	\$3,860,000	\$3,858,000	0%
7/1/09-10	\$3,443,651	\$3,466,887	\$3,512,651	1%	\$3,598,000	\$3,625,000	1%
7/1/10-11	\$3,631,828	\$3,658,786	\$3,632,578	-1%	\$3,803,000	\$3,812,000	0%
7/1/11-12	\$4,446,568	\$4,474,859	\$4,409,123	-1%	\$4,618,000	\$4,555,000	-1%
7/1/12-13	\$2,163,546	\$2,181,116	\$2,159,339	-1%	\$2,265,000	\$2,245,000	-1%
7/1/13-14	\$1,711,514	\$1,729,617	\$1,717,283	-1%	\$1,811,000	\$1,800,000	-1%
7/1/14-15	\$2,632,603	\$2,669,238	\$2,628,679	-2%	\$2,824,000	\$2,783,000	-1%
7/1/15-16	\$1,845,888	\$1,917,234	\$1,840,384	-4%	\$2,200,000	\$2,147,000	-2%
7/1/16-17	\$1,361,551	\$1,428,436	\$1,361,399	-5%	\$1,677,000	\$1,616,000	-4%
7/1/17-18	\$1,299,817	\$1,392,300	\$1,270,314	-9%	\$1,715,000	\$1,580,000	-8%
7/1/18-19	\$1,629,066	\$1,743,726	\$1,587,151	-9%	\$2,121,000	\$1,946,000	-8%
7/1/19-20	\$1,060,888	\$1,223,019	\$1,005,953	-18%	\$1,731,000	\$1,445,000	-17%
7/1/20-21	\$940,864	\$1,124,517	\$944,457	-16%	\$1,683,000	\$1,415,000	-16%
7/1/21-22	\$806,416	\$1,059,097	\$879,049	-17%	\$1,831,000	\$1,534,000	-16%
7/1/22-23	--	\$1,207,792	\$1,020,888	-15%	\$2,088,000	\$1,733,000	-17%
<b>Total</b>	<b>\$68,456,012</b>	<b>\$70,809,084</b>	<b>\$69,034,277</b>	<b>-2.5%</b>	<b>\$75,821,000</b>	<b>\$73,690,000</b>	<b>-2.8%</b>
		<i>Variance in Incurred</i>	<b>(\$1,774,807)</b>		<i>Change in Ultimates</i>	<b>(\$2,131,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,225,627	\$1,225,637	\$1,225,627	0%	\$1,226,000	\$1,226,000	0%
7/1/94-95	\$1,845,115	\$1,845,112	\$1,845,115	0%	\$1,845,000	\$1,845,000	0%
7/1/95-96	\$1,650,832	\$1,651,034	\$1,652,051	0%	\$1,658,000	\$1,665,000	0%
7/1/96-97	\$819,209	\$819,203	\$819,209	0%	\$819,000	\$819,000	0%
7/1/97-98	\$1,243,439	\$1,243,425	\$1,243,439	0%	\$1,243,000	\$1,243,000	0%
7/1/98-99	\$2,460,826	\$2,460,831	\$2,460,826	0%	\$2,461,000	\$2,461,000	0%
7/1/99-00	\$1,706,365	\$1,706,353	\$1,706,365	0%	\$1,706,000	\$1,706,000	0%
7/1/00-01	\$2,375,217	\$2,387,507	\$2,420,216	1%	\$2,737,000	\$2,711,000	-1%
7/1/01-02	\$2,428,221	\$2,431,543	\$2,432,220	0%	\$2,522,000	\$2,502,000	-1%
7/1/02-03	\$1,853,943	\$1,856,389	\$1,858,486	0%	\$1,920,000	\$1,938,000	1%
7/1/03-04	\$2,029,989	\$2,035,571	\$2,032,694	0%	\$2,174,000	\$2,196,000	1%
7/1/04-05	\$2,540,509	\$2,544,231	\$2,542,329	0%	\$2,632,000	\$2,542,000	-3%
7/1/05-06	\$1,976,117	\$1,984,245	\$1,976,468	0%	\$2,166,000	\$2,008,000	-7%
7/1/06-07	\$7,980,640	\$8,064,784	\$8,592,518	7%	\$9,844,000	\$9,818,000	0%
7/1/07-08	\$2,273,514	\$2,310,288	\$2,360,627	2%	\$3,043,000	\$2,916,000	-4%
7/1/08-09	\$3,453,611	\$3,474,237	\$3,460,843	0%	\$3,860,000	\$3,858,000	0%
7/1/09-10	\$3,112,555	\$3,138,824	\$3,133,700	0%	\$3,598,000	\$3,625,000	1%
7/1/10-11	\$3,244,902	\$3,277,246	\$3,306,519	1%	\$3,803,000	\$3,812,000	0%
7/1/11-12	\$3,927,337	\$3,970,432	\$3,958,488	0%	\$4,618,000	\$4,555,000	-1%
7/1/12-13	\$1,779,739	\$1,812,538	\$1,791,519	-1%	\$2,265,000	\$2,245,000	-1%
7/1/13-14	\$1,711,514	\$1,718,850	\$1,714,341	0%	\$1,811,000	\$1,800,000	-1%
7/1/14-15	\$2,061,472	\$2,123,348	\$2,075,873	-2%	\$2,824,000	\$2,783,000	-1%
7/1/15-16	\$1,816,985	\$1,851,558	\$1,834,902	-1%	\$2,200,000	\$2,147,000	-2%
7/1/16-17	\$1,314,359	\$1,351,262	\$1,336,396	-1%	\$1,677,000	\$1,616,000	-4%
7/1/17-18	\$1,255,285	\$1,308,945	\$1,263,598	-3%	\$1,715,000	\$1,580,000	-8%
7/1/18-19	\$1,321,127	\$1,430,784	\$1,399,107	-2%	\$2,121,000	\$1,946,000	-8%
7/1/19-20	\$811,725	\$964,979	\$864,646	-10%	\$1,731,000	\$1,445,000	-17%
7/1/20-21	\$764,349	\$961,346	\$826,923	-14%	\$1,683,000	\$1,415,000	-16%
7/1/21-22	\$464,105	\$888,319	\$705,843	-21%	\$1,831,000	\$1,534,000	-16%
7/1/22-23	--	\$503,551	\$418,352	-17%	\$2,088,000	\$1,733,000	-17%
<b>Total</b>	<b>\$61,448,625</b>	<b>\$63,342,374</b>	<b>\$63,259,240</b>	<b>-0.1%</b>	<b>\$75,821,000</b>	<b>\$73,690,000</b>	<b>-2.8%</b>
		<b>Variance in Paid</b>	<b>(\$83,134)</b>		<b>Change in Ultimates</b>	<b>(\$2,131,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Calculation of Required Reserves  
 As of June 30, 2023  
 Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Incurred Losses	(D) Paid Losses	(E) Case Reserves	(F) IBNR Reserves	(G) Total Required Reserves	(H) Discount Factor at 4.0%	(I) Total Discounted Reserves at 4.0%
7/1/93-94	\$1,226,000	\$1,225,627	\$1,225,627	\$0	\$0	\$0	1.000	\$0
7/1/94-95	\$1,845,000	\$1,845,115	\$1,845,115	\$0	\$0	\$0	0.981	\$0
7/1/95-96	\$1,665,000	\$1,657,871	\$1,652,051	\$5,820	\$7,000	\$13,000	0.944	\$12,000
7/1/96-97	\$819,000	\$819,209	\$819,209	\$0	\$0	\$0	0.909	\$0
7/1/97-98	\$1,243,000	\$1,243,439	\$1,243,439	\$0	\$0	\$0	0.877	\$0
7/1/98-99	\$2,461,000	\$2,460,826	\$2,460,826	\$0	\$0	\$0	0.848	\$0
7/1/99-00	\$1,706,000	\$1,706,365	\$1,706,365	\$0	\$0	\$0	0.820	\$0
7/1/00-01	\$2,711,000	\$2,691,022	\$2,420,216	\$270,806	\$20,000	\$291,000	0.794	\$231,000
7/1/01-02	\$2,502,000	\$2,481,229	\$2,432,220	\$49,010	\$21,000	\$70,000	0.771	\$54,000
7/1/02-03	\$1,938,000	\$1,919,866	\$1,858,486	\$61,380	\$18,000	\$80,000	0.749	\$60,000
7/1/03-04	\$2,196,000	\$2,173,775	\$2,032,694	\$141,081	\$22,000	\$163,000	0.729	\$119,000
7/1/04-05	\$2,542,000	\$2,542,329	\$2,542,329	\$0	\$0	\$0	0.711	\$0
7/1/05-06	\$2,008,000	\$1,981,267	\$1,976,468	\$4,799	\$27,000	\$32,000	0.695	\$22,000
7/1/06-07	\$9,818,000	\$9,670,247	\$8,592,518	\$1,077,728	\$148,000	\$1,225,000	0.681	\$835,000
7/1/07-08	\$2,916,000	\$2,865,560	\$2,360,627	\$504,933	\$50,000	\$555,000	0.669	\$371,000
7/1/08-09	\$3,858,000	\$3,781,284	\$3,460,843	\$320,442	\$77,000	\$397,000	0.658	\$261,000
7/1/09-10	\$3,625,000	\$3,512,651	\$3,133,700	\$378,951	\$112,000	\$491,000	0.650	\$319,000
7/1/10-11	\$3,812,000	\$3,632,578	\$3,306,519	\$326,059	\$179,000	\$505,000	0.643	\$325,000
7/1/11-12	\$4,555,000	\$4,409,123	\$3,958,488	\$450,635	\$146,000	\$597,000	0.638	\$381,000
7/1/12-13	\$2,245,000	\$2,159,339	\$1,791,519	\$367,819	\$86,000	\$453,000	0.635	\$288,000
7/1/13-14	\$1,800,000	\$1,717,283	\$1,714,341	\$2,942	\$83,000	\$86,000	0.634	\$55,000
7/1/14-15	\$2,783,000	\$2,628,679	\$2,075,873	\$552,805	\$154,000	\$707,000	0.636	\$450,000
7/1/15-16	\$2,147,000	\$1,840,384	\$1,834,902	\$5,482	\$307,000	\$312,000	0.640	\$200,000
7/1/16-17	\$1,616,000	\$1,361,399	\$1,336,396	\$25,003	\$255,000	\$280,000	0.647	\$181,000
7/1/17-18	\$1,580,000	\$1,270,314	\$1,263,598	\$6,717	\$310,000	\$316,000	0.657	\$207,000
7/1/18-19	\$1,946,000	\$1,587,151	\$1,399,107	\$188,044	\$359,000	\$547,000	0.670	\$367,000
7/1/19-20	\$1,445,000	\$1,005,953	\$864,646	\$141,307	\$439,000	\$580,000	0.689	\$400,000
7/1/20-21	\$1,415,000	\$944,457	\$826,923	\$117,535	\$471,000	\$588,000	0.714	\$420,000
7/1/21-22	\$1,534,000	\$879,049	\$705,843	\$173,205	\$655,000	\$828,000	0.749	\$620,000
7/1/22-23	\$1,733,000	\$1,020,888	\$418,352	\$602,536	\$712,000	\$1,315,000	0.803	\$1,056,000
<b>Total</b>	<b>\$73,690,000</b>	<b>\$69,034,277</b>	<b>\$63,259,240</b>	<b>\$5,775,038</b>	<b>\$4,658,000</b>	<b>\$10,431,000</b>		<b>\$7,234,000</b>

Column (B): Exhibit 3-A  
 Columns (C), (D): Exhibit 1  
 Column (E) = (C) - (D)  
 Column (F) = (B) - (C)  
 Column (G) = (B) - (D)  
 Column (H): Appendix B  
 Column (I) = (G) \* (H)

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$1,226,000	\$1,226,000	\$1,232,000	\$1,236,000	\$1,245,000
7/1/94-95	\$1,845,000	\$1,845,000	\$1,856,000	\$1,864,000	\$1,881,000
7/1/95-96	\$1,665,000	\$1,665,000	\$1,677,000	\$1,686,000	\$1,706,000
7/1/96-97	\$819,000	\$819,000	\$826,000	\$832,000	\$844,000
7/1/97-98	\$1,243,000	\$1,242,000	\$1,257,000	\$1,268,000	\$1,291,000
7/1/98-99	\$2,461,000	\$2,459,000	\$2,495,000	\$2,522,000	\$2,579,000
7/1/99-00	\$1,706,000	\$1,705,000	\$1,731,000	\$1,751,000	\$1,794,000
7/1/00-01	\$2,711,000	\$2,708,000	\$2,754,000	\$2,788,000	\$2,863,000
7/1/01-02	\$2,502,000	\$2,498,000	\$2,550,000	\$2,590,000	\$2,676,000
7/1/02-03	\$1,938,000	\$1,935,000	\$1,976,000	\$2,007,000	\$2,074,000
7/1/03-04	\$2,196,000	\$2,192,000	\$2,242,000	\$2,279,000	\$2,360,000
7/1/04-05	\$2,542,000	\$2,538,000	\$2,595,000	\$2,639,000	\$2,733,000
7/1/05-06	\$2,008,000	\$2,004,000	\$2,052,000	\$2,089,000	\$2,169,000
7/1/06-07	\$9,818,000	\$9,798,000	\$10,042,000	\$10,229,000	\$10,634,000
7/1/07-08	\$2,916,000	\$2,910,000	\$2,985,000	\$3,043,000	\$3,168,000
7/1/08-09	\$3,858,000	\$3,849,000	\$3,953,000	\$4,033,000	\$4,207,000
7/1/09-10	\$3,625,000	\$3,616,000	\$3,717,000	\$3,795,000	\$3,965,000
7/1/10-11	\$3,812,000	\$3,801,000	\$3,912,000	\$3,998,000	\$4,183,000
7/1/11-12	\$4,555,000	\$4,541,000	\$4,678,000	\$4,784,000	\$5,013,000
7/1/12-13	\$2,245,000	\$2,235,000	\$2,317,000	\$2,380,000	\$2,519,000
7/1/13-14	\$1,800,000	\$1,792,000	\$1,859,000	\$1,912,000	\$2,027,000
7/1/14-15	\$2,783,000	\$2,767,000	\$2,885,000	\$2,977,000	\$3,181,000
7/1/15-16	\$2,147,000	\$2,134,000	\$2,228,000	\$2,301,000	\$2,463,000
7/1/16-17	\$1,616,000	\$1,606,000	\$1,678,000	\$1,734,000	\$1,858,000
7/1/17-18	\$1,580,000	\$1,569,000	\$1,642,000	\$1,700,000	\$1,827,000
7/1/18-19	\$1,946,000	\$1,929,000	\$2,030,000	\$2,110,000	\$2,286,000
7/1/19-20	\$1,445,000	\$1,428,000	\$1,515,000	\$1,584,000	\$1,738,000
7/1/20-21	\$1,415,000	\$1,390,000	\$1,494,000	\$1,577,000	\$1,767,000
7/1/21-22	\$1,534,000	\$1,501,000	\$1,626,000	\$1,727,000	\$1,960,000
7/1/22-23	\$1,733,000	\$1,660,000	\$1,859,000	\$2,023,000	\$2,417,000
(1) All Years*	\$73,690,000	\$73,667,000	\$74,188,000	\$74,581,000	\$75,381,000
(2) Total Paid Losses		\$63,259,240			
<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
(3) All Years*	Expected \$10,431,000	50th %-ile \$10,408,000	65th %-ile \$10,929,000	75th %-ile \$11,322,000	90th %-ile \$12,122,000
<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
(4) All Years*	Expected \$7,234,000	50th %-ile \$7,218,000	65th %-ile \$7,579,000	75th %-ile \$7,852,000	90th %-ile \$8,407,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Estimated Ultimate Claim Counts, Average Claim Size, and Cost Per \$100 Payroll  
 Workers Compensation**

(A) Accident Period	(B) Number of Claims	(C) Claim Development Factor	(D) Estimated Ultimate Claims	(E) Estimated Ultimate Losses	(F) Severity*	(G) Estimated Fiscal Year Payroll (Hundreds)	(H) Claims Per \$1 Million Payroll	(I) Cost Per \$100 Payroll
7/1/93-94	437	1.000	437	\$1,226,000	\$2,800	\$4,426,020	0.987	\$0.28
7/1/94-95	435	1.000	435	\$1,845,000	\$4,200	\$4,770,185	0.912	\$0.39
7/1/95-96	430	1.000	430	\$1,665,000	\$3,900	\$5,002,695	0.860	\$0.33
7/1/96-97	430	1.000	430	\$819,000	\$1,900	\$5,224,652	0.823	\$0.16
7/1/97-98	436	1.000	436	\$1,243,000	\$2,900	\$5,344,054	0.816	\$0.23
7/1/98-99	445	1.000	445	\$2,461,000	\$5,500	\$5,490,653	0.810	\$0.45
7/1/99-00	451	1.000	451	\$1,706,000	\$3,800	\$5,774,324	0.781	\$0.30
7/1/00-01	451	1.000	451	\$2,711,000	\$6,000	\$6,082,806	0.741	\$0.45
7/1/01-02	446	1.000	446	\$2,502,000	\$5,600	\$6,420,160	0.695	\$0.39
7/1/02-03	528	1.000	528	\$1,938,000	\$3,700	\$6,724,030	0.785	\$0.29
7/1/03-04	455	1.000	455	\$2,196,000	\$4,800	\$6,841,156	0.665	\$0.32
7/1/04-05	465	1.000	465	\$2,542,000	\$5,500	\$6,995,624	0.665	\$0.36
7/1/05-06	446	1.000	446	\$2,008,000	\$4,500	\$7,234,921	0.616	\$0.28
7/1/06-07	398	1.000	398	\$9,818,000	\$24,700	\$7,381,829	0.539	\$1.33
7/1/07-08	367	1.000	367	\$2,916,000	\$7,900	\$7,449,461	0.493	\$0.39
7/1/08-09	377	1.000	377	\$3,858,000	\$10,200	\$7,582,195	0.497	\$0.51
7/1/09-10	434	1.000	434	\$3,625,000	\$8,400	\$7,707,049	0.563	\$0.47
7/1/10-11	396	1.000	396	\$3,812,000	\$9,600	\$7,633,501	0.519	\$0.50
7/1/11-12	385	1.000	385	\$4,555,000	\$11,800	\$7,675,685	0.502	\$0.59
7/1/12-13	352	1.000	352	\$2,245,000	\$6,400	\$7,824,899	0.450	\$0.29
7/1/13-14	331	1.000	331	\$1,800,000	\$5,400	\$8,035,366	0.412	\$0.22
7/1/14-15	368	1.000	368	\$2,783,000	\$7,600	\$8,380,917	0.439	\$0.33
7/1/15-16	387	1.000	387	\$2,147,000	\$5,500	\$8,559,280	0.452	\$0.25
7/1/16-17	369	1.000	369	\$1,616,000	\$4,400	\$8,878,332	0.416	\$0.18
7/1/17-18	419	1.000	419	\$1,580,000	\$3,800	\$9,466,084	0.443	\$0.17
7/1/18-19	344	1.000	344	\$1,946,000	\$5,700	\$9,855,067	0.349	\$0.20
7/1/19-20	288	1.000	288	\$1,445,000	\$5,000	\$10,178,220	0.283	\$0.14
7/1/20-21	214	1.001	214	\$1,415,000	\$6,600	\$10,379,045	0.206	\$0.14
7/1/21-22	257	1.002	258	\$1,534,000	\$6,000	\$10,566,285	0.244	\$0.15
7/1/22-23	268	1.021	274	\$1,733,000	\$6,300	\$10,939,733	0.250	\$0.16
<b>Total</b>	<b>11,809</b>		<b>11,816</b>	<b>\$73,690,000</b>	<b>\$6,200</b>	<b>\$224,824,229</b>	<b>0.526</b>	<b>\$0.33</b>

\* Estimated ultimate average claim size

Columns (B), (G): Exhibit 1

Column (C): Appendix A3

Column (D) = (B) \* (C)

Column (E): Exhibit 3-A

Column (F) = (E) / (D)

Column (G): Exhibit 1

Column (H) = (D) / (G) \* 10,000

Column (I) = (E) / (G)





**Estimation of Cumulative Reported Loss Development Factors  
 Using "The Method of Least Squares"  
 Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.666	-4.3867	-0.4068	19.243	0.1655	1.7846	360	1.004
24	1.452	-4.5259	-0.7934	20.484	0.6295	3.5910	348	1.004
36	1.299	-4.6480	-1.2069	21.604	1.4565	5.6095	336	1.005
48	1.200	-4.7568	-1.6084	22.627	2.5868	7.6507	324	1.005
60	1.154	-4.8550	-1.8705	23.571	3.4986	9.0810	312	1.005
72	1.115	-4.9443	-2.1626	24.446	4.6768	10.6925	300	1.006
84	1.090	-5.0264	-2.4131	25.264	5.8229	12.1289	288	1.007
96	1.073	-5.1022	-2.6180	26.032	6.8541	13.3576	276	1.007
108	1.061	-5.1726	-2.7888	26.756	7.7775	14.4255	264	1.008
120	1.051	-5.2384	-2.9691	27.441	8.8158	15.5536	252	1.009
132	1.041	-5.3002	-3.1870	28.092	10.1568	16.8916	240	1.010
144	1.034	-5.3584	-3.3950	28.712	11.5257	18.1914	228	1.012
156	1.027	-5.4133	-3.5950	29.304	12.9244	19.4612	216	1.013
168	1.023	-5.4654	-3.7565	29.871	14.1111	20.5307	204	1.015
180	1.019	-5.5149	-3.9482	30.415	15.5885	21.7743	192	1.018
							180	1.020
							168	1.024
							156	1.028
							144	1.033
							132	1.040
							120	1.048
							108	1.059
							96	1.073
							84	1.092
							72	1.119
							60	1.157
							48	1.212
							36	1.298
							24	1.434
							12	1.668
Sum		-75.7086	-36.7192	383.8627	106.5905	190.7241		
Average		-5.0472	-2.4479	25.5908	7.1060	12.7149		

N =	15		
A =	5.22E+05		
B =	3.093	R^2 =	0.99880
C =	68		

\* Appendix A1, page 1





**Analysis of Paid Loss Development  
Workers Compensation**

Year	Gross Paid Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$1,145	\$1,154			\$1,183	\$1,195	\$1,206	\$1,212	\$1,218	\$1,222	\$1,225	\$1,225	\$1,226	\$1,226	\$1,226
7/1/94-95	\$1,966	\$1,967		\$1,967	\$1,967	\$1,967	\$1,967	\$1,967	\$1,967	\$1,967	\$1,967	\$1,967	\$1,967	\$1,967	\$1,967
7/1/95-96	\$1,627	\$1,631	\$1,633	\$1,635	\$1,638	\$1,640	\$1,642	\$1,644	\$1,646	\$1,648	\$1,649	\$1,650	\$1,651	\$1,652	\$1,652
7/1/96-97	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821	\$821
7/1/97-98	\$1,271	\$1,271	\$1,271	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272	\$1,272
7/1/98-99	\$2,451	\$2,451	\$2,452	\$2,456	\$2,457	\$2,459	\$2,459	\$2,460	\$2,461	\$2,462	\$2,462				
7/1/99-00	\$1,708	\$1,709	\$1,711	\$1,711	\$1,712	\$1,713	\$1,712	\$1,712	\$1,712	\$1,712	\$1,712				
7/1/00-01	\$1,921	\$1,977	\$2,029	\$2,111	\$2,188	\$2,245	\$2,327	\$2,379	\$2,424						
7/1/01-02	\$2,151	\$2,156	\$2,212	\$2,297	\$2,386	\$2,397	\$2,447	\$2,451							
7/1/02-03	\$1,761	\$1,777	\$1,805	\$1,849	\$1,858	\$1,869	\$1,873								
7/1/03-04	\$2,014	\$2,018	\$2,023	\$2,028	\$2,030	\$2,033									
7/1/04-05	\$2,484	\$2,490	\$2,540	\$2,544	\$2,546										
7/1/05-06	\$1,919	\$1,987	\$1,994	\$1,994											
7/1/06-07	\$7,393	\$7,983	\$8,595												
7/1/07-08	\$2,278	\$2,365													
7/1/08-09	\$3,536														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.008				1.010	1.009	1.005	1.005	1.003	1.002	1.000	1.000	1.000	1.000	1.000
7/1/94-95	1.001			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/95-96	1.003	1.001	1.001	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	
7/1/96-97	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/97-98	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/98-99	1.000	1.000	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/99-00	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/00-01	1.029	1.026	1.041	1.037	1.026	1.037	1.022	1.019							
7/1/01-02	1.003	1.026	1.038	1.039	1.005	1.021	1.002								
7/1/02-03	1.009	1.016	1.024	1.005	1.006	1.002									
7/1/03-04	1.002	1.003	1.002	1.001	1.001										
7/1/04-05	1.002	1.020	1.002	1.001											
7/1/05-06	1.036	1.003	1.000												
7/1/06-07	1.080	1.077													
7/1/07-08	1.038														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	1.014	1.014	1.010	1.008	1.005	1.007	1.003	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<b>Avg Latest 5</b>	1.032	1.024	1.013	1.016	1.008	1.012	1.005	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Wtd Avg</b>	1.026	1.029	1.011	1.009	1.005	1.008	1.004	1.004	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<b>Wtd Avg Latest 5</b>	1.047	1.043	1.013	1.017	1.008	1.013	1.006	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>State (All Agencies)</b>	1.012	1.010	1.008	1.008	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Prior</b>	1.012	1.010	1.008	1.007	1.006	1.006	1.006	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.060
<b>Industry*</b>	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.052
<b>Selected</b>	1.014	1.012	1.008	1.008	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Cumulative</b>	1.150	1.134	1.120	1.112	1.104	1.097	1.090	1.084	1.079	1.074	1.070	1.068	1.065	1.062	1.060

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Estimation of Cumulative Paid Loss Development Factors  
 Using "The Method of Least Squares"  
 Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	3.917	-1.4942	1.0705	2.233	1.1459	-1.5995	360	1.091
24	2.002	-2.8007	0.0021	7.844	0.0000	-0.0058	348	1.093
36	1.676	-3.3484	-0.3914	11.212	0.1532	1.3105	336	1.096
48	1.489	-3.7002	-0.7148	13.692	0.5110	2.6450	324	1.099
60	1.396	-3.9600	-0.9272	15.681	0.8597	3.6718	312	1.102
72	1.338	-4.1660	-1.0835	17.355	1.1740	4.5140	300	1.105
84	1.308	-4.3367	-1.1786	18.807	1.3890	5.1110	288	1.109
96	1.280	-4.4825	-1.2744	20.093	1.6242	5.7127	276	1.113
108	1.259	-4.6097	-1.3526	21.250	1.8296	6.2352	264	1.117
120	1.239	-4.7226	-1.4293	22.303	2.0430	6.7501	252	1.121
132	1.221	-4.8240	-1.5116	23.271	2.2850	7.2919	240	1.126
144	1.203	-4.9160	-1.5969	24.167	2.5502	7.8505	228	1.132
156	1.185	-5.0003	-1.6888	25.003	2.8519	8.4443	216	1.138
168	1.167	-5.0780	-1.7883	25.786	3.1982	9.0812	204	1.144
180	1.150	-5.1501	-1.8972	26.524	3.5994	9.7708	192	1.152
192	1.134	-5.2174	-2.0097	27.221	4.0388	10.4853	180	1.160
							168	1.169
							156	1.180
							144	1.192
							132	1.207
							120	1.224
							108	1.245
							96	1.271
							84	1.305
							72	1.349
							60	1.411
							48	1.505
							36	1.667
							24	2.030
							12	3.908
Sum		-67.8068	-17.7719	302.4407	29.2530	87.2691		
Average		-4.2379	-1.1107	18.9025	1.8283	5.4543		

N =	16		
A =	9.47E+00		
B =	0.793	R^2 =	0.99593
C =	-8		

\* Appendix A2, page 1

**Analysis of Reported Claim Development**  
**Workers Compensation**

Year	Reported Claims as of (Months):											
	12	24	36	48	60	72	84	96	108	120	132	144
7/1/93-94								437	437	437	437	437
7/1/94-95						434		434	434	434	435	435
7/1/95-96					430	430	430	430	430	430	430	430
7/1/96-97				430	430	430	430	430	430	430	430	430
7/1/97-98			436	436	436	436	436	436	436	436	436	436
7/1/98-99		444	444	444	444	444	444	445	445	445	445	445
7/1/99-00	425	449	451	451	451	451	451	451	451	451	451	451
7/1/00-01	407	449	450	451	451	451	451	451	451	451	451	451
7/1/01-02	414	445	446	446	446	446	446	446	446	446	446	446
7/1/02-03	488	523	524	525	525	527	528	528	528	528	528	528
7/1/03-04	443	454	455	455	455	455	455	455	455	455	455	455
7/1/04-05	429	463	464	464	465	465	465	465	465	465	465	465
7/1/05-06	421	445	445	446	446	446	446	446	446	446	446	446
7/1/06-07	377	393	396	397	397	397	397	397	397	397	397	398
7/1/07-08	355	365	367	367	367	367	367	367	367	367	367	367
7/1/08-09	366	376	377	377	377	377	377	377	377	377	377	377
7/1/09-10	411	434	434	434	434	434	434	434	434	434	434	434
7/1/10-11	382	395	396	396	396	396	396	396	396	396	396	396
7/1/11-12	367	385	385	385	385	385	385	385	385	385	385	385
7/1/12-13	339	351	352	352	352	352	352	352	352	352	352	352
7/1/13-14	314	329	329	329	330	330	331	331	331	331		
7/1/14-15	348	362	362	363	365	365	365	365	368			
7/1/15-16	379	387	386	387	387	387	387					
7/1/16-17	363	369	369	369	369	369	369					
7/1/17-18	417	418	418	418	419	419						
7/1/18-19	339	344	344	344	344							
7/1/19-20	284	288	288	288								
7/1/20-21	207	212	214									
7/1/21-22	251	257										
7/1/22-23	268											

Year	Age to age development:											
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:ULT
7/1/93-94							1.000	1.000	1.000	1.000	1.000	
7/1/94-95						1.000	1.000	1.000	1.000	1.002	1.000	1.000
7/1/95-96					1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/96-97				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/97-98			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/98-99		1.000	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000
7/1/99-00	1.056	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/00-01	1.103	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/01-02	1.075	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/02-03	1.072	1.002	1.002	1.000	1.004	1.002	1.000	1.000	1.000	1.000	1.000	1.000
7/1/03-04	1.025	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/04-05	1.079	1.002	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/05-06	1.057	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/06-07	1.042	1.008	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.003
7/1/07-08	1.028	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/08-09	1.027	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/09-10	1.056	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/10-11	1.034	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/11-12	1.049	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/12-13	1.035	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/13-14	1.048	1.000	1.000	1.003	1.000	1.003	1.000	1.000	1.000			
7/1/14-15	1.040	1.000	1.003	1.006	1.000	1.000	1.000	1.008				
7/1/15-16	1.021	0.997	1.003	1.000	1.000	1.000	1.000					
7/1/16-17	1.017	1.000	1.000	1.000	1.000	1.000						
7/1/17-18	1.002	1.000	1.000	1.002	1.000							
7/1/18-19	1.015	1.000	1.000	1.000								
7/1/19-20	1.014	1.000	1.000									
7/1/20-21	1.024	1.009										
7/1/21-22	1.024											
<b>Average</b>	1.041	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
<b>Avg Latest 5</b>	1.016	1.002	1.001	1.002	1.000	1.001	1.000	1.002	1.000	1.000	1.000	
<b>Wtd Avg</b>	1.043	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
<b>Wtd Avg Latest 5</b>	1.014	1.001	1.001	1.002	1.000	1.001	1.000	1.002	1.000	1.000	1.000	
<b>State (All Agencies)</b>	1.018	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Prior</b>	1.020	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Industry*</b>	1.083	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.018	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Cumulative</b>	1.021	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

\* Based on experience of several large carriers

**Estimation of Cumulative Reported Claim Development Factors  
 Using "The Method of Least Squares"  
 Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.021	-2.2255	-3.8761	4.953	15.0238	8.6260	360	1.000
24	1.002	-3.0567	-6.0629	9.344	36.7585	18.5325	348	1.000
36	1.001	-3.5043	-7.2403	12.280	52.4220	25.3721	336	1.000
							324	1.000
							312	1.000
							300	1.000
							288	1.000
							276	1.000
							264	1.000
							252	1.000
							240	1.000
							228	1.000
							216	1.000
							204	1.000
							192	1.000
							180	1.000
							168	1.000
							156	1.000
							144	1.000
							132	1.000
							120	1.000
							108	1.000
							96	1.000
							84	1.000
							72	1.000
							60	1.000
							48	1.000
							36	1.001
							24	1.002
							12	1.021
Sum		-8.7865	-17.1792	26.5762	104.2044	52.5306		
Average		-2.9288	-5.7264	8.8587	34.7348	17.5102		

N =	3		
A =	7.23E+00		
B =	2.631	R^2 =	1.00000
C =	-3		

\* Appendix A3, page 1

**Loss Forecasting Model**  
**Analysis of Historical Loss Patterns**  
**Variation in Reported Loss Development**  
**Workers Compensation**

Year	Variation in Reported Losses:														
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180	180:192
7/1/93-94					0.048	-0.011	0.008	0.022	0.094	0.000	0.000	0.000	0.000	-0.010	0.000
7/1/94-95				0.143	0.031	-0.011	-0.003	0.041	-0.023	-0.011	0.000	0.001	0.006	-0.005	0.004
7/1/95-96			0.061	0.101	-0.027	0.020	0.000	0.000	0.001	-0.015	-0.001	0.004	0.004	0.001	0.000
7/1/96-97		0.141	-0.082	0.032	0.067	0.005	-0.011	0.000	-0.019	0.000	0.000	0.000	0.004	0.000	0.000
7/1/97-98	0.188	-0.022	0.025	-0.007	-0.001	0.012	0.000	-0.032	-0.013	0.000	0.000	0.000	0.000	0.000	0.002
7/1/98-99	0.433	0.218	0.019	0.143	-0.077	-0.006	-0.004	-0.001	0.005	-0.003	0.018	0.008	-0.006	0.001	--
7/1/99-00	0.586	0.003	0.095	0.024	0.044	0.015	-0.013	0.040	-0.062	0.000	0.000	0.004	0.001	--	0.001
7/1/00-01	0.456	0.184	0.062	-0.034	-0.022	-0.009	0.013	0.020	0.011	0.022	0.022	0.034	--	-0.058	0.002
7/1/01-02	0.405	0.000	0.036	-0.042	-0.001	0.007	-0.003	-0.015	0.005	0.013	0.033	--	0.046	0.011	-0.044
7/1/02-03	0.202	0.003	-0.056	-0.011	-0.058	0.001	0.011	0.007	0.007	0.030	--	-0.023	0.000	-0.068	0.000
7/1/03-04	0.348	0.053	0.094	0.026	0.001	0.008	0.000	0.004	-0.001	--	0.018	0.001	0.010	0.000	0.056
7/1/04-05	0.591	0.005	0.148	0.067	0.022	-0.006	0.001	-0.002	--	--	-0.002	0.000	-0.072	0.001	-0.019
7/1/05-06	0.180	0.039	0.021	0.016	-0.013	0.012	-0.005	--	0.065	0.011	-0.100	0.002	0.014	-0.001	-0.059
7/1/06-07	0.235	0.146	0.143	0.076	0.036	0.070	--	--	0.000	0.000	0.306	0.000	0.000	0.002	0.000
7/1/07-08	0.018	0.174	0.034	0.032	0.005	--	-0.036	0.000	0.000	-0.032	0.037	-0.033	0.000	-0.013	-0.041
7/1/08-09	0.473	0.078	0.147	0.045	--	--	-0.009	-0.008	0.028	-0.028	-0.001	-0.046	-0.015	0.002	0.000
7/1/09-10	0.080	-0.026	0.102	--	0.174	-0.148	0.050	-0.007	-0.019	-0.014	0.000	0.000	0.020	--	--
7/1/10-11	0.167	-0.034	--	0.318	-0.184	-0.039	-0.074	0.005	0.001	0.046	0.000	0.000	--	--	--
7/1/11-12	0.289	--	0.143	-0.006	0.082	-0.017	-0.063	-0.050	0.002	-0.011	-0.008	--	--	--	--
7/1/12-13	--	0.087	0.020	0.154	0.033	0.017	0.026	0.000	0.004	-0.002	--	--	--	--	--
7/1/13-14	0.016	0.000	-0.003	0.003	-0.025	-0.025	-0.004	-0.006	0.003	--	--	--	--	--	--
7/1/14-15	0.180	0.010	0.264	0.000	0.000	0.021	-0.003	-0.001	--	--	--	--	--	--	--
7/1/15-16	0.497	-0.040	0.056	0.017	0.048	-0.040	-0.003	--	--	--	--	--	--	--	--
7/1/16-17	-0.151	0.031	0.027	0.019	0.036	0.000	--	--	--	--	--	--	--	--	--
7/1/17-18	-0.067	-0.034	0.036	-0.008	-0.022	--	--	--	--	--	--	--	--	--	--
7/1/18-19	0.128	0.284	-0.175	-0.026	--	--	--	--	--	--	--	--	--	--	--
7/1/19-20	0.159	0.143	-0.053	--	--	--	--	--	--	--	--	--	--	--	--
7/1/20-21	-0.015	0.004	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/21-22	0.086	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- Excludes points impacted by change in reserving methodology

Variance	0.043	0.008	0.006	0.006	0.004	0.002	0.001	0.000	0.001	0.000	0.006	0.000	0.001	0.001	0.001
Sigma	0.293	0.208	0.187	0.169	0.149	0.134	0.128	0.126	0.124	0.120	0.118	0.089	0.088	0.085	0.081

Year	Maturity	Lognormal Parameters			
		Ultimate Losses	Prior Sigma*	Sigma	Mu
7/1/93-94	360	\$1,226,000	0.012	0.012	14.019
7/1/94-95	348	\$1,845,000	0.009	0.015	14.428
7/1/95-96	336	\$1,665,000	0.011	0.019	14.325
7/1/96-97	324	\$819,000	0.014	0.024	13.616
7/1/97-98	312	\$1,243,000	0.017	0.030	14.033
7/1/98-99	300	\$2,461,000	0.021	0.037	14.715
7/1/99-00	288	\$1,706,000	0.027	0.040	14.349
7/1/00-01	276	\$2,711,000	0.033	0.043	14.812
7/1/01-02	264	\$2,502,000	0.042	0.053	14.731
7/1/02-03	252	\$1,938,000	0.052	0.054	14.476
7/1/03-04	240	\$2,196,000	0.052	0.058	14.600
7/1/04-05	228	\$2,542,000	0.053	0.058	14.747
7/1/05-06	216	\$2,008,000	0.054	0.062	14.511
7/1/06-07	204	\$9,818,000	0.055	0.064	16.098
7/1/07-08	192	\$2,916,000	0.056	0.066	14.884
7/1/08-09	180	\$3,858,000	0.058	0.069	15.163
7/1/09-10	168	\$3,625,000	0.059	0.072	15.101
7/1/10-11	156	\$3,812,000	0.062	0.075	15.151
7/1/11-12	144	\$4,555,000	0.065	0.077	15.329
7/1/12-13	132	\$2,245,000	0.068	0.093	14.620
7/1/13-14	120	\$1,800,000	0.073	0.096	14.399
7/1/14-15	108	\$2,783,000	0.094	0.109	14.833
7/1/15-16	96	\$2,147,000	0.099	0.112	14.573
7/1/16-17	84	\$1,616,000	0.099	0.114	14.289
7/1/17-18	72	\$1,580,000	0.103	0.119	14.266
7/1/18-19	60	\$1,946,000	0.116	0.133	14.472
7/1/19-20	48	\$1,445,000	0.137	0.153	14.172
7/1/20-21	36	\$1,415,000	0.161	0.187	14.145
7/1/21-22	24	\$1,534,000	0.191	0.208	14.222
7/1/22-23	12	\$1,733,000	0.276	0.293	14.322

\* Prior sigma at indicated maturity

**Derivation of Discount Factors  
 Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Maturity in Years at 6/30/2023	Cumulative Paid Loss Develop. Factor	% Losses Paid 6/30/2023	Midpoint Upcoming Period	% Losses Paid Upcoming Period	Column(F) Discounted 4.0%	Discount Factor at 4.0%
7/1/93-94	30	1.000	100.0%				<b>1.000</b>
7/1/94-95	29	1.093	91.5%	29.5	8.53%	0.0268	<b>0.981</b>
7/1/95-96	28	1.096	91.2%	28.5	0.22%	0.0007	<b>0.944</b>
7/1/96-97	27	1.099	91.0%	27.5	0.24%	0.0008	<b>0.909</b>
7/1/97-98	26	1.102	90.8%	26.5	0.25%	0.0009	<b>0.877</b>
7/1/98-99	25	1.105	90.5%	25.5	0.27%	0.0010	<b>0.848</b>
7/1/99-00	24	1.109	90.2%	24.5	0.29%	0.0011	<b>0.820</b>
7/1/00-01	23	1.113	89.9%	23.5	0.31%	0.0012	<b>0.794</b>
7/1/01-02	22	1.117	89.6%	22.5	0.33%	0.0014	<b>0.771</b>
7/1/02-03	21	1.121	89.2%	21.5	0.36%	0.0016	<b>0.749</b>
7/1/03-04	20	1.126	88.8%	20.5	0.39%	0.0018	<b>0.729</b>
7/1/04-05	19	1.132	88.4%	19.5	0.43%	0.0020	<b>0.711</b>
7/1/05-06	18	1.138	87.9%	18.5	0.46%	0.0022	<b>0.695</b>
7/1/06-07	17	1.144	87.4%	17.5	0.51%	0.0026	<b>0.681</b>
7/1/07-08	16	1.152	86.8%	16.5	0.56%	0.0029	<b>0.669</b>
7/1/08-09	15	1.160	86.2%	15.5	0.62%	0.0034	<b>0.658</b>
7/1/09-10	14	1.169	85.5%	14.5	0.69%	0.0039	<b>0.650</b>
7/1/10-11	13	1.180	84.7%	13.5	0.78%	0.0046	<b>0.643</b>
7/1/11-12	12	1.192	83.9%	12.5	0.88%	0.0054	<b>0.638</b>
7/1/12-13	11	1.207	82.8%	11.5	1.01%	0.0065	<b>0.635</b>
7/1/13-14	10	1.224	81.7%	10.5	1.17%	0.0078	<b>0.634</b>
7/1/14-15	9	1.245	80.3%	9.5	1.38%	0.0095	<b>0.636</b>
7/1/15-16	8	1.271	78.7%	8.5	1.65%	0.0118	<b>0.640</b>
7/1/16-17	7	1.305	76.7%	7.5	2.01%	0.0150	<b>0.647</b>
7/1/17-18	6	1.349	74.1%	6.5	2.51%	0.0194	<b>0.657</b>
7/1/18-19	5	1.411	70.9%	5.5	3.25%	0.0262	<b>0.670</b>
7/1/19-20	4	1.505	66.5%	4.5	4.43%	0.0371	<b>0.689</b>
7/1/20-21	3	1.667	60.0%	3.5	6.48%	0.0565	<b>0.714</b>
7/1/21-22	2	2.030	49.3%	2.5	10.73%	0.0972	<b>0.749</b>
7/1/22-23	1	3.908	25.6%	1.5	23.67%	0.2232	<b>0.803</b>

Column (C): Appendix A2, page 2

Column (D) = 1 / (C)

Column (E) = [ (B), current line + (B), previous line] / 2

Column (F) = (D), previous line - (D), current line

Column (G) = (F) x [ 1 + Interest Rate ]<sup>-(E)</sup>

Column (H) = [ 1 + Interest Rate ]<sup>-(B)</sup> / [ 1 - (D) ] x [ Downward Sum, (G) ]

**Summary of Experience  
Workers Compensation**

(A) Period Begin End		(B) Evaluation Date	(C) Maturity (months)	(D) Reported Claims	(E) Open Claims	(F) Paid Losses	(G) Case Reserves	(H) Incurred Losses	(I) Historic Calendar Year Payroll (Hundreds)	(J) Estimated Fiscal Year Payroll (Hundreds)
07/01/93	06/30/94	6/30/23	360	493	0	\$3,127,684	\$0	\$3,127,684	--	--
07/01/94	06/30/95	6/30/23	348	442	0	\$1,827,846	\$0	\$1,827,846	--	--
07/01/95	06/30/96	6/30/23	336	425	1	\$3,105,721	\$4,500	\$3,110,221	--	--
07/01/96	06/30/97	6/30/23	324	391	2	\$1,600,402	\$16,523	\$1,616,925	--	--
07/01/97	06/30/98	6/30/23	312	391	1	\$2,082,147	\$89,619	\$2,171,766	--	--
07/01/98	06/30/99	6/30/23	300	419	0	\$1,826,851	\$0	\$1,826,851	--	--
07/01/99	06/30/00	6/30/23	288	356	0	\$3,616,019	\$0	\$3,616,019	--	--
07/01/00	06/30/01	6/30/23	276	334	0	\$2,322,003	\$0	\$2,322,003	--	--
07/01/01	06/30/02	6/30/23	264	347	1	\$1,567,053	\$7,732	\$1,574,785	--	--
07/01/02	06/30/03	6/30/23	252	347	1	\$2,975,941	\$71,161	\$3,047,102	--	--
07/01/03	06/30/04	6/30/23	240	321	1	\$1,914,766	\$102,839	\$2,017,605	--	--
07/01/04	06/30/05	6/30/23	228	347	6	\$4,737,835	\$783,757	\$5,521,591	--	--
07/01/05	06/30/06	6/30/23	216	334	1	\$1,812,883	\$182,176	\$1,995,058	--	--
07/01/06	06/30/07	6/30/23	204	324	2	\$2,735,854	\$739,292	\$3,475,145	--	--
07/01/07	06/30/08	6/30/23	192	296	3	\$1,896,132	\$266,452	\$2,162,583	--	--
07/01/08	06/30/09	6/30/23	180	305	0	\$1,725,158	\$0	\$1,725,158	--	--
07/01/09	06/30/10	6/30/23	168	285	3	\$2,793,241	\$298,240	\$3,091,481	\$1,417,929	\$1,409,885
07/01/10	06/30/11	6/30/23	156	321	2	\$2,711,723	\$195,838	\$2,907,561	\$1,401,841	\$1,377,571
07/01/11	06/30/12	6/30/23	144	265	6	\$3,840,229	\$303,433	\$4,143,663	\$1,353,302	\$1,328,788
07/01/12	06/30/13	6/30/23	132	301	4	\$3,064,262	\$150,297	\$3,214,558	\$1,304,275	\$1,282,516
07/01/13	06/30/14	6/30/23	120	267	3	\$2,929,350	\$633,362	\$3,562,713	\$1,260,757	\$1,299,389
07/01/14	06/30/15	6/30/23	108	228	3	\$1,967,996	\$145,304	\$2,113,300	\$1,338,021	\$1,318,213
07/01/15	06/30/16	6/30/23	96	200	4	\$1,485,260	\$263,659	\$1,748,919	\$1,298,404	\$1,325,938
07/01/16	06/30/17	6/30/23	84	224	7	\$2,105,261	\$799,747	\$2,905,008	\$1,353,472	\$1,331,152
07/01/17	06/30/18	6/30/23	72	275	5	\$1,026,471	\$171,073	\$1,197,544	\$1,308,831	\$1,356,325
07/01/18	06/30/19	6/30/23	60	223	5	\$2,902,471	\$565,591	\$3,468,062	\$1,403,820	\$1,657,655
07/01/19	06/30/20	6/30/23	48	196	5	\$1,271,780	\$106,859	\$1,378,639	\$1,911,489	\$1,932,766
07/01/20	06/30/21	6/30/23	36	176	10	\$1,319,139	\$260,239	\$1,579,378	\$1,954,042	\$1,952,671
07/01/21	06/30/22	6/30/23	24	211	20	\$1,039,036	\$341,501	\$1,380,537	\$1,951,300	\$1,958,743
07/01/22	06/30/23	6/30/23	12	186	64	\$297,735	\$652,996	\$950,731	\$1,966,185	\$2,053,164
<b>Total</b>				<b>9,230</b>	<b>160</b>	<b>\$67,628,249</b>	<b>\$7,152,187</b>	<b>\$74,780,436</b>	<b>\$21,223,669</b>	<b>\$21,584,776</b>

- Loss information and payroll (hundreds) provided by The State of Tennessee, Risk Management Division  
- Loss information contains only pure losses, net of recoveries  
Column (J): Interpolation of (I)



**Estimation of Ultimate Losses  
Workers Compensation**

<i>Incurring Loss Development</i>				<i>Paid Loss Development</i>			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses	Incurred Develop. Factor	Estimated Ultimate Losses	Accident Period	Paid Losses	Paid Develop. Factor	Estimated Ultimate Losses
7/1/93-94	\$3,127,684	1.003	\$3,137,000	7/1/93-94	\$3,127,684	1.082	\$3,385,000
7/1/94-95	\$1,827,846	1.003	\$1,834,000	7/1/94-95	\$1,827,846	1.085	\$1,983,000
7/1/95-96	\$3,110,221	1.004	\$3,122,000	7/1/95-96	\$3,105,721	1.088	\$3,378,000
7/1/96-97	\$1,616,925	1.004	\$1,624,000	7/1/96-97	\$1,600,402	1.091	\$1,745,000
7/1/97-98	\$2,171,766	1.005	\$2,182,000	7/1/97-98	\$2,082,147	1.094	\$2,277,000
7/1/98-99	\$1,826,851	1.005	\$1,837,000	7/1/98-99	\$1,826,851	1.097	\$2,004,000
7/1/99-00	\$3,616,019	1.006	\$3,638,000	7/1/99-00	\$3,616,019	1.101	\$3,980,000
7/1/00-01	\$2,322,003	1.007	\$2,338,000	7/1/00-01	\$2,322,003	1.105	\$2,565,000
7/1/01-02	\$1,574,785	1.008	\$1,587,000	7/1/01-02	\$1,567,053	1.109	\$1,738,000
7/1/02-03	\$3,047,102	1.009	\$3,075,000	7/1/02-03	\$2,975,941	1.113	\$3,314,000
7/1/03-04	\$2,017,605	1.010	\$2,039,000	7/1/03-04	\$1,914,766	1.119	\$2,142,000
7/1/04-05	\$5,521,591	1.012	\$5,588,000	7/1/04-05	\$4,737,835	1.124	\$5,326,000
7/1/05-06	\$1,995,058	1.014	\$2,023,000	7/1/05-06	\$1,812,883	1.130	\$2,049,000
7/1/06-07	\$3,475,145	1.016	\$3,532,000	7/1/06-07	\$2,735,854	1.137	\$3,112,000
7/1/07-08	\$2,162,583	1.019	\$2,205,000	7/1/07-08	\$1,896,132	1.145	\$2,171,000
7/1/08-09	\$1,725,158	1.023	\$1,765,000	7/1/08-09	\$1,725,158	1.154	\$1,991,000
7/1/09-10	\$3,091,481	1.027	\$3,176,000	7/1/09-10	\$2,793,241	1.164	\$3,251,000
7/1/10-11	\$2,907,561	1.033	\$3,004,000	7/1/10-11	\$2,711,723	1.175	\$3,188,000
7/1/11-12	\$4,143,663	1.040	\$4,310,000	7/1/11-12	\$3,840,229	1.189	\$4,566,000
7/1/12-13	\$3,214,558	1.049	\$3,373,000	7/1/12-13	\$3,064,262	1.205	\$3,692,000
7/1/13-14	\$3,562,713	1.061	\$3,780,000	7/1/13-14	\$2,929,350	1.224	\$3,585,000
7/1/14-15	\$2,113,300	1.076	\$2,274,000	7/1/14-15	\$1,967,996	1.247	\$2,454,000
7/1/15-16	\$1,748,919	1.097	\$1,918,000	7/1/15-16	\$1,485,260	1.276	\$1,895,000
7/1/16-17	\$2,905,008	1.124	\$3,266,000	7/1/16-17	\$2,105,261	1.313	\$2,765,000
7/1/17-18	\$1,197,544	1.162	\$1,391,000	7/1/17-18	\$1,026,471	1.364	\$1,400,000
7/1/18-19	\$3,468,062	1.215	\$4,213,000	7/1/18-19	\$2,902,471	1.435	\$4,166,000
7/1/19-20	\$1,378,639	1.291	\$1,780,000	7/1/19-20	\$1,271,780	1.546	\$1,966,000
7/1/20-21	\$1,579,378	1.403	\$2,217,000	7/1/20-21	\$1,319,139	1.742	\$2,298,000
7/1/21-22	\$1,380,537	1.574	\$2,173,000	7/1/21-22	\$1,039,036	2.192	\$2,278,000
7/1/22-23	\$950,731	1.843	\$1,752,000	7/1/22-23	\$297,735	4.623	\$1,376,000
<b>Total</b>	<b>\$74,780,436</b>		<b>\$80,153,000</b>	<b>Total</b>	<b>\$67,628,249</b>		<b>\$82,040,000</b>

Columns (B), (F): Exhibit 1  
 Column (C): Appendix A1  
 Column (D) = (B) \* (C)  
 Column (G): Appendix A2  
 Column (H) = (F) \* (G)

**Estimation of Ultimate Losses  
Workers Compensation**

*Incurred Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Incurred Develop. Factor	Estimated Percent Unpaid	Estimated Unreported Losses	Incurred Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$3,128,000	1.003	0.3%	\$9,288	\$3,127,684	\$3,137,000
7/1/94-95	\$1,828,000	1.003	0.3%	\$6,056	\$1,827,846	\$1,834,000
7/1/95-96	\$3,041,000	1.004	0.4%	\$11,273	\$3,110,221	\$3,121,000
7/1/96-97	\$1,625,000	1.004	0.4%	\$6,761	\$1,616,925	\$1,624,000
7/1/97-98	\$2,172,000	1.005	0.5%	\$10,173	\$2,171,766	\$2,182,000
7/1/98-99	\$1,827,000	1.005	0.5%	\$9,665	\$1,826,851	\$1,837,000
7/1/99-00	\$3,616,000	1.006	0.6%	\$21,683	\$3,616,019	\$3,638,000
7/1/00-01	\$2,322,000	1.007	0.7%	\$15,841	\$2,322,003	\$2,338,000
7/1/01-02	\$1,590,000	1.008	0.8%	\$12,387	\$1,574,785	\$1,587,000
7/1/02-03	\$3,047,000	1.009	0.9%	\$27,218	\$3,047,102	\$3,074,000
7/1/03-04	\$2,043,000	1.010	1.0%	\$21,021	\$2,017,605	\$2,039,000
7/1/04-05	\$5,439,000	1.012	1.2%	\$64,761	\$5,521,591	\$5,586,000
7/1/05-06	\$2,029,000	1.014	1.4%	\$28,088	\$1,995,058	\$2,023,000
7/1/06-07	\$3,544,000	1.016	1.6%	\$57,337	\$3,475,145	\$3,532,000
7/1/07-08	\$2,301,000	1.019	1.9%	\$43,758	\$2,162,583	\$2,206,000
7/1/08-09	\$1,773,000	1.023	2.2%	\$39,866	\$1,725,158	\$1,765,000
7/1/09-10	\$3,140,000	1.027	2.7%	\$83,981	\$3,091,481	\$3,175,000
7/1/10-11	\$2,838,000	1.033	3.2%	\$90,883	\$2,907,561	\$2,998,000
7/1/11-12	\$4,381,000	1.040	3.9%	\$169,199	\$4,143,663	\$4,313,000
7/1/12-13	\$3,543,000	1.049	4.7%	\$166,239	\$3,214,558	\$3,381,000
7/1/13-14	\$3,851,000	1.061	5.7%	\$221,140	\$3,562,713	\$3,784,000
7/1/14-15	\$2,414,000	1.076	7.1%	\$170,989	\$2,113,300	\$2,284,000
7/1/15-16	\$1,941,000	1.097	8.8%	\$170,987	\$1,748,919	\$1,920,000
7/1/16-17	\$2,814,000	1.124	11.0%	\$310,691	\$2,905,008	\$3,216,000
7/1/17-18	\$1,540,000	1.162	13.9%	\$214,565	\$1,197,544	\$1,412,000
7/1/18-19	\$4,260,000	1.215	17.7%	\$753,443	\$3,468,062	\$4,222,000
7/1/19-20	\$2,256,000	1.291	22.5%	\$508,592	\$1,378,639	\$1,887,000
7/1/20-21	\$2,746,000	1.403	28.7%	\$789,368	\$1,579,378	\$2,369,000
7/1/21-22	\$3,104,000	1.574	36.5%	\$1,132,059	\$1,380,537	\$2,513,000
7/1/22-23	\$2,770,000	1.843	45.7%	\$1,267,046	\$950,731	\$2,218,000
<b>Total</b>	<b>\$82,923,000</b>			<b>\$6,434,359</b>	<b>\$74,780,436</b>	<b>\$81,215,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23  
 Column (C): Appendix A  
 Column (D) = 1 - 1 / (C)

Column (E) = (B) \* (D)  
 Column (F): Exhibit 1  
 Column (G) = (E) + (F)

**Estimation of Ultimate Losses  
Workers Compensation**

*Paid Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Paid Develop. Factor	Estimated Percent Unpaid	Estimated Unpaid Losses	Paid Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$3,128,000	1.082	7.6%	\$238,018	\$3,127,684	\$3,366,000
7/1/94-95	\$1,828,000	1.085	7.8%	\$143,041	\$1,827,846	\$1,971,000
7/1/95-96	\$3,041,000	1.088	8.1%	\$244,943	\$3,105,721	\$3,351,000
7/1/96-97	\$1,625,000	1.091	8.3%	\$134,866	\$1,600,402	\$1,735,000
7/1/97-98	\$2,172,000	1.094	8.6%	\$185,932	\$2,082,147	\$2,268,000
7/1/98-99	\$1,827,000	1.097	8.8%	\$161,501	\$1,826,851	\$1,988,000
7/1/99-00	\$3,616,000	1.101	9.1%	\$330,497	\$3,616,019	\$3,947,000
7/1/00-01	\$2,322,000	1.105	9.5%	\$219,728	\$2,322,003	\$2,542,000
7/1/01-02	\$1,590,000	1.109	9.8%	\$155,996	\$1,567,053	\$1,723,000
7/1/02-03	\$3,047,000	1.113	10.2%	\$310,433	\$2,975,941	\$3,286,000
7/1/03-04	\$2,043,000	1.119	10.6%	\$216,528	\$1,914,766	\$2,131,000
7/1/04-05	\$5,439,000	1.124	11.0%	\$600,810	\$4,737,835	\$5,339,000
7/1/05-06	\$2,029,000	1.130	11.5%	\$234,074	\$1,812,883	\$2,047,000
7/1/06-07	\$3,544,000	1.137	12.1%	\$427,974	\$2,735,854	\$3,164,000
7/1/07-08	\$2,301,000	1.145	12.7%	\$291,633	\$1,896,132	\$2,188,000
7/1/08-09	\$1,773,000	1.154	13.3%	\$236,523	\$1,725,158	\$1,962,000
7/1/09-10	\$3,140,000	1.164	14.1%	\$442,302	\$2,793,241	\$3,236,000
7/1/10-11	\$2,838,000	1.175	14.9%	\$423,666	\$2,711,723	\$3,135,000
7/1/11-12	\$4,381,000	1.189	15.9%	\$696,113	\$3,840,229	\$4,536,000
7/1/12-13	\$3,543,000	1.205	17.0%	\$602,150	\$3,064,262	\$3,666,000
7/1/13-14	\$3,851,000	1.224	18.3%	\$704,029	\$2,929,350	\$3,633,000
7/1/14-15	\$2,414,000	1.247	19.8%	\$477,976	\$1,967,996	\$2,446,000
7/1/15-16	\$1,941,000	1.276	21.6%	\$419,756	\$1,485,260	\$1,905,000
7/1/16-17	\$2,814,000	1.313	23.9%	\$671,517	\$2,105,261	\$2,777,000
7/1/17-18	\$1,540,000	1.364	26.7%	\$410,780	\$1,026,471	\$1,437,000
7/1/18-19	\$4,260,000	1.435	30.3%	\$1,292,054	\$2,902,471	\$4,195,000
7/1/19-20	\$2,256,000	1.546	35.3%	\$796,764	\$1,271,780	\$2,069,000
7/1/20-21	\$2,746,000	1.742	42.6%	\$1,169,428	\$1,319,139	\$2,489,000
7/1/21-22	\$3,104,000	2.192	54.4%	\$1,687,978	\$1,039,036	\$2,727,000
7/1/22-23	\$2,770,000	4.623	78.4%	\$2,170,771	\$297,735	\$2,469,000
<b>Total</b>	<b>\$82,923,000</b>			<b>\$16,097,779</b>	<b>\$67,628,249</b>	<b>\$83,728,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)



**Projection of Incremental Payments  
Workers Compensation**

Accident Period	Incremental Paid Losses							
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT
7/1/93-94	\$102,503	\$31,863	\$122,287	\$114,672	\$49,245	\$26,031	\$47,425	\$273,146
7/1/94-95	\$70,111	\$6,169	\$20,377	\$3,240	\$66,385	(\$39,213)	\$2,943	\$27,775
7/1/95-96	\$53,228	\$39,505	\$33,041	\$39,733	\$51,792	\$39,485	\$36,167	\$423,464
7/1/96-97	\$39,691	\$4,632	\$18,354	\$14,008	\$6,073	\$4,375	\$4,982	\$84,008
7/1/97-98	\$25,881	\$18,077	\$45,140	\$7,937	\$19,071	\$8,085	\$9,203	\$212,962
7/1/98-99	\$123,104	\$23,773	\$18,698	\$15,830	\$12,610	\$25,375	\$20,151	\$19,359
7/1/99-00	\$65,563	\$66,652	\$36,438	\$39,418	\$36,743	\$48,638	\$76,069	\$661,990
7/1/00-01	\$19,496	\$18,847	\$12,157	\$9,468	\$4,945	\$0	\$0	\$0
7/1/01-02	\$13,481	\$62,724	\$503	\$4,491	\$475	\$8,910	\$885	\$12,826
7/1/02-03	\$37,397	\$23,326	\$23,004	\$42,722	\$31,465	\$33,914	\$3,340	\$85,026
7/1/03-04	\$32,082	\$32,851	\$29,040	\$23,731	\$15,018	\$13,342	\$13,794	\$187,347
7/1/04-05	\$175,997	\$114,390	\$110,838	\$143,527	\$98,237	\$90,134	\$138,326	\$982,525
7/1/05-06	\$11,810	\$11,124	\$19,700	\$54,660	\$13,660	\$7,610	\$6,775	\$265,763
7/1/06-07	\$31,842	\$38,120	\$41,071	\$30,324	\$22,244	\$20,214	\$18,219	\$761,090
7/1/07-08	\$21,158	\$13,559	\$12,961	\$9,658	\$10,768	\$10,377	\$11,280	\$266,452
7/1/08-09	\$8,743	\$33,229	\$11,298	\$4,548	\$0	\$0	\$0	\$0
7/1/09-10	\$33,375	\$40,080	\$22,364	\$49,330	\$30,861	\$0	\$0	\$0
7/1/10-11	\$7,772	\$923	\$1,120	\$6,707	\$0	\$0	\$0	\$0
7/1/11-12	\$73,213	\$403,515	\$22,320	\$0	\$0	\$0	\$0	\$0
7/1/12-13	\$14,215	\$7,224	\$0	\$0	\$0	\$0	\$0	\$0
7/1/13-14	\$37,328	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/14-15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/15-16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/16-17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/17-18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/18-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/19-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/20-21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/21-22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/22-23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level								Trend Factor to 7/1/24-25
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/93-94	\$253	\$78	\$301	\$283	\$121	\$64	\$117	\$673	1.215
7/1/94-95	\$191	\$17	\$55	\$9	\$181	--	\$8	\$76	1.203
7/1/95-96	\$149	\$111	\$93	\$111	\$145	\$111	\$101	\$1,186	1.191
7/1/96-97	\$120	\$14	\$55	\$42	\$18	\$13	\$15	\$253	1.179
7/1/97-98	\$77	\$54	\$135	\$24	\$57	\$24	\$27	\$636	1.167
7/1/98-99	\$340	\$66	\$52	\$44	\$35	\$70	\$56	\$53	1.156
7/1/99-00	\$211	\$214	\$117	\$127	\$118	\$156	\$244	\$2,128	1.144
7/1/00-01	\$66	\$64	\$41	\$32	\$17	\$0	\$0	\$0	1.133
7/1/01-02	\$44	\$203	\$2	\$15	\$2	\$29	\$3	\$41	1.122
7/1/02-03	\$120	\$75	\$74	\$137	\$101	\$109	\$11	\$272	1.111
7/1/03-04	\$110	\$113	\$99	\$81	\$51	\$46	\$47	\$642	1.100
7/1/04-05	\$552	\$359	\$348	\$450	\$308	\$283	\$434	\$3,082	1.089
7/1/05-06	\$38	\$36	\$64	\$176	\$44	\$25	\$22	\$858	1.078
7/1/06-07	\$105	\$126	\$135	\$100	\$73	\$67	\$60	\$2,507	1.067
7/1/07-08	\$76	\$48	\$46	\$34	\$38	\$37	\$40	\$951	1.057
7/1/08-09	\$30	\$114	\$39	\$16	\$0	\$0	\$0	\$0	1.046
7/1/09-10	\$121	\$146	\$81	\$179	\$112	\$0	\$0	\$0	1.036
7/1/10-11	\$24	\$3	\$3	\$21	\$0	\$0	\$0	\$0	1.002
7/1/11-12	\$275	\$1,517	\$84	\$0	\$0	\$0	\$0	\$0	0.996
7/1/12-13	\$48	\$24	\$0	\$0	\$0	\$0	\$0	\$0	1.014
7/1/13-14	\$144	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.033
7/1/14-15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.057
7/1/15-16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.069
7/1/16-17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.074
7/1/17-18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.072
7/1/18-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.060
7/1/19-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.043
7/1/20-21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.026
7/1/21-22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.016
7/1/22-23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.010
<b>Average</b>	\$147	\$169	\$96	\$104	\$84	\$69	\$79	\$891	
<b>Avg Latest 5</b>	\$123	\$361	\$51	\$70	\$54	\$82	\$121	\$1,608	
<b>Prior</b>	\$133	\$141	\$120	\$107	\$88	\$88	\$75	\$1,061	
<b>All Agencies</b>	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$764	
<b>Selected</b>	\$140	\$140	\$112	\$105	\$93	\$88	\$75	\$1,044	

Accident Period	Projected Incremental Payments								Total Unpaid
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/07-08								\$292,514	\$293,000
7/1/08-09							\$21,903	\$304,423	\$326,000
7/1/09-10						\$24,102	\$20,671	\$287,306	\$332,000
7/1/10-11					\$29,954	\$28,076	\$24,079	\$334,675	\$417,000
7/1/11-12				\$27,907	\$24,862	\$23,303	\$19,986	\$277,781	\$374,000
7/1/12-13			\$33,369	\$31,126	\$27,729	\$25,991	\$22,291	\$309,822	\$450,000
7/1/13-14		\$36,181	\$29,064	\$27,110	\$24,152	\$22,638	\$19,415	\$269,850	\$366,000
7/1/14-15	\$30,223	\$30,203	\$24,262	\$22,631	\$20,162	\$18,898	\$16,208	\$225,268	\$388,000
7/1/15-16	\$26,208	\$26,191	\$21,039	\$19,624	\$17,483	\$16,387	\$14,054	\$195,341	\$373,000
7/1/16-17	\$29,231	\$29,211	\$23,465	\$21,888	\$19,499	\$18,277	\$15,675	\$217,870	\$458,000
7/1/17-18	\$35,952	\$35,929	\$28,861	\$26,921	\$23,983	\$22,480	\$19,280	\$267,970	\$675,000
7/1/18-19	\$29,485	\$29,466	\$23,669	\$22,078	\$19,669	\$18,436	\$15,812	\$219,766	\$666,000
7/1/19-20	\$26,329	\$26,312	\$21,136	\$19,715	\$17,564	\$16,463	\$14,119	\$196,244	\$706,000
7/1/20-21	\$24,046	\$24,030	\$19,303	\$18,006	\$16,041	\$15,035	\$12,895	\$179,226	\$779,000
7/1/21-22	\$29,163	\$29,144	\$23,411	\$21,837	\$19,455	\$18,235	\$15,639	\$217,368	\$1,201,000
7/1/22-23	\$26,392	\$26,375	\$21,187	\$19,762	\$17,606	\$16,503	\$14,153	\$196,714	\$1,632,000

**Estimation of Ultimate Losses  
Incremental Paid Method  
Workers Compensation**

(A) Accident Period	(B) Paid Losses As of 6/30/23	(C) Estimated Unpaid Losses	(D) Estimate Ultimate Losses
7/1/07-08	\$1,896,132	\$293,000	\$2,189,000
7/1/08-09	\$1,725,158	\$326,000	\$2,051,000
7/1/09-10	\$2,793,241	\$332,000	\$3,125,000
7/1/10-11	\$2,711,723	\$417,000	\$3,129,000
7/1/11-12	\$3,840,229	\$374,000	\$4,214,000
7/1/12-13	\$3,064,262	\$450,000	\$3,514,000
7/1/13-14	\$2,929,350	\$428,000	\$3,357,000
7/1/14-15	\$1,967,996	\$388,000	\$2,356,000
7/1/15-16	\$1,485,260	\$373,000	\$1,858,000
7/1/16-17	\$2,105,261	\$458,000	\$2,563,000
7/1/17-18	\$1,026,471	\$675,000	\$1,701,000
7/1/18-19	\$2,902,471	\$666,000	\$3,568,000
7/1/19-20	\$1,271,780	\$706,000	\$1,978,000
7/1/20-21	\$1,319,139	\$779,000	\$2,098,000
7/1/21-22	\$1,039,036	\$1,201,000	\$2,240,000
7/1/22-23	\$297,735	\$1,632,000	\$1,930,000
<b>Total</b>	<b>\$32,375,244</b>	<b>\$9,498,000</b>	<b>\$41,871,000</b>

Column (B): Exhibit 1  
Column (C): Exhibit 2-C, page 1 and 2  
Column (D) = (B) + (C)

**Summary and Selection of Ultimate Losses  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Previous Ultimate	Incurred Loss Development Method	Paid Loss Development Method	Incurred Bornhuetter- Ferguson Method	Paid Bornhuetter- Ferguson Method	Incremental Paid Method	Selected Ultimate Losses
7/1/93-94	\$3,128,000	\$3,137,000	\$3,385,000	\$3,137,000	\$3,366,000		\$3,128,000
7/1/94-95	\$1,828,000	\$1,834,000	\$1,983,000	\$1,834,000	\$1,971,000		\$1,828,000
7/1/95-96	\$3,041,000	\$3,122,000	\$3,378,000	\$3,121,000	\$3,351,000		\$3,122,000
7/1/96-97	\$1,625,000	\$1,624,000	\$1,745,000	\$1,624,000	\$1,735,000		\$1,624,000
7/1/97-98	\$2,172,000	\$2,182,000	\$2,277,000	\$2,182,000	\$2,268,000		\$2,182,000
7/1/98-99	\$1,827,000	\$1,837,000	\$2,004,000	\$1,837,000	\$1,988,000		\$1,827,000
7/1/99-00	\$3,616,000	\$3,638,000	\$3,980,000	\$3,638,000	\$3,947,000		\$3,616,000
7/1/00-01	\$2,322,000	\$2,338,000	\$2,565,000	\$2,338,000	\$2,542,000		\$2,322,000
7/1/01-02	\$1,590,000	\$1,587,000	\$1,738,000	\$1,587,000	\$1,723,000		\$1,587,000
7/1/02-03	\$3,047,000	\$3,075,000	\$3,314,000	\$3,074,000	\$3,286,000		\$3,075,000
7/1/03-04	\$2,043,000	\$2,039,000	\$2,142,000	\$2,039,000	\$2,131,000		\$2,039,000
7/1/04-05	\$5,439,000	\$5,588,000	\$5,326,000	\$5,586,000	\$5,339,000		\$5,588,000
7/1/05-06	\$2,029,000	\$2,023,000	\$2,049,000	\$2,023,000	\$2,047,000		\$2,023,000
7/1/06-07	\$3,544,000	\$3,532,000	\$3,112,000	\$3,532,000	\$3,164,000		\$3,532,000
7/1/07-08	\$2,301,000	\$2,205,000	\$2,171,000	\$2,206,000	\$2,188,000	\$2,189,000	\$2,205,000
7/1/08-09	\$1,773,000	\$1,765,000	\$1,991,000	\$1,765,000	\$1,962,000	\$2,051,000	\$1,765,000
7/1/09-10	\$3,140,000	\$3,176,000	\$3,251,000	\$3,175,000	\$3,236,000	\$3,125,000	\$3,176,000
7/1/10-11	\$2,838,000	\$3,004,000	\$3,188,000	\$2,998,000	\$3,135,000	\$3,129,000	\$3,004,000
7/1/11-12	\$4,381,000	\$4,310,000	\$4,566,000	\$4,313,000	\$4,536,000	\$4,214,000	\$4,381,000
7/1/12-13	\$3,543,000	\$3,373,000	\$3,692,000	\$3,381,000	\$3,666,000	\$3,514,000	\$3,524,000
7/1/13-14	\$3,851,000	\$3,780,000	\$3,585,000	\$3,784,000	\$3,633,000	\$3,357,000	\$3,780,000
7/1/14-15	\$2,414,000	\$2,274,000	\$2,454,000	\$2,284,000	\$2,446,000	\$2,356,000	\$2,365,000
7/1/15-16	\$1,941,000	\$1,918,000	\$1,895,000	\$1,920,000	\$1,905,000	\$1,858,000	\$1,913,000
7/1/16-17	\$2,814,000	\$3,266,000	\$2,765,000	\$3,216,000	\$2,777,000	\$2,563,000	\$3,216,000
7/1/17-18	\$1,540,000	\$1,391,000	\$1,400,000	\$1,412,000	\$1,437,000	\$1,701,000	\$1,425,000
7/1/18-19	\$4,260,000	\$4,213,000	\$4,166,000	\$4,222,000	\$4,195,000	\$3,568,000	\$4,209,000
7/1/19-20	\$2,256,000	\$1,780,000	\$1,966,000	\$1,887,000	\$2,069,000	\$1,978,000	\$2,069,000
7/1/20-21	\$2,746,000	\$2,217,000	\$2,298,000	\$2,369,000	\$2,489,000	\$2,098,000	\$2,489,000
7/1/21-22	\$3,104,000	\$2,173,000	\$2,278,000	\$2,513,000	\$2,727,000	\$2,240,000	\$2,620,000
7/1/22-23	\$3,250,000	\$1,752,000	\$1,376,000	\$2,218,000	\$2,469,000	\$1,930,000	\$2,344,000
<b>Total</b>	<b>\$83,403,000</b>	<b>\$80,153,000</b>	<b>\$82,040,000</b>	<b>\$81,215,000</b>	<b>\$83,728,000</b>	<b>\$41,871,000</b>	<b>\$81,978,000</b>

Column (B): Previous actuarial report

Columns (C), (D): Exhibit 2-A

Columns (E), (F): Exhibit 2-B

Column (G): Exhibit 2-C

Column (H): Reported losses for 93-94, 94-95, and 98-99 through 00-01

Column (C) for 95-96 through 97-98, 01-02 through 11-12, and 13-14

Average of (E) and (F) for 12-13, 14-15, 15-16, 17-18, 18-19, 21-22, and 22-23

Column (E) for 16-17

Column (F) for 19-20 and 20-21

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,127,684	\$3,127,715	\$3,127,684	0%	\$3,128,000	\$3,128,000	0%
7/1/94-95	\$1,827,846	\$1,827,862	\$1,827,846	0%	\$1,828,000	\$1,828,000	0%
7/1/95-96	\$3,027,272	\$3,028,674	\$3,110,221	3%	\$3,041,000	\$3,122,000	3%
7/1/96-97	\$1,616,925	\$1,617,771	\$1,616,925	0%	\$1,625,000	\$1,624,000	0%
7/1/97-98	\$2,171,766	\$2,171,791	\$2,171,766	0%	\$2,172,000	\$2,182,000	0%
7/1/98-99	\$1,826,851	\$1,826,868	\$1,826,851	0%	\$1,827,000	\$1,827,000	0%
7/1/99-00	\$3,616,019	\$3,616,017	\$3,616,019	0%	\$3,616,000	\$3,616,000	0%
7/1/00-01	\$2,322,003	\$2,322,003	\$2,322,003	0%	\$2,322,000	\$2,322,000	0%
7/1/01-02	\$1,574,785	\$1,576,629	\$1,574,785	0%	\$1,590,000	\$1,587,000	0%
7/1/02-03	\$3,047,102	\$3,047,089	\$3,047,102	0%	\$3,047,000	\$3,075,000	1%
7/1/03-04	\$2,017,605	\$2,020,886	\$2,017,605	0%	\$2,043,000	\$2,039,000	0%
7/1/04-05	\$5,361,116	\$5,371,520	\$5,521,591	3%	\$5,439,000	\$5,588,000	3%
7/1/05-06	\$1,995,058	\$1,999,750	\$1,995,058	0%	\$2,029,000	\$2,023,000	0%
7/1/06-07	\$3,475,145	\$3,485,003	\$3,475,145	0%	\$3,544,000	\$3,532,000	0%
7/1/07-08	\$2,248,957	\$2,256,682	\$2,162,583	-4%	\$2,301,000	\$2,205,000	-4%
7/1/08-09	\$1,725,158	\$1,732,528	\$1,725,158	0%	\$1,773,000	\$1,765,000	0%
7/1/09-10	\$3,039,421	\$3,055,513	\$3,091,481	1%	\$3,140,000	\$3,176,000	1%
7/1/10-11	\$2,728,697	\$2,746,876	\$2,907,561	6%	\$2,838,000	\$3,004,000	6%
7/1/11-12	\$4,135,437	\$4,177,922	\$4,143,663	-1%	\$4,381,000	\$4,381,000	0%
7/1/12-13	\$3,158,692	\$3,227,887	\$3,214,558	0%	\$3,543,000	\$3,524,000	-1%
7/1/13-14	\$3,582,038	\$3,632,437	\$3,562,713	-2%	\$3,851,000	\$3,780,000	-2%
7/1/14-15	\$2,134,191	\$2,188,730	\$2,113,300	-3%	\$2,414,000	\$2,365,000	-2%
7/1/15-16	\$1,730,170	\$1,772,858	\$1,748,919	-1%	\$1,941,000	\$1,913,000	-1%
7/1/16-17	\$2,473,521	\$2,544,938	\$2,905,008	14%	\$2,814,000	\$3,216,000	14%
7/1/17-18	\$1,171,555	\$1,251,230	\$1,197,544	-4%	\$1,540,000	\$1,425,000	-7%
7/1/18-19	\$3,534,744	\$3,695,167	\$3,468,062	-6%	\$4,260,000	\$4,209,000	-1%
7/1/19-20	\$1,389,972	\$1,583,473	\$1,378,639	-13%	\$2,256,000	\$2,069,000	-8%
7/1/20-21	\$1,335,555	\$1,647,714	\$1,579,378	-4%	\$2,746,000	\$2,489,000	-9%
7/1/21-22	\$1,610,294	\$1,928,151	\$1,380,537	-28%	\$3,104,000	\$2,620,000	-16%
7/1/22-23	--	\$1,710,320	\$950,731	-44%	\$3,250,000	\$2,344,000	-28%
<b>Total</b>	<b>\$73,005,581</b>	<b>\$76,192,003</b>	<b>\$74,780,436</b>	<b>-1.9%</b>	<b>\$83,403,000</b>	<b>\$81,978,000</b>	<b>-1.7%</b>
		<i>Variance in Incurred</i>	<b>(\$1,411,568)</b>		<i>Change in Ultimates</i>	<b>(\$1,425,000)</b>	

Columns (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1



**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$3,127,684	\$3,127,693	\$3,127,684	0%	\$3,128,000	\$3,128,000	0%
7/1/94-95	\$1,827,846	\$1,827,851	\$1,827,846	0%	\$1,828,000	\$1,828,000	0%
7/1/95-96	\$2,963,451	\$2,965,792	\$3,105,721	5%	\$3,041,000	\$3,122,000	3%
7/1/96-97	\$1,598,116	\$1,598,956	\$1,600,402	0%	\$1,625,000	\$1,624,000	0%
7/1/97-98	\$2,076,629	\$2,079,719	\$2,082,147	0%	\$2,172,000	\$2,182,000	0%
7/1/98-99	\$1,826,851	\$1,826,856	\$1,826,851	0%	\$1,827,000	\$1,827,000	0%
7/1/99-00	\$3,616,019	\$3,616,019	\$3,616,019	0%	\$3,616,000	\$3,616,000	0%
7/1/00-01	\$2,322,003	\$2,322,003	\$2,322,003	0%	\$2,322,000	\$2,322,000	0%
7/1/01-02	\$1,565,227	\$1,566,167	\$1,567,053	0%	\$1,590,000	\$1,587,000	0%
7/1/02-03	\$2,973,550	\$2,976,463	\$2,975,941	0%	\$3,047,000	\$3,075,000	1%
7/1/03-04	\$1,895,192	\$1,901,329	\$1,914,766	1%	\$2,043,000	\$2,039,000	0%
7/1/04-05	\$4,665,427	\$4,699,129	\$4,737,835	1%	\$5,439,000	\$5,588,000	3%
7/1/05-06	\$1,743,573	\$1,756,653	\$1,812,883	3%	\$2,029,000	\$2,023,000	0%
7/1/06-07	\$2,714,055	\$2,754,168	\$2,735,854	-1%	\$3,544,000	\$3,532,000	0%
7/1/07-08	\$1,884,851	\$1,906,131	\$1,896,132	-1%	\$2,301,000	\$2,205,000	-4%
7/1/08-09	\$1,725,158	\$1,727,755	\$1,725,158	0%	\$1,773,000	\$1,765,000	0%
7/1/09-10	\$2,762,380	\$2,784,227	\$2,793,241	0%	\$3,140,000	\$3,176,000	1%
7/1/10-11	\$2,705,016	\$2,713,251	\$2,711,723	0%	\$2,838,000	\$3,004,000	6%
7/1/11-12	\$3,817,909	\$3,855,426	\$3,840,229	0%	\$4,381,000	\$4,381,000	0%
7/1/12-13	\$3,057,038	\$3,092,081	\$3,064,262	-1%	\$3,543,000	\$3,524,000	-1%
7/1/13-14	\$2,892,022	\$2,967,382	\$2,929,350	-1%	\$3,851,000	\$3,780,000	-2%
7/1/14-15	\$1,962,072	\$2,001,097	\$1,967,996	-2%	\$2,414,000	\$2,365,000	-2%
7/1/15-16	\$1,452,921	\$1,499,714	\$1,485,260	-1%	\$1,941,000	\$1,913,000	-1%
7/1/16-17	\$2,032,704	\$2,116,932	\$2,105,261	-1%	\$2,814,000	\$3,216,000	14%
7/1/17-18	\$1,035,302	\$1,097,480	\$1,026,471	-6%	\$1,540,000	\$1,425,000	-7%
7/1/18-19	\$2,564,367	\$2,808,375	\$2,902,471	3%	\$4,260,000	\$4,209,000	-1%
7/1/19-20	\$1,145,347	\$1,337,987	\$1,271,780	-5%	\$2,256,000	\$2,069,000	-8%
7/1/20-21	\$1,164,044	\$1,511,323	\$1,319,139	-13%	\$2,746,000	\$2,489,000	-9%
7/1/21-22	\$496,679	\$1,293,215	\$1,039,036	-20%	\$3,104,000	\$2,620,000	-16%
7/1/22-23	--	\$703,421	\$297,735	-58%	\$3,250,000	\$2,344,000	-28%
<b>Total</b>	<b>\$65,613,434</b>	<b>\$68,434,597</b>	<b>\$67,628,249</b>	<b>-1.2%</b>	<b>\$83,403,000</b>	<b>\$81,978,000</b>	<b>-1.7%</b>
		<b>Variance in Paid</b>	<b>(\$806,348)</b>		<b>Change in Ultimates</b>	<b>(\$1,425,000)</b>	

Columns (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Incurred Losses	(D) Paid Losses	(E) Case Reserves	(F) IBNR Reserves	(G) Total Required Reserves	(H) Discount Factor at 4.0%	(I) Total Discounted Reserves at 4.0%
7/1/93-94	\$3,128,000	\$3,127,684	\$3,127,684	\$0	\$0	\$0	1.000	\$0
7/1/94-95	\$1,828,000	\$1,827,846	\$1,827,846	\$0	\$0	\$0	0.981	\$0
7/1/95-96	\$3,122,000	\$3,110,221	\$3,105,721	\$4,500	\$12,000	\$16,000	0.944	\$15,000
7/1/96-97	\$1,624,000	\$1,616,925	\$1,600,402	\$16,523	\$7,000	\$24,000	0.910	\$22,000
7/1/97-98	\$2,182,000	\$2,171,766	\$2,082,147	\$89,619	\$10,000	\$100,000	0.878	\$88,000
7/1/98-99	\$1,827,000	\$1,826,851	\$1,826,851	\$0	\$0	\$0	0.849	\$0
7/1/99-00	\$3,616,000	\$3,616,019	\$3,616,019	\$0	\$0	\$0	0.821	\$0
7/1/00-01	\$2,322,000	\$2,322,003	\$2,322,003	\$0	\$0	\$0	0.796	\$0
7/1/01-02	\$1,587,000	\$1,574,785	\$1,567,053	\$7,732	\$12,000	\$20,000	0.773	\$15,000
7/1/02-03	\$3,075,000	\$3,047,102	\$2,975,941	\$71,161	\$28,000	\$99,000	0.752	\$74,000
7/1/03-04	\$2,039,000	\$2,017,605	\$1,914,766	\$102,839	\$21,000	\$124,000	0.733	\$91,000
7/1/04-05	\$5,588,000	\$5,521,591	\$4,737,835	\$783,757	\$66,000	\$850,000	0.716	\$609,000
7/1/05-06	\$2,023,000	\$1,995,058	\$1,812,883	\$182,176	\$28,000	\$210,000	0.701	\$147,000
7/1/06-07	\$3,532,000	\$3,475,145	\$2,735,854	\$739,292	\$57,000	\$796,000	0.688	\$548,000
7/1/07-08	\$2,205,000	\$2,162,583	\$1,896,132	\$266,452	\$42,000	\$309,000	0.676	\$209,000
7/1/08-09	\$1,765,000	\$1,725,158	\$1,725,158	\$0	\$40,000	\$40,000	0.667	\$27,000
7/1/09-10	\$3,176,000	\$3,091,481	\$2,793,241	\$298,240	\$85,000	\$383,000	0.659	\$252,000
7/1/10-11	\$3,004,000	\$2,907,561	\$2,711,723	\$195,838	\$96,000	\$292,000	0.653	\$191,000
7/1/11-12	\$4,381,000	\$4,143,663	\$3,840,229	\$303,433	\$237,000	\$541,000	0.650	\$351,000
7/1/12-13	\$3,524,000	\$3,214,558	\$3,064,262	\$150,297	\$309,000	\$460,000	0.648	\$298,000
7/1/13-14	\$3,780,000	\$3,562,713	\$2,929,350	\$633,362	\$217,000	\$851,000	0.648	\$551,000
7/1/14-15	\$2,365,000	\$2,113,300	\$1,967,996	\$145,304	\$252,000	\$397,000	0.651	\$258,000
7/1/15-16	\$1,913,000	\$1,748,919	\$1,485,260	\$263,659	\$164,000	\$428,000	0.655	\$281,000
7/1/16-17	\$3,216,000	\$2,905,008	\$2,105,261	\$799,747	\$311,000	\$1,111,000	0.663	\$737,000
7/1/17-18	\$1,425,000	\$1,197,544	\$1,026,471	\$171,073	\$227,000	\$399,000	0.674	\$269,000
7/1/18-19	\$4,209,000	\$3,468,062	\$2,902,471	\$565,591	\$741,000	\$1,307,000	0.688	\$899,000
7/1/19-20	\$2,069,000	\$1,378,639	\$1,271,780	\$106,859	\$690,000	\$797,000	0.707	\$563,000
7/1/20-21	\$2,489,000	\$1,579,378	\$1,319,139	\$260,239	\$910,000	\$1,170,000	0.731	\$855,000
7/1/21-22	\$2,620,000	\$1,380,537	\$1,039,036	\$341,501	\$1,239,000	\$1,581,000	0.763	\$1,206,000
7/1/22-23	\$2,344,000	\$950,731	\$297,735	\$652,996	\$1,393,000	\$2,046,000	0.809	\$1,656,000
<b>Total</b>	<b>\$81,978,000</b>	<b>\$74,780,436</b>	<b>\$67,628,249</b>	<b>\$7,152,187</b>	<b>\$7,194,000</b>	<b>\$14,351,000</b>		<b>\$10,212,000</b>

Column (B): Exhibit 3-A  
Columns (C), (D): Exhibit 1  
Column (E) = (C) - (D)  
Column (F) = (B) - (C)  
Column (G) = (B) - (D)  
Column (H): Appendix B  
Column (I) = (G) \* (H)

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$3,128,000	\$3,128,000	\$3,139,000	\$3,147,000	\$3,164,000
7/1/94-95	\$1,828,000	\$1,828,000	\$1,836,000	\$1,842,000	\$1,854,000
7/1/95-96	\$3,122,000	\$3,122,000	\$3,139,000	\$3,151,000	\$3,179,000
7/1/96-97	\$1,624,000	\$1,624,000	\$1,635,000	\$1,643,000	\$1,661,000
7/1/97-98	\$2,182,000	\$2,182,000	\$2,199,000	\$2,211,000	\$2,239,000
7/1/98-99	\$1,827,000	\$1,826,000	\$1,843,000	\$1,856,000	\$1,882,000
7/1/99-00	\$3,616,000	\$3,615,000	\$3,654,000	\$3,684,000	\$3,747,000
7/1/00-01	\$2,322,000	\$2,321,000	\$2,350,000	\$2,373,000	\$2,421,000
7/1/01-02	\$1,587,000	\$1,585,000	\$1,613,000	\$1,635,000	\$1,680,000
7/1/02-03	\$3,075,000	\$3,071,000	\$3,134,000	\$3,183,000	\$3,288,000
7/1/03-04	\$2,039,000	\$2,036,000	\$2,080,000	\$2,113,000	\$2,185,000
7/1/04-05	\$5,588,000	\$5,578,000	\$5,708,000	\$5,808,000	\$6,023,000
7/1/05-06	\$2,023,000	\$2,018,000	\$2,072,000	\$2,113,000	\$2,201,000
7/1/06-07	\$3,532,000	\$3,523,000	\$3,619,000	\$3,693,000	\$3,852,000
7/1/07-08	\$2,205,000	\$2,197,000	\$2,272,000	\$2,330,000	\$2,458,000
7/1/08-09	\$1,765,000	\$1,756,000	\$1,824,000	\$1,877,000	\$1,992,000
7/1/09-10	\$3,176,000	\$3,159,000	\$3,287,000	\$3,387,000	\$3,606,000
7/1/10-11	\$3,004,000	\$2,986,000	\$3,116,000	\$3,218,000	\$3,442,000
7/1/11-12	\$4,381,000	\$4,351,000	\$4,551,000	\$4,708,000	\$5,053,000
7/1/12-13	\$3,524,000	\$3,497,000	\$3,669,000	\$3,803,000	\$4,103,000
7/1/13-14	\$3,780,000	\$3,750,000	\$3,937,000	\$4,084,000	\$4,410,000
7/1/14-15	\$2,365,000	\$2,345,000	\$2,465,000	\$2,560,000	\$2,769,000
7/1/15-16	\$1,913,000	\$1,891,000	\$2,006,000	\$2,097,000	\$2,301,000
7/1/16-17	\$3,216,000	\$3,174,000	\$3,378,000	\$3,539,000	\$3,904,000
7/1/17-18	\$1,425,000	\$1,405,000	\$1,499,000	\$1,574,000	\$1,744,000
7/1/18-19	\$4,209,000	\$4,141,000	\$4,440,000	\$4,679,000	\$5,222,000
7/1/19-20	\$2,069,000	\$2,032,000	\$2,186,000	\$2,310,000	\$2,593,000
7/1/20-21	\$2,489,000	\$2,424,000	\$2,649,000	\$2,832,000	\$3,258,000
7/1/21-22	\$2,620,000	\$2,517,000	\$2,807,000	\$3,047,000	\$3,619,000
7/1/22-23	\$2,344,000	\$2,214,000	\$2,522,000	\$2,781,000	\$3,414,000
(1) All Years*	\$81,978,000	\$81,912,000	\$82,657,000	\$83,267,000	\$84,524,000
(2) Total Paid Losses		\$67,628,249			

<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(3) All Years*	\$14,351,000	\$14,284,000	\$15,029,000	\$15,639,000	\$16,896,000

<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(4) All Years*	\$10,212,000	\$10,164,000	\$10,694,000	\$11,129,000	\$12,023,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Estimated Ultimate Claim Counts, Average Claim Size, and Cost Per \$100 Payroll  
Workers Compensation**

(A) Accident Period	(B) Number of Claims	(C) Claim Development Factor	(D) Estimated Ultimate Claims	(E) Estimated Ultimate Losses	(F) Severity*	(G) Estimated Fiscal Year Payroll (Hundreds)	(H) Claims Per \$1 Million Payroll	(I) Cost Per \$100 Payroll
7/1/93-94	493	1.000	493	\$3,128,000	\$6,300	--	--	--
7/1/94-95	442	1.000	442	\$1,828,000	\$4,100	--	--	--
7/1/95-96	425	1.000	425	\$3,122,000	\$7,300	--	--	--
7/1/96-97	391	1.000	391	\$1,624,000	\$4,200	--	--	--
7/1/97-98	391	1.000	391	\$2,182,000	\$5,600	--	--	--
7/1/98-99	419	1.000	419	\$1,827,000	\$4,400	--	--	--
7/1/99-00	356	1.000	356	\$3,616,000	\$10,200	--	--	--
7/1/00-01	334	1.000	334	\$2,322,000	\$7,000	--	--	--
7/1/01-02	347	1.000	347	\$1,587,000	\$4,600	--	--	--
7/1/02-03	347	1.000	347	\$3,075,000	\$8,900	--	--	--
7/1/03-04	321	1.000	321	\$2,039,000	\$6,400	--	--	--
7/1/04-05	347	1.000	347	\$5,588,000	\$16,100	--	--	--
7/1/05-06	334	1.000	334	\$2,023,000	\$6,100	--	--	--
7/1/06-07	324	1.000	324	\$3,532,000	\$10,900	--	--	--
7/1/07-08	296	1.000	296	\$2,205,000	\$7,400	--	--	--
7/1/08-09	305	1.000	305	\$1,765,000	\$5,800	--	--	--
7/1/09-10	285	1.000	285	\$3,176,000	\$11,100	\$1,409,885	2.0	\$2.25
7/1/10-11	321	1.000	321	\$3,004,000	\$9,400	\$1,377,571	2.3	\$2.18
7/1/11-12	265	1.000	265	\$4,381,000	\$16,500	\$1,328,788	2.0	\$3.30
7/1/12-13	301	1.000	301	\$3,524,000	\$11,700	\$1,282,516	2.3	\$2.75
7/1/13-14	267	1.000	267	\$3,780,000	\$14,200	\$1,299,389	2.1	\$2.91
7/1/14-15	228	1.000	228	\$2,365,000	\$10,400	\$1,318,213	1.7	\$1.79
7/1/15-16	200	1.000	200	\$1,913,000	\$9,600	\$1,325,938	1.5	\$1.44
7/1/16-17	224	1.000	224	\$3,216,000	\$14,400	\$1,331,152	1.7	\$2.42
7/1/17-18	275	1.000	275	\$1,425,000	\$5,200	\$1,356,325	2.0	\$1.05
7/1/18-19	223	1.000	223	\$4,209,000	\$18,900	\$1,657,655	1.3	\$2.54
7/1/19-20	196	1.000	196	\$2,069,000	\$10,600	\$1,932,766	1.0	\$1.07
7/1/20-21	176	1.001	176	\$2,489,000	\$14,100	\$1,952,671	0.9	\$1.27
7/1/21-22	211	1.002	211	\$2,620,000	\$12,400	\$1,958,743	1.1	\$1.34
7/1/22-23	186	1.023	190	\$2,344,000	\$12,300	\$2,053,164	0.9	\$1.14
<b>Total</b>	<b>9,230</b>		<b>9,235</b>	<b>\$81,978,000</b>	<b>\$8,900</b>	<b>\$21,584,776</b>	<b>1.6</b>	<b>\$1.88</b>

\* Estimated ultimate average claim size

Columns (B), (G): Exhibit 1

Column (C): Appendix A3

Column (D) = (B) \* (C)

Column (E): Exhibit 3-A

Column (F) = (E) / (D)

Column (G): Exhibit 1

Column (H) = (D) / (G) \* 10,000

Column (I) = (E) / (G)



**Analysis of Reported Loss Development  
Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$2,951	\$2,934			\$3,070	\$3,102	\$3,393	\$3,220	\$3,220	\$3,220	\$3,172	\$3,172	\$3,172	\$3,172	\$3,172
7/1/94-95	\$1,941	\$1,941		\$1,943	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893
7/1/95-96	\$2,951	\$2,949	\$2,967	\$2,946	\$3,446	\$3,403	\$3,425	\$3,295	\$3,134	\$3,137	\$3,143	\$3,162	\$3,166	\$3,249	
7/1/96-97	\$1,747	\$1,747	\$1,741	\$1,763	\$1,660	\$1,685	\$1,707	\$1,618	\$1,621	\$1,622	\$1,622	\$1,622	\$1,634		
7/1/97-98	\$2,048	\$2,023	\$2,183	\$2,258	\$2,263	\$2,258	\$2,341	\$2,341	\$2,224	\$2,224	\$2,224	\$2,224			
7/1/98-99	\$1,864	\$2,258	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875				
7/1/99-00	\$3,530	\$3,474	\$3,764	\$3,724	\$4,057	\$3,771	\$3,774	\$3,774	\$3,774	\$3,774	\$3,774				
7/1/00-01	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434						
7/1/01-02	\$1,658	\$1,608	\$1,608	\$1,608	\$1,608	\$1,589	\$1,599	\$1,599							
7/1/02-03	\$3,584	\$3,079	\$3,074	\$3,074	\$3,074	\$3,054	\$3,054								
7/1/03-04	\$2,107	\$2,073	\$2,098	\$2,098	\$2,108	\$2,108									
7/1/04-05	\$5,492	\$5,524	\$5,483	\$5,501	\$5,662										
7/1/05-06	\$1,994	\$2,098	\$2,098	\$2,098											
7/1/06-07	\$3,728	\$3,731	\$3,731												
7/1/07-08	\$2,297	\$2,211													
7/1/08-09	\$1,809														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:*														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	0.994				1.010	--	0.949	1.000	1.000	0.985	1.000	1.000	1.000	1.000	
7/1/94-95	1.000			0.974	--	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/95-96	0.999	1.006	0.993	--	0.988	1.006	0.962	0.951	1.001	1.002	1.006	1.001	1.026		
7/1/96-97	1.000	0.997	--	0.942	1.015	1.013	0.948	1.002	1.001	1.000	1.007	1.000			
7/1/97-98	0.988	--	1.034	1.002	0.998	1.037	1.000	0.950	1.000	1.000	1.000				
7/1/98-99	--	0.831	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/99-00	0.984	1.083	0.989	1.089	1.000	1.001	1.000	1.000	1.000						
7/1/00-01	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
7/1/01-02	0.970	1.000	1.000	1.000	0.988	1.006	1.000								
7/1/02-03	0.859	0.998	1.000	1.000	0.993	1.000									
7/1/03-04	0.984	1.012	1.000	1.005	1.000										
7/1/04-05	1.006	0.993	1.003	1.029											
7/1/05-06	1.052	1.000	1.000												
7/1/06-07	1.001	1.000													
7/1/07-08	0.962														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	0.986	0.993	1.002	1.004	0.992	1.007	0.984	0.988	1.000	0.998	1.003	1.000	1.009	1.000	
<b>Avg Latest 3</b>	1.005	0.998	1.001	1.011	0.994	1.002	1.000	1.000	1.000	1.000	1.004	1.000	1.009		
<b>Avg Latest 5</b>	1.001	1.001	1.001	1.007	0.982	1.001	1.000	0.990	1.000	1.000	1.003				
<b>Wtd Avg</b>	0.983	0.997	1.001	1.014	0.988	1.006	0.983	0.987	1.000	0.997	1.003	1.000	1.010	1.000	
<b>Wtd Avg Latest 3</b>	1.002	0.996	1.002	1.016	0.994	1.001	1.000	1.000	1.000	1.000	1.004	1.001	1.010		
<b>Wtd Avg Latest 5</b>	1.001	0.999	1.001	1.012	0.976	1.001	1.000	0.990	1.000	1.001	1.003				
<b>State (All Agencies)</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior</b>	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior Implied</b>	1.004	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<b>Industry**</b>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.003	1.002	1.002	1.002	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Cumulative</b>	1.022	1.019	1.018	1.016	1.014	1.013	1.012	1.011	1.011	1.011	1.010	1.010	1.010	1.010	1.010

\* Age to age development not shown on one diagonal due to change in reserving methodology

\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Estimation of Cumulative Reported Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.937	-4.8569	-0.0650	23.590	0.0042	0.3157	360	1.003
24	1.556	-4.9461	-0.5874	24.464	0.3450	2.9052	348	1.003
36	1.359	-5.0280	-1.0251	25.281	1.0508	5.1541	336	1.004
48	1.275	-5.1037	-1.2923	26.048	1.6702	6.5957	324	1.004
60	1.213	-5.1740	-1.5483	26.771	2.3972	8.0109	312	1.005
72	1.163	-5.2398	-1.8133	27.455	3.2882	9.5014	300	1.005
84	1.121	-5.3014	-2.1113	28.105	4.4576	11.1929	288	1.006
96	1.100	-5.3595	-2.2995	28.725	5.2877	12.3242	276	1.007
108	1.082	-5.4144	-2.4954	29.316	6.2271	13.5113	264	1.008
120	1.067	-5.4665	-2.7057	29.882	7.3211	14.7909	252	1.009
132	1.051	-5.5160	-2.9749	30.426	8.8498	16.4092	240	1.010
144	1.041	-5.5631	-3.1968	30.948	10.2193	17.7838	228	1.012
156	1.031	-5.6081	-3.4871	31.451	12.1600	19.5562	216	1.014
168	1.026	-5.6512	-3.6313	31.936	13.1861	20.5209	204	1.016
180	1.022	-5.6925	-3.7990	32.404	14.4324	21.6257	192	1.019
							180	1.023
							168	1.027
							156	1.033
							144	1.040
							132	1.049
							120	1.061
							108	1.076
							96	1.097
							84	1.124
							72	1.162
							60	1.215
							48	1.291
							36	1.403
							24	1.574
							12	1.843
Sum		-79.9212	-33.0324	426.8005	90.8965	180.1982		
Average		-5.3281	-2.2022	28.4534	6.0598	12.0132		

N =	15		
A =	1.04E+09		
B =	4.310	R^2 =	0.99691
C =	117		

\* Appendix A1, page 1





**Analysis of Paid Loss Development  
Workers Compensation**

Year	Gross Paid Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$2,852	\$2,899			\$3,015	\$3,052	\$3,116	\$3,151	\$3,166	\$3,172	\$3,172	\$3,172	\$3,172	\$3,172	\$3,172
7/1/94-95	\$1,863	\$1,865		\$1,942	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893	\$1,893
7/1/95-96	\$2,789	\$2,825	\$2,862	\$2,887	\$2,910	\$2,932	\$2,975	\$2,993	\$3,008	\$3,014	\$3,021	\$3,031	\$3,102	\$3,244	
7/1/96-97	\$1,545	\$1,550	\$1,554	\$1,560	\$1,561	\$1,565	\$1,568	\$1,607	\$1,610	\$1,612	\$1,612	\$1,615	\$1,618		
7/1/97-98	\$2,002	\$2,011	\$2,027	\$2,058	\$2,072	\$2,085	\$2,097	\$2,111	\$2,116	\$2,122	\$2,129	\$2,134			
7/1/98-99	\$1,836	\$1,856	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875	\$1,875				
7/1/99-00	\$3,036	\$3,112	\$3,305	\$3,356	\$3,410	\$3,771	\$3,774	\$3,774	\$3,774	\$3,774					
7/1/00-01	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434	\$2,434						
7/1/01-02	\$1,585	\$1,586	\$1,587	\$1,587	\$1,588	\$1,589	\$1,589	\$1,591							
7/1/02-03	\$2,966	\$2,969	\$2,972	\$2,976	\$2,978	\$2,981	\$2,983								
7/1/03-04	\$1,907	\$1,920	\$1,940	\$1,970	\$1,985	\$2,005									
7/1/04-05	\$4,541	\$4,679	\$4,720	\$4,806	\$4,878										
7/1/05-06	\$1,825	\$1,832	\$1,846	\$1,916											
7/1/06-07	\$2,952	\$2,970	\$2,992												
7/1/07-08	\$1,933	\$1,945													
7/1/08-09	\$1,809														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.017				1.012	1.021	1.011	1.005	1.002	1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95	1.002			0.975	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/95-96	1.013	1.013	1.009	1.008	1.007	1.015	1.006	1.005	1.002	1.002	1.003	1.023	1.046		
7/1/96-97	1.003	1.002	1.004	1.001	1.003	1.002	1.025	1.002	1.001	1.000	1.002	1.001			
7/1/97-98	1.005	1.008	1.015	1.007	1.006	1.006	1.007	1.002	1.003	1.003	1.003				
7/1/98-99	1.011	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/99-00	1.025	1.062	1.015	1.016	1.106	1.001	1.000	1.000	1.000						
7/1/00-01	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
7/1/01-02	1.001	1.001	1.000	1.000	1.000	1.000	1.001								
7/1/02-03	1.001	1.001	1.001	1.001	1.001	1.001									
7/1/03-04	1.007	1.010	1.016	1.008	1.010										
7/1/04-05	1.030	1.009	1.018	1.015											
7/1/05-06	1.004	1.008	1.038												
7/1/06-07	1.006	1.007													
7/1/07-08	1.006														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	1.009	1.011	1.011	1.003	1.013	1.005	1.006	1.002	1.001	1.001	1.002	1.006	1.015	1.000	
<b>Avd Latest 5</b>	1.011	1.007	1.015	1.005	1.023	1.000	1.002	1.001	1.001	1.001	1.002				
<b>Wtd Avg</b>	1.011	1.012	1.011	1.005	1.018	1.005	1.005	1.002	1.001	1.001	1.002	1.008	1.017	1.000	
<b>Wtd Avg Latest 5</b>	1.014	1.007	1.014	1.007	1.031	1.000	1.001	1.001	1.001	1.001	1.002				
<b>State (All Agencies)</b>	1.012	1.010	1.008	1.008	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Prior</b>	1.012	1.008	1.008	1.007	1.006	1.006	1.006	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.060
<b>Industry*</b>	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.052
<b>Selected</b>	1.012	1.010	1.009	1.008	1.007	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Cumulative</b>	1.148	1.134	1.123	1.113	1.104	1.097	1.090	1.084	1.079	1.074	1.070	1.068	1.065	1.062	1.060

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Estimation of Cumulative Paid Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	4.642	-1.5494	1.2924	2.401	1.6704	-2.0025	360	1.082
24	2.140	-2.8159	0.1311	7.929	0.0172	-0.3691	348	1.085
36	1.728	-3.3572	-0.3171	11.271	0.1006	1.0646	336	1.088
48	1.555	-3.7064	-0.5890	13.738	0.3469	2.1831	324	1.091
60	1.450	-3.9648	-0.7988	15.719	0.6381	3.1670	312	1.094
72	1.361	-4.1699	-1.0198	17.388	1.0401	4.2526	300	1.097
84	1.310	-4.3400	-1.1720	18.836	1.3735	5.0864	288	1.101
96	1.279	-4.4854	-1.2779	20.118	1.6331	5.7320	276	1.105
108	1.250	-4.6122	-1.3878	21.273	1.9260	6.4009	264	1.109
120	1.231	-4.7248	-1.4668	22.324	2.1516	6.9305	252	1.113
132	1.212	-4.8260	-1.5518	23.290	2.4080	7.4888	240	1.119
144	1.195	-4.9179	-1.6340	24.185	2.6699	8.0357	228	1.124
156	1.179	-5.0020	-1.7196	25.020	2.9571	8.6016	216	1.130
168	1.163	-5.0796	-1.8117	25.802	3.2822	9.2026	204	1.137
180	1.148	-5.1516	-1.9096	26.539	3.6466	9.8376	192	1.145
192	1.134	-5.2188	-2.0075	27.236	4.0299	10.4764	180	1.154
							168	1.164
							156	1.175
							144	1.189
							132	1.205
							120	1.224
							108	1.247
							96	1.276
							84	1.313
							72	1.364
							60	1.435
							48	1.546
							36	1.742
							24	2.192
							12	4.623
Sum		-67.9219	-17.2399	303.0692	29.8911	86.0882		
Average		-4.2451	-1.0775	18.9418	1.8682	5.3805		

N =	16		
A =	1.40E+01		
B =	0.876	R^2 =	0.99866
C =	-7		

\* Appendix A2, page 1

**Analysis of Reported Claim Development  
Workers Compensation**

Year	Reported Claims as of (Months):											
	12	24	36	48	60	72	84	96	108	120	132	144
7/1/93-94								493	493	493	493	493
7/1/94-95						442	442	442	442	442	442	442
7/1/95-96					424	424	424	425	425	425	425	425
7/1/96-97				389	389	389	391	391	391	391	391	391
7/1/97-98			391	391	391	391	391	391	391	391	391	391
7/1/98-99		420	419	419	419	419	419	419	419	419	419	419
7/1/99-00	343	355	356	356	356	356	356	356	356	356	356	356
7/1/00-01	314	332	334	334	334	334	334	334	334	334	334	334
7/1/01-02	334	347	347	347	347	347	347	347	347	347	347	347
7/1/02-03	338	346	347	347	347	347	347	347	347	347	347	347
7/1/03-04	308	321	321	321	321	321	321	321	321	321	321	321
7/1/04-05	336	347	347	347	347	347	347	347	347	347	347	347
7/1/05-06	326	335	335	334	334	334	334	334	334	334	334	334
7/1/06-07	318	334	324	324	324	324	324	324	324	324	324	324
7/1/07-08	289	295	296	296	296	296	296	296	296	296	296	296
7/1/08-09	300	305	305	305	305	305	305	305	305	305	305	305
7/1/09-10	275	285	285	285	285	285	285	285	285	285	285	285
7/1/10-11	317	321	321	321	321	321	321	321	321	321	321	321
7/1/11-12	261	265	265	265	265	265	265	265	265	265	265	265
7/1/12-13	292	301	301	301	301	301	301	301	301	301	301	301
7/1/13-14	257	265	267	267	267	267	267	267	267	267	267	267
7/1/14-15	224	228	228	228	228	228	228	228	228	228	228	228
7/1/15-16	194	198	198	200	200	200	200	200	200	200	200	200
7/1/16-17	220	223	223	223	223	223	224	224	224	224	224	224
7/1/17-18	272	275	275	275	275	275	275	275	275	275	275	275
7/1/18-19	217	222	223	223	223	223	223	223	223	223	223	223
7/1/19-20	193	196	196	196	196	196	196	196	196	196	196	196
7/1/20-21	172	176	176	176	176	176	176	176	176	176	176	176
7/1/21-22	210	211	211	211	211	211	211	211	211	211	211	211
7/1/22-23	186											

Year	Age to age development:											
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:ULT
7/1/93-94							1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95						1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/95-96					1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000
7/1/96-97				1.000	1.000	1.005	1.000	1.000	1.000	1.000	1.000	1.000
7/1/97-98			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/98-99		0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/99-00	1.035	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/00-01	1.057	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/01-02	1.039	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/02-03	1.024	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/03-04	1.042	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/04-05	1.033	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/05-06	1.028	1.000	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/06-07	1.050	0.970	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/07-08	1.021	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/08-09	1.017	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/09-10	1.036	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/10-11	1.013	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/11-12	1.015	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/12-13	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/13-14	1.031	1.008	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/14-15	1.018	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/15-16	1.021	1.000	1.010	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/16-17	1.014	1.000	1.000	1.000	1.000	1.004	1.004	1.004	1.004	1.004	1.004	1.004
7/1/17-18	1.011	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/18-19	1.023	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/19-20	1.016	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/20-21	1.023	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/21-22	1.005											
<b>Average</b>	1.026	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Avg Latest 5</b>	1.016	1.001	1.002	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<b>Wtd Avg</b>	1.027	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Wtd Avg Latest 5</b>	1.015	1.001	1.002	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<b>State (All Agencies)</b>	1.018	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Prior</b>	1.022	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Industry*</b>	1.083	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.020	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Cumulative</b>	1.023	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

\* Based on experience of several large carriers

**Estimation of Cumulative Reported Claim Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.023	-2.0930	-3.7779	4.381	14.2722	7.9070	360	1.000
24	1.002	-3.0012	-6.0629	9.007	36.7585	18.1957	348	1.000
36	1.001	-3.4691	-7.2403	12.035	52.4220	25.1176	336	1.000
							324	1.000
							312	1.000
							300	1.000
							288	1.000
							276	1.000
							264	1.000
							252	1.000
							240	1.000
							228	1.000
							216	1.000
							204	1.000
							192	1.000
							180	1.000
							168	1.000
							156	1.000
							144	1.000
							132	1.000
							120	1.000
							108	1.000
							96	1.000
							84	1.000
							72	1.000
							60	1.000
							48	1.000
							36	1.001
							24	1.002
							12	1.023
Sum		-8.5633	-17.0810	25.4225	103.4527	51.2204		
Average		-2.8544	-5.6937	8.4742	34.4842	17.0735		

N =	3		
A =	4.43E+00		
B =	2.516	R^2 =	1.00000
C =	-4		

\* Appendix A3, page 1

**Loss Forecasting Model**  
**Analysis of Historical Loss Patterns**  
**Variation in Reported Loss Development**  
**Workers Compensation**

Year	Variation in Reported Losses:														
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180	180:192
7/1/93-94					0.019	0.013	0.008	0.030	0.075	0.000	0.004	0.032	0.054	0.000	-0.006
7/1/94-95				0.049	-0.016	-0.004	-0.001	0.045	-0.005	0.000	-0.009	0.002	0.032	0.007	0.000
7/1/95-96			-0.022	0.010	0.070	0.019	0.062	-0.010	0.010	0.003	-0.002	0.030	0.009	0.014	-0.001
7/1/96-97		-0.035	0.010	0.064	0.098	0.031	0.153	0.025	0.014	-0.012	0.008	0.004	0.015	0.000	0.000
7/1/97-98	0.175	0.073	0.059	0.108	0.093	-0.013	-0.003	0.004	0.025	0.007	0.025	0.003	0.004	0.005	-0.012
7/1/98-99	0.390	0.004	0.011	0.127	-0.056	-0.008	0.002	0.000	0.064	0.025	0.095	-0.085	0.000	0.029	--
7/1/99-00	0.170	0.132	0.112	-0.007	0.002	0.003	0.021	-0.007	0.023	0.024	0.002	0.008	0.012	--	-0.016
7/1/00-01	0.679	0.170	-0.034	-0.001	-0.012	0.002	-0.004	-0.001	0.000	0.000	-0.007	0.000	--	0.000	0.000
7/1/01-02	0.332	0.069	-0.037	-0.006	0.009	-0.009	0.004	-0.020	0.014	0.032	-0.007	--	0.013	0.038	-0.030
7/1/02-03	0.154	0.061	-0.012	-0.044	-0.005	-0.001	-0.012	-0.004	0.023	-0.012	--	0.059	0.002	0.095	-0.152
7/1/03-04	0.260	0.139	-0.020	0.010	0.015	0.028	0.125	0.024	0.011	--	0.062	-0.001	-0.122	-0.031	-0.017
7/1/04-05	0.210	0.099	-0.032	0.014	0.020	0.034	0.020	0.021	--	--	0.005	-0.003	-0.022	0.037	0.006
7/1/05-06	0.229	-0.004	0.102	0.038	0.014	-0.008	-0.002	--	--	0.022	0.020	-0.064	0.013	0.000	0.051
7/1/06-07	0.208	0.034	0.010	0.099	0.002	0.010	--	0.277	-0.036	-0.001	0.000	0.000	-0.015	0.000	0.001
7/1/07-08	0.213	0.138	0.153	0.056	0.027	--	--	-0.008	0.005	0.028	-0.075	0.001	0.000	-0.043	-0.038
7/1/08-09	0.302	-0.034	0.002	0.043	--	--	0.003	-0.223	0.032	0.016	-0.086	0.000	-0.069	0.000	
7/1/09-10	0.246	0.083	0.021	--	0.242	-0.076	0.098	0.026	0.022	0.001	-0.075	-0.007	0.016		
7/1/10-11	0.312	-0.020	--	0.124	-0.077	-0.007	-0.079	0.057	-0.048	0.001	0.003	0.060			
7/1/11-12	0.164	--	0.233	-0.007	0.043	0.064	0.038	0.012	0.033	0.080	0.002				
7/1/12-13	--	0.073	0.020	-0.042	0.071	0.011	0.002	0.000	0.004	0.016					
7/1/13-14	0.273	0.045	0.076	0.175	0.140	0.085	0.001	-0.008	-0.005						
7/1/14-15	0.146	0.000	-0.024	0.049	0.005	0.037	0.015	-0.009							
7/1/15-16	0.604	0.761	-0.507	-0.023	0.089	-0.094	0.010								
7/1/16-17	0.188	-0.130	0.116	-0.006	0.021	0.152									
7/1/17-18	0.076	-0.009	0.081	0.076	0.034										
7/1/18-19	0.515	0.004	0.080	-0.019											
7/1/19-20	0.317	0.156	-0.008												
7/1/20-21	-0.105	0.208													
7/1/21-22	-0.148														
Variance	0.034	0.027	0.017	0.003	0.004	0.002	0.003	0.007	0.001	0.000	0.002	0.001	0.002	0.001	0.002
Sigma	0.338	0.283	0.231	0.190	0.181	0.169	0.161	0.153	0.130	0.127	0.125	0.117	0.111	0.103	0.098

Lognormal Parameters					
Year	Maturity	Ultimate Losses	Prior Sigma*	Selected Sigma	Mu
7/1/93-94	360	\$3,128,000		0.009	14.956
7/1/94-95	348	\$1,828,000	0.013	0.011	14.419
7/1/95-96	336	\$3,122,000	0.016	0.014	14.954
7/1/96-97	324	\$1,624,000	0.020	0.018	14.300
7/1/97-98	312	\$2,182,000	0.025	0.020	14.596
7/1/98-99	300	\$1,827,000	0.032	0.024	14.418
7/1/99-00	288	\$3,616,000	0.040	0.028	15.100
7/1/00-01	276	\$2,322,000	0.050	0.033	14.657
7/1/01-02	264	\$1,587,000	0.062	0.045	14.276
7/1/02-03	252	\$3,075,000	0.069	0.053	14.937
7/1/03-04	240	\$2,039,000	0.071	0.055	14.526
7/1/04-05	228	\$5,588,000	0.073	0.060	15.534
7/1/05-06	216	\$2,023,000	0.076	0.068	14.518
7/1/06-07	204	\$3,532,000	0.079	0.070	15.075
7/1/07-08	192	\$2,205,000	0.082	0.088	14.602
7/1/08-09	180	\$1,765,000	0.085	0.098	14.379
7/1/09-10	168	\$3,176,000	0.089	0.103	14.966
7/1/10-11	156	\$3,004,000	0.094	0.111	14.909
7/1/11-12	144	\$4,381,000	0.098	0.117	15.286
7/1/12-13	132	\$3,524,000	0.104	0.125	15.067
7/1/13-14	120	\$3,780,000	0.106	0.127	15.137
7/1/14-15	108	\$2,365,000	0.111	0.130	14.668
7/1/15-16	96	\$1,913,000	0.114	0.153	14.452
7/1/16-17	84	\$3,216,000	0.133	0.161	14.971
7/1/17-18	72	\$1,425,000	0.135	0.169	14.155
7/1/18-19	60	\$4,209,000	0.144	0.181	15.236
7/1/19-20	48	\$2,069,000	0.156	0.190	14.524
7/1/20-21	36	\$2,489,000	0.171	0.231	14.701
7/1/21-22	24	\$2,620,000	0.188	0.283	14.739
7/1/22-23	12	\$2,344,000	0.245	0.338	14.610

\* Prior sigma at indicated maturity

**Derivation of Discount Factors  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Maturity in Years at 6/30/2023	Cumulative Paid Loss Develop. Factor	% Losses Paid 6/30/2023	Midpoint Upcoming Period	% Losses Paid Upcoming Period	Column(F) Discounted 4.0%	Discount Factor at 4.0%
7/1/93-94	30	1.000	100.0%				<b>1.000</b>
7/1/94-95	29	1.085	92.2%	29.5	7.83%	0.0246	<b>0.981</b>
7/1/95-96	28	1.088	91.9%	28.5	0.23%	0.0008	<b>0.944</b>
7/1/96-97	27	1.091	91.7%	27.5	0.24%	0.0008	<b>0.910</b>
7/1/97-98	26	1.094	91.4%	26.5	0.26%	0.0009	<b>0.878</b>
7/1/98-99	25	1.097	91.2%	25.5	0.28%	0.0010	<b>0.849</b>
7/1/99-00	24	1.101	90.9%	24.5	0.30%	0.0011	<b>0.821</b>
7/1/00-01	23	1.105	90.5%	23.5	0.32%	0.0013	<b>0.796</b>
7/1/01-02	22	1.109	90.2%	22.5	0.35%	0.0014	<b>0.773</b>
7/1/02-03	21	1.113	89.8%	21.5	0.38%	0.0016	<b>0.752</b>
7/1/03-04	20	1.119	89.4%	20.5	0.41%	0.0018	<b>0.733</b>
7/1/04-05	19	1.124	89.0%	19.5	0.45%	0.0021	<b>0.716</b>
7/1/05-06	18	1.130	88.5%	18.5	0.49%	0.0024	<b>0.701</b>
7/1/06-07	17	1.137	87.9%	17.5	0.54%	0.0027	<b>0.688</b>
7/1/07-08	16	1.145	87.3%	16.5	0.60%	0.0031	<b>0.676</b>
7/1/08-09	15	1.154	86.7%	15.5	0.67%	0.0036	<b>0.667</b>
7/1/09-10	14	1.164	85.9%	14.5	0.75%	0.0042	<b>0.659</b>
7/1/10-11	13	1.175	85.1%	13.5	0.84%	0.0050	<b>0.653</b>
7/1/11-12	12	1.189	84.1%	12.5	0.96%	0.0059	<b>0.650</b>
7/1/12-13	11	1.205	83.0%	11.5	1.11%	0.0070	<b>0.648</b>
7/1/13-14	10	1.224	81.7%	10.5	1.29%	0.0085	<b>0.648</b>
7/1/14-15	9	1.247	80.2%	9.5	1.52%	0.0105	<b>0.651</b>
7/1/15-16	8	1.276	78.4%	8.5	1.83%	0.0131	<b>0.655</b>
7/1/16-17	7	1.313	76.1%	7.5	2.24%	0.0167	<b>0.663</b>
7/1/17-18	6	1.364	73.3%	6.5	2.81%	0.0218	<b>0.674</b>
7/1/18-19	5	1.435	69.7%	5.5	3.66%	0.0295	<b>0.688</b>
7/1/19-20	4	1.546	64.7%	4.5	4.99%	0.0418	<b>0.707</b>
7/1/20-21	3	1.742	57.4%	3.5	7.27%	0.0634	<b>0.731</b>
7/1/21-22	2	2.192	45.6%	2.5	11.79%	0.1069	<b>0.763</b>
7/1/22-23	1	4.623	21.6%	1.5	23.99%	0.2262	<b>0.809</b>

Column (C): Appendix A2, page 2

Column (D) = 1 / (C)

Column (E) = [ (B), current line + (B), previous line] / 2

Column (F) = (D), previous line - (D), current line

Column (G) = (F) x [ 1 + Interest Rate ]<sup>-(E)</sup>

Column (H) = [ 1 + Interest Rate ]<sup>-(B)</sup> / [ 1 - (D) ] x [ Downward Sum, (G) ]

**Summary of Experience  
Workers Compensation**

(A) Period Begin End		(B) Evaluation Date	(C) Maturity (months)	(D) Reported Claims	(E) Open Claims	(F) Paid Losses	(G) Case Reserves	(H) Incurred Losses	(I) Historic Calendar Year Payroll (Hundreds)	(J) Estimated Fiscal Year Payroll (Hundreds)
07/01/93	06/30/94	6/30/23	360	804	0	\$1,198,127	\$0	\$1,198,127	\$4,262,809	\$4,444,341
07/01/94	06/30/95	6/30/23	348	751	0	\$1,575,482	\$0	\$1,575,482	\$4,625,872	\$4,776,291
07/01/95	06/30/96	6/30/23	336	819	0	\$2,517,749	\$0	\$2,517,749	\$4,926,710	\$4,930,147
07/01/96	06/30/97	6/30/23	324	718	1	\$1,702,652	\$667,140	\$2,369,793	\$4,933,584	\$4,958,956
07/01/97	06/30/98	6/30/23	312	548	0	\$1,262,727	\$0	\$1,262,727	\$4,984,327	\$5,045,243
07/01/98	06/30/99	6/30/23	300	489	0	\$831,226	\$0	\$831,226	\$5,106,160	\$5,193,649
07/01/99	06/30/00	6/30/23	288	486	2	\$2,322,359	\$84,095	\$2,406,454	\$5,281,139	\$5,298,756
07/01/00	06/30/01	6/30/23	276	522	0	\$1,835,135	\$0	\$1,835,135	\$5,316,374	\$5,485,021
07/01/01	06/30/02	6/30/23	264	519	2	\$1,641,142	\$197,823	\$1,838,965	\$5,653,668	\$5,903,745
07/01/02	06/30/03	6/30/23	252	476	0	\$1,290,330	\$0	\$1,290,330	\$6,153,823	\$6,387,912
07/01/03	06/30/04	6/30/23	240	419	1	\$1,922,339	\$20,726	\$1,943,065	\$6,622,001	\$6,791,034
07/01/04	06/30/05	6/30/23	228	415	2	\$1,316,449	\$404,736	\$1,721,185	\$6,960,067	\$6,939,244
07/01/05	06/30/06	6/30/23	216	470	0	\$1,528,140	\$0	\$1,528,140	\$6,918,422	\$7,036,114
07/01/06	06/30/07	6/30/23	204	444	2	\$1,570,387	\$104,450	\$1,674,837	\$7,153,806	\$7,324,905
07/01/07	06/30/08	6/30/23	192	437	0	\$1,019,471	\$0	\$1,019,471	\$7,496,004	\$7,659,633
07/01/08	06/30/09	6/30/23	180	413	0	\$1,327,634	\$0	\$1,327,634	\$7,823,262	\$7,950,681
07/01/09	06/30/10	6/30/23	168	437	1	\$1,803,466	\$258,268	\$2,061,735	\$8,078,099	\$8,144,999
07/01/10	06/30/11	6/30/23	156	421	1	\$1,555,854	\$82,857	\$1,638,711	\$8,211,900	\$8,316,872
07/01/11	06/30/12	6/30/23	144	344	2	\$1,301,143	\$130,056	\$1,431,199	\$8,421,844	\$8,491,078
07/01/12	06/30/13	6/30/23	132	316	1	\$2,076,602	\$500,151	\$2,576,753	\$8,560,312	\$8,548,039
07/01/13	06/30/14	6/30/23	120	340	3	\$1,664,278	\$180,207	\$1,844,485	\$8,535,765	\$8,643,197
07/01/14	06/30/15	6/30/23	108	346	1	\$800,423	\$258,491	\$1,058,914	\$8,750,628	\$8,840,462
07/01/15	06/30/16	6/30/23	96	388	1	\$1,290,781	\$167,285	\$1,458,067	\$8,930,296	\$9,058,044
07/01/16	06/30/17	6/30/23	84	452	0	\$561,694	\$0	\$561,694	\$9,185,792	\$9,406,250
07/01/17	06/30/18	6/30/23	72	477	3	\$1,006,620	\$107,883	\$1,114,503	\$9,626,707	\$9,755,389
07/01/18	06/30/19	6/30/23	60	515	5	\$1,272,980	\$128,035	\$1,401,014	\$9,884,070	\$9,853,978
07/01/19	06/30/20	6/30/23	48	476	4	\$1,417,525	\$44,791	\$1,462,317	\$9,823,886	\$10,029,396
07/01/20	06/30/21	6/30/23	36	342	3	\$930,098	\$88,568	\$1,018,666	\$10,234,906	\$10,210,831
07/01/21	06/30/22	6/30/23	24	437	7	\$677,947	\$92,009	\$769,956	\$10,186,757	\$10,849,185
07/01/22	06/30/23	6/30/23	12	420	82	\$535,716	\$612,797	\$1,148,513	\$11,511,614	\$12,020,589
<b>Total</b>				<b>14,441</b>	<b>124</b>	<b>\$41,756,477</b>	<b>\$4,130,369</b>	<b>\$45,886,846</b>	<b>\$224,160,603</b>	<b>\$228,293,980</b>

- Loss information and payroll (hundreds) provided by The State of Tennessee, Risk Management Division  
- Loss information contains only pure losses, net of recoveries  
Column (J): Interpolation of (I)

**Estimation of Ultimate Losses  
Workers Compensation**

<i>Incurring Loss Development</i>				<i>Paid Loss Development</i>			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurring Losses	Incurring Develop. Factor	Estimated Ultimate Losses	Accident Period	Paid Losses	Paid Develop. Factor	Estimated Ultimate Losses
7/1/93-94	\$1,198,127	1.001	\$1,200,000	7/1/93-94	\$1,198,127	1.084	\$1,299,000
7/1/94-95	\$1,575,482	1.002	\$1,578,000	7/1/94-95	\$1,575,482	1.086	\$1,712,000
7/1/95-96	\$2,517,749	1.002	\$2,523,000	7/1/95-96	\$2,517,749	1.089	\$2,742,000
7/1/96-97	\$2,369,793	1.002	\$2,375,000	7/1/96-97	\$1,702,652	1.092	\$1,859,000
7/1/97-98	\$1,262,727	1.003	\$1,266,000	7/1/97-98	\$1,262,727	1.095	\$1,382,000
7/1/98-99	\$831,226	1.003	\$834,000	7/1/98-99	\$831,226	1.098	\$912,000
7/1/99-00	\$2,406,454	1.004	\$2,416,000	7/1/99-00	\$2,322,359	1.101	\$2,557,000
7/1/00-01	\$1,835,135	1.004	\$1,843,000	7/1/00-01	\$1,835,135	1.105	\$2,027,000
7/1/01-02	\$1,838,965	1.005	\$1,849,000	7/1/01-02	\$1,641,142	1.109	\$1,819,000
7/1/02-03	\$1,290,330	1.006	\$1,298,000	7/1/02-03	\$1,290,330	1.113	\$1,436,000
7/1/03-04	\$1,943,065	1.008	\$1,958,000	7/1/03-04	\$1,922,339	1.118	\$2,148,000
7/1/04-05	\$1,721,185	1.009	\$1,737,000	7/1/04-05	\$1,316,449	1.123	\$1,478,000
7/1/05-06	\$1,528,140	1.011	\$1,545,000	7/1/05-06	\$1,528,140	1.128	\$1,724,000
7/1/06-07	\$1,674,837	1.013	\$1,697,000	7/1/06-07	\$1,570,387	1.135	\$1,782,000
7/1/07-08	\$1,019,471	1.016	\$1,036,000	7/1/07-08	\$1,019,471	1.142	\$1,164,000
7/1/08-09	\$1,327,634	1.019	\$1,353,000	7/1/08-09	\$1,327,634	1.149	\$1,526,000
7/1/09-10	\$2,061,735	1.024	\$2,110,000	7/1/09-10	\$1,803,466	1.158	\$2,089,000
7/1/10-11	\$1,638,711	1.029	\$1,686,000	7/1/10-11	\$1,555,854	1.169	\$1,818,000
7/1/11-12	\$1,431,199	1.036	\$1,482,000	7/1/11-12	\$1,301,143	1.180	\$1,536,000
7/1/12-13	\$2,576,753	1.044	\$2,691,000	7/1/12-13	\$2,076,602	1.194	\$2,480,000
7/1/13-14	\$1,844,485	1.055	\$1,946,000	7/1/13-14	\$1,664,278	1.211	\$2,015,000
7/1/14-15	\$1,058,914	1.069	\$1,132,000	7/1/14-15	\$800,423	1.231	\$985,000
7/1/15-16	\$1,458,067	1.087	\$1,585,000	7/1/15-16	\$1,290,781	1.256	\$1,621,000
7/1/16-17	\$561,694	1.110	\$623,000	7/1/16-17	\$561,694	1.287	\$723,000
7/1/17-18	\$1,114,503	1.140	\$1,270,000	7/1/17-18	\$1,006,620	1.329	\$1,338,000
7/1/18-19	\$1,401,014	1.179	\$1,652,000	7/1/18-19	\$1,272,980	1.388	\$1,767,000
7/1/19-20	\$1,462,317	1.231	\$1,800,000	7/1/19-20	\$1,417,525	1.478	\$2,095,000
7/1/20-21	\$1,018,666	1.301	\$1,325,000	7/1/20-21	\$930,098	1.632	\$1,518,000
7/1/21-22	\$769,956	1.394	\$1,073,000	7/1/21-22	\$677,947	1.975	\$1,339,000
7/1/22-23	\$1,148,513	1.519	\$1,745,000	7/1/22-23	\$535,716	3.648	\$1,955,000
<b>Total</b>	<b>\$45,886,846</b>		<b>\$48,628,000</b>	<b>Total</b>	<b>\$41,756,477</b>		<b>\$50,846,000</b>

Columns (B), (F): Exhibit 1  
Column (C): Appendix A1  
Column (D) = (B) \* (C)  
Column (G): Appendix A2  
Column (H) = (F) \* (G)



**Estimation of Ultimate Losses  
Workers Compensation**

*Incurred Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Incurred Develop. Factor	Estimated Percent Unpaid	Estimated Unreported Losses	Incurred Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$1,198,127	1.001	0.1%	\$1,738	\$1,198,127	\$1,200,000
7/1/94-95	\$1,575,448	1.002	0.2%	\$2,659	\$1,575,482	\$1,578,000
7/1/95-96	\$2,615,495	1.002	0.2%	\$5,151	\$2,517,749	\$2,523,000
7/1/96-97	\$2,369,793	1.002	0.2%	\$5,460	\$2,369,793	\$2,375,000
7/1/97-98	\$1,262,727	1.003	0.3%	\$3,411	\$1,262,727	\$1,266,000
7/1/98-99	\$831,226	1.003	0.3%	\$2,640	\$831,226	\$834,000
7/1/99-00	\$2,406,454	1.004	0.4%	\$9,013	\$2,406,454	\$2,415,000
7/1/00-01	\$1,835,135	1.004	0.4%	\$8,128	\$1,835,135	\$1,843,000
7/1/01-02	\$1,838,965	1.005	0.5%	\$9,658	\$1,838,965	\$1,849,000
7/1/02-03	\$1,290,330	1.006	0.6%	\$8,059	\$1,290,330	\$1,298,000
7/1/03-04	\$1,943,065	1.008	0.7%	\$14,482	\$1,943,065	\$1,958,000
7/1/04-05	\$1,721,185	1.009	0.9%	\$15,357	\$1,721,185	\$1,737,000
7/1/05-06	\$1,528,140	1.011	1.1%	\$16,370	\$1,528,140	\$1,545,000
7/1/06-07	\$1,674,837	1.013	1.3%	\$21,613	\$1,674,837	\$1,696,000
7/1/07-08	\$1,019,471	1.016	1.6%	\$15,905	\$1,019,471	\$1,035,000
7/1/08-09	\$1,370,000	1.019	1.9%	\$25,927	\$1,327,634	\$1,354,000
7/1/09-10	\$2,105,000	1.024	2.3%	\$48,474	\$2,061,735	\$2,110,000
7/1/10-11	\$1,762,000	1.029	2.8%	\$49,538	\$1,638,711	\$1,688,000
7/1/11-12	\$1,523,000	1.036	3.4%	\$52,462	\$1,431,199	\$1,484,000
7/1/12-13	\$2,725,000	1.044	4.2%	\$115,367	\$2,576,753	\$2,692,000
7/1/13-14	\$1,966,000	1.055	5.2%	\$102,563	\$1,844,485	\$1,947,000
7/1/14-15	\$1,081,000	1.069	6.4%	\$69,665	\$1,058,914	\$1,129,000
7/1/15-16	\$1,649,000	1.087	8.0%	\$131,581	\$1,458,067	\$1,590,000
7/1/16-17	\$753,000	1.110	9.9%	\$74,493	\$561,694	\$636,000
7/1/17-18	\$1,391,000	1.140	12.3%	\$170,619	\$1,114,503	\$1,285,000
7/1/18-19	\$1,797,000	1.179	15.2%	\$273,050	\$1,401,014	\$1,674,000
7/1/19-20	\$1,952,000	1.231	18.8%	\$366,623	\$1,462,317	\$1,829,000
7/1/20-21	\$1,713,000	1.301	23.1%	\$395,919	\$1,018,666	\$1,415,000
7/1/21-22	\$1,960,000	1.394	28.2%	\$553,527	\$769,956	\$1,323,000
7/1/22-23	\$1,915,000	1.519	34.2%	\$654,607	\$1,148,513	\$1,803,000
<b>Total</b>	<b>\$50,772,000</b>			<b>\$3,224,057</b>	<b>\$45,886,846</b>	<b>\$49,111,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)

**Estimation of Ultimate Losses  
Workers Compensation**

*Paid Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Paid Develop. Factor	Estimated Percent Unpaid	Estimated Unpaid Losses	Paid Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$1,198,127	1.084	7.8%	\$92,965	\$1,198,127	\$1,291,000
7/1/94-95	\$1,575,448	1.086	8.0%	\$125,421	\$1,575,482	\$1,701,000
7/1/95-96	\$2,615,495	1.089	8.2%	\$213,825	\$2,517,749	\$2,732,000
7/1/96-97	\$2,369,793	1.092	8.4%	\$199,138	\$1,702,652	\$1,902,000
7/1/97-98	\$1,262,727	1.095	8.6%	\$109,170	\$1,262,727	\$1,372,000
7/1/98-99	\$831,226	1.098	8.9%	\$74,016	\$831,226	\$905,000
7/1/99-00	\$2,406,454	1.101	9.2%	\$220,957	\$2,322,359	\$2,543,000
7/1/00-01	\$1,835,135	1.105	9.5%	\$173,966	\$1,835,135	\$2,009,000
7/1/01-02	\$1,838,965	1.109	9.8%	\$180,218	\$1,641,142	\$1,821,000
7/1/02-03	\$1,290,330	1.113	10.1%	\$130,914	\$1,290,330	\$1,421,000
7/1/03-04	\$1,943,065	1.118	10.5%	\$204,433	\$1,922,339	\$2,127,000
7/1/04-05	\$1,721,185	1.123	10.9%	\$188,119	\$1,316,449	\$1,505,000
7/1/05-06	\$1,528,140	1.128	11.4%	\$173,831	\$1,528,140	\$1,702,000
7/1/06-07	\$1,674,837	1.135	11.9%	\$198,712	\$1,570,387	\$1,769,000
7/1/07-08	\$1,019,471	1.142	12.4%	\$126,467	\$1,019,471	\$1,146,000
7/1/08-09	\$1,370,000	1.149	13.0%	\$178,172	\$1,327,634	\$1,506,000
7/1/09-10	\$2,105,000	1.158	13.7%	\$287,856	\$1,803,466	\$2,091,000
7/1/10-11	\$1,762,000	1.169	14.4%	\$254,233	\$1,555,854	\$1,810,000
7/1/11-12	\$1,523,000	1.180	15.3%	\$232,800	\$1,301,143	\$1,534,000
7/1/12-13	\$2,725,000	1.194	16.3%	\$443,319	\$2,076,602	\$2,520,000
7/1/13-14	\$1,966,000	1.211	17.4%	\$342,231	\$1,664,278	\$2,007,000
7/1/14-15	\$1,081,000	1.231	18.7%	\$202,659	\$800,423	\$1,003,000
7/1/15-16	\$1,649,000	1.256	20.4%	\$335,619	\$1,290,781	\$1,626,000
7/1/16-17	\$753,000	1.287	22.3%	\$168,031	\$561,694	\$730,000
7/1/17-18	\$1,391,000	1.329	24.8%	\$344,598	\$1,006,620	\$1,351,000
7/1/18-19	\$1,797,000	1.388	28.0%	\$502,589	\$1,272,980	\$1,776,000
7/1/19-20	\$1,952,000	1.478	32.3%	\$631,154	\$1,417,525	\$2,049,000
7/1/20-21	\$1,713,000	1.632	38.7%	\$663,648	\$930,098	\$1,594,000
7/1/21-22	\$1,960,000	1.975	49.4%	\$967,492	\$677,947	\$1,645,000
7/1/22-23	\$1,915,000	3.648	72.6%	\$1,390,114	\$535,716	\$1,926,000
<b>Total</b>	<b>\$50,772,000</b>			<b>\$9,356,669</b>	<b>\$41,756,477</b>	<b>\$51,114,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)

**Projection of Incremental Payments  
Workers Compensation**

Accident Period	Ultimate Reported Claims	Incremental Paid Losses								
		0:12	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108
7/1/93-94	804									
7/1/94-95	751									
7/1/95-96	819									
7/1/96-97	718									
7/1/97-98	548	\$431,615	\$248,588	\$85,085	\$43,027	\$85,386	\$54,416	\$17,900	\$3,993	\$61,723
7/1/98-99	489	\$246,896	\$316,213	\$179,573	\$103,823	\$34,396	\$6	\$0	\$1,253	(\$50)
7/1/99-00	486	\$262,526	\$523,051	\$228,568	\$317,240	\$90,749	\$93,995	\$92,713	\$33,653	\$33,383
7/1/00-01	522	\$439,490	\$653,446	\$291,877	\$184,081	\$85,683	\$79,851	\$60,011	\$52,020	\$641
7/1/01-02	519	\$417,115	\$502,432	\$166,733	\$218,550	\$86,242	\$36,424	\$14,984	\$11,996	\$7,082
7/1/02-03	476	\$501,396	\$554,617	\$119,176	\$46,253	\$13,181	\$5,744	\$1,886	\$5,815	\$552
7/1/03-04	419	\$531,907	\$488,803	\$379,862	\$100,993	\$79,769	\$62,722	\$44,775	\$32,345	\$26,343
7/1/04-05	415	\$315,399	\$215,501	\$102,663	\$154,070	\$111,369	\$113,215	\$23,356	\$31,577	\$20,438
7/1/05-06	470	\$387,351	\$412,445	\$195,688	\$181,543	\$65,406	\$17,954	\$63,630	\$12,040	\$33,713
7/1/06-07	444	\$352,072	\$366,915	\$265,464	\$115,969	\$114,503	\$149,844	\$39,295	\$39,695	\$9,628
7/1/07-08	437	\$319,918	\$316,110	\$197,690	\$81,460	\$602	\$42,431	\$1,234	\$60,027	\$0
7/1/08-09	413	\$439,162	\$440,627	\$165,188	\$19,323	\$50,595	\$8,739	\$4,571	\$1,134	\$1,178
7/1/09-10	437	\$447,685	\$564,928	\$201,315	\$70,302	\$103,769	\$82,414	\$60,595	\$57,052	\$94,500
7/1/10-11	421	\$468,135	\$481,175	\$189,004	\$127,506	\$84,895	\$50,937	\$13,494	\$17,462	\$82,584
7/1/11-12	344	\$399,544	\$294,539	\$201,564	\$91,048	\$99,675	\$134,594	\$29,173	\$28,516	\$7,246
7/1/12-13	316	\$318,274	\$515,765	\$192,789	\$271,933	\$206,844	\$81,180	\$162,722	\$163,098	\$126,690
7/1/13-14	340	\$301,773	\$400,607	\$345,449	\$185,657	\$21,637	\$26,539	\$134,024	\$183,443	\$17,171
7/1/14-15	346	\$328,507	\$359,655	\$88,716	\$20,884	\$14,222	\$1,934	\$2,458	\$5,161	\$6,505
7/1/15-16	388	\$415,007	\$668,158	\$109,688	\$72,570	\$26,428	\$4,079	\$336	\$588	
7/1/16-17	452	\$318,059	\$189,636	\$17,908	\$36,092	\$0	\$0	(\$0)		
7/1/17-18	477	\$404,514	\$395,016	\$147,801	\$15,853	\$50,291	\$16,134			
7/1/18-19	515	\$483,290	\$496,654	\$190,321	\$55,862	\$48,656				
7/1/19-20	476	\$638,152	\$564,683	\$168,127	\$48,140					
7/1/20-21	342	\$410,908	\$475,635	\$55,887						
7/1/21-22	438	\$401,733	\$277,027							
7/1/22-23	432	\$535,716								

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level								
	0:12	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108
7/1/93-94									
7/1/94-95									
7/1/95-96									
7/1/96-97									
7/1/97-98			\$140	\$71	\$166	\$3	\$131	\$21	\$22
7/1/98-99									
7/1/99-00									
7/1/00-01									
7/1/01-02									
7/1/02-03									
7/1/03-04									
7/1/04-05									
7/1/05-06									
7/1/06-07									
7/1/07-08									
7/1/08-09									
7/1/09-10									
7/1/10-11									
7/1/11-12									
7/1/12-13									
7/1/13-14									
7/1/14-15									
7/1/15-16									
7/1/16-17									
7/1/17-18									
7/1/18-19									
7/1/19-20									
7/1/20-21									
7/1/21-22									
7/1/22-23									
<b>Average</b>	\$995	\$1,067	\$453	\$282	\$162	\$116	\$104	\$91	\$68
<b>Avg Latest 5</b>	\$1,162	\$1,043	\$260	\$108	\$66	\$27	\$235	\$236	\$139
<b>Prior</b>	\$1,023	\$1,205	\$372	\$205	\$177	\$155	\$150	\$145	\$109
<b>All Agencies</b>	\$1,683	\$1,757	\$788	\$432	\$332	\$309	\$223	\$194	\$138
<b>Selected</b>	\$1,162	\$1,136	\$357	\$198	\$162	\$150	\$145	\$140	\$109

Accident Period	Projected Incremental Payments								
	0:12	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108
7/1/07-08									
7/1/08-09									
7/1/09-10									
7/1/10-11									
7/1/11-12									
7/1/12-13									
7/1/13-14									
7/1/14-15									
7/1/15-16									\$39,522
7/1/16-17									\$45,849
7/1/17-18							\$64,546	\$62,321	\$48,475
7/1/18-19						\$72,910	\$70,479	\$68,049	\$52,930
7/1/19-20					\$74,018	\$68,465	\$66,183	\$63,901	\$49,704
7/1/20-21				\$66,199	\$54,088	\$50,030	\$48,363	\$46,695	\$36,321
7/1/21-22			\$153,832	\$85,572	\$69,917	\$64,672	\$62,516	\$60,360	\$46,950
7/1/22-23		\$485,409	\$152,433	\$84,794	\$69,281	\$64,084	\$61,948	\$59,812	\$46,523

**Projection of Incremental Payments  
Workers Compensation**

Accident Period	Incremental Paid Losses							
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT
7/1/93-94	(\$46)	\$0	\$163	\$0	\$0	\$0	\$0	\$696
7/1/94-95	\$9,881	\$49,687	\$32,780	\$6,959	(\$258)	\$26	(\$63)	\$1,750
7/1/95-96	\$14,740	\$1,318	\$560	\$0	\$924	\$22,778	\$1,939	\$656,463
7/1/96-97	\$12,082	\$6,365	\$8,068	\$13,031	\$12,519	\$11,401	\$15,411	\$1,040,741
7/1/97-98	\$2,329	\$5,901	\$10,543	\$8,967	\$2,991	\$1,948	\$854	\$29,578
7/1/98-99	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$688
7/1/99-00	\$25,845	\$69,355	\$36,232	\$50,580	\$80,802	\$44,687	\$51,651	\$377,806
7/1/00-01	\$0	\$0	\$0	\$0	\$0	\$16	\$0	\$0
7/1/01-02	\$10,602	\$12,590	\$11,869	\$20,248	\$47,751	\$16,113	\$12,209	\$263,066
7/1/02-03	\$32	\$1,255	\$0	\$0	\$35,367	\$266	(\$0)	\$4,790
7/1/03-04	\$23,234	\$20,981	\$22,806	\$19,883	\$10,803	\$32,391	\$32,021	\$36,558
7/1/04-05	\$54,626	\$78,841	\$18,145	\$12,481	\$5,991	\$20,722	\$12,148	\$436,840
7/1/05-06	\$30,604	\$29,638	\$49,874	\$23,054	\$21,095	\$11,117	\$52,235	\$0
7/1/06-07	\$61,788	\$5,459	\$10,018	\$30,362	\$5,069	\$3,662	\$4,170	\$108,802
7/1/07-08	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/08-09	\$26,069	\$157,077	\$11,719	\$0	\$2,361	\$0	\$0	\$0
7/1/09-10	\$28,137	\$25,553	\$27,925	\$22,654	\$17,491	\$0	\$0	\$0
7/1/10-11	\$12,274	\$11,078	\$11,078	\$11,078	\$0	\$0	\$0	\$0
7/1/11-12	\$9,777	\$6,344	\$5,043	\$0	\$0	\$0	\$0	\$0
7/1/12-13	\$27,013	\$31,591	\$0	\$0	\$0	\$0	\$0	\$0
7/1/13-14	\$50,368	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/14-15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/15-16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/16-17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/17-18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/18-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/19-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/20-21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/21-22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7/1/22-23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level							Trend Factor to 7/1/24-25	
	108:120	120:132	132:144	144:156	156:168	168:180	180:192		192:ULT
7/1/93-94	--	\$0	\$0	\$0	\$0	\$0	\$0	\$1	1.215
7/1/94-95	\$16	\$80	\$52	\$11	--	\$0	--	\$3	1.203
7/1/95-96	\$21	\$2	\$1	\$0	\$1	\$33	\$3	\$954	1.191
7/1/96-97	\$20	\$10	\$13	\$21	\$21	\$19	\$25	\$1,709	1.179
7/1/97-98	\$5	\$13	\$22	\$19	\$6	\$4	\$2	\$63	1.167
7/1/98-99	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2	1.156
7/1/99-00	\$61	\$163	\$85	\$119	\$190	\$105	\$122	\$889	1.144
7/1/00-01	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.133
7/1/01-02	\$23	\$27	\$26	\$44	\$103	\$35	\$26	\$569	1.122
7/1/02-03	\$0	\$3	\$0	\$0	\$83	\$1	--	\$11	1.111
7/1/03-04	\$61	\$55	\$60	\$52	\$28	\$85	\$84	\$96	1.100
7/1/04-05	\$143	\$207	\$48	\$33	\$16	\$54	\$32	\$1,146	1.089
7/1/05-06	\$70	\$68	\$114	\$53	\$48	\$25	\$120	\$0	1.078
7/1/06-07	\$149	\$13	\$24	\$73	\$12	\$9	\$10	\$262	1.067
7/1/07-08	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.057
7/1/08-09	\$66	\$398	\$30	\$0	\$6	\$0	\$0	\$0	1.046
7/1/09-10	\$67	\$61	\$66	\$54	\$41	\$0	\$0	\$0	1.036
7/1/10-11	\$29	\$26	\$26	\$26	\$0	\$0	\$0	\$0	1.002
7/1/11-12	\$28	\$18	\$15	\$0	\$0	\$0	\$0	\$0	0.996
7/1/12-13	\$87	\$101	\$0	\$0	\$0	\$0	\$0	\$0	1.014
7/1/13-14	\$153	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.033
7/1/14-15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.057
7/1/15-16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.069
7/1/16-17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.074
7/1/17-18	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.072
7/1/18-19	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.060
7/1/19-20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.043
7/1/20-21	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.026
7/1/21-22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.016
7/1/22-23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	1.010
Average	\$50	\$62	\$31	\$28	\$35	\$23	\$33	\$380	
Avg Latest 5	\$73	\$121	\$27	\$31	\$22	\$18	\$49	\$301	
Prior	\$75	\$58	\$40	\$36	\$34	\$33	\$30	\$703	
All Agencies	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$764	
Selected	\$85	\$62	\$40	\$36	\$34	\$33	\$30	\$764	

Accident Period	Projected Incremental Payments							Total Unpaid	
	108:120	120:132	132:144	144:156	156:168	168:180	180:192		192:ULT
7/1/07-08								\$315,824	\$316,000
7/1/08-09							\$11,843	\$301,464	\$313,000
7/1/09-10						\$13,890	\$12,657	\$322,173	\$349,000
7/1/10-11					\$14,292	\$13,840	\$12,611	\$321,002	\$362,000
7/1/11-12				\$12,342	\$11,741	\$11,370	\$10,360	\$263,708	\$310,000
7/1/12-13			\$12,460	\$11,133	\$10,591	\$10,256	\$9,345	\$237,871	\$292,000
7/1/13-14		\$20,494	\$13,164	\$11,762	\$11,189	\$10,835	\$9,873	\$251,304	\$329,000
7/1/14-15	\$27,900	\$20,388	\$13,096	\$11,701	\$11,131	\$10,779	\$9,822	\$250,005	\$355,000
7/1/15-16	\$30,928	\$22,601	\$14,517	\$12,971	\$12,340	\$11,949	\$10,888	\$277,143	\$433,000
7/1/16-17	\$35,880	\$26,219	\$16,841	\$15,048	\$14,315	\$13,862	\$12,631	\$321,512	\$561,000
7/1/17-18	\$37,935	\$27,721	\$17,806	\$15,909	\$15,135	\$14,656	\$13,354	\$339,924	\$658,000
7/1/18-19	\$41,421	\$30,269	\$19,443	\$17,372	\$16,526	\$16,003	\$14,582	\$371,169	\$791,000
7/1/19-20	\$38,896	\$28,424	\$18,257	\$16,313	\$15,519	\$15,027	\$13,693	\$348,543	\$817,000
7/1/20-21	\$28,423	\$20,770	\$13,341	\$11,920	\$11,340	\$10,981	\$10,006	\$254,696	\$663,000
7/1/21-22	\$36,741	\$26,849	\$17,246	\$15,409	\$14,659	\$14,195	\$12,934	\$329,232	\$1,011,000
7/1/22-23	\$36,407	\$26,605	\$17,089	\$15,269	\$14,526	\$14,066	\$12,817	\$326,239	\$1,487,000

**Estimation of Ultimate Losses  
Incremental Paid Method  
Workers Compensation**

(A) Accident Period	(B) Paid Losses As of 6/30/23	(C) Estimated Unpaid Losses	(D) Estimate Ultimate Losses
7/1/07-08	\$1,019,471	\$316,000	\$1,335,000
7/1/08-09	\$1,327,634	\$313,000	\$1,641,000
7/1/09-10	\$1,803,466	\$349,000	\$2,152,000
7/1/10-11	\$1,555,854	\$362,000	\$1,918,000
7/1/11-12	\$1,301,143	\$310,000	\$1,611,000
7/1/12-13	\$2,076,602	\$292,000	\$2,369,000
7/1/13-14	\$1,664,278	\$329,000	\$1,993,000
7/1/14-15	\$800,423	\$355,000	\$1,155,000
7/1/15-16	\$1,290,781	\$433,000	\$1,724,000
7/1/16-17	\$561,694	\$561,000	\$1,123,000
7/1/17-18	\$1,006,620	\$658,000	\$1,665,000
7/1/18-19	\$1,272,980	\$791,000	\$2,064,000
7/1/19-20	\$1,417,525	\$817,000	\$2,235,000
7/1/20-21	\$930,098	\$663,000	\$1,593,000
7/1/21-22	\$677,947	\$1,011,000	\$1,689,000
7/1/22-23	\$535,716	\$1,487,000	\$2,023,000
<b>Total</b>	<b>\$19,242,232</b>	<b>\$9,047,000</b>	<b>\$28,290,000</b>

Column (B): Exhibit 1  
Column (C): Exhibit 2-C, page 1 and 2  
Column (D) = (B) + (C)

**Summary and Selection of Ultimate Losses  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Previous Ultimate	Incurred Loss Development Method	Paid Loss Development Method	Incurred Bornhuetter- Ferguson Method	Paid Bornhuetter- Ferguson Method	Incremental Paid Method	Selected Ultimate Losses
7/1/93-94	\$1,198,127	\$1,200,000	\$1,299,000	\$1,200,000	\$1,291,000		\$1,198,127
7/1/94-95	\$1,575,448	\$1,578,000	\$1,712,000	\$1,578,000	\$1,701,000		\$1,575,448
7/1/95-96	\$2,615,495	\$2,523,000	\$2,742,000	\$2,523,000	\$2,732,000		\$2,517,749
7/1/96-97	\$2,369,793	\$2,375,000	\$1,859,000	\$2,375,000	\$1,902,000		\$2,375,000
7/1/97-98	\$1,262,727	\$1,266,000	\$1,382,000	\$1,266,000	\$1,372,000		\$1,262,727
7/1/98-99	\$831,226	\$834,000	\$912,000	\$834,000	\$905,000		\$831,226
7/1/99-00	\$2,406,454	\$2,416,000	\$2,557,000	\$2,415,000	\$2,543,000		\$2,416,000
7/1/00-01	\$1,835,135	\$1,843,000	\$2,027,000	\$1,843,000	\$2,009,000		\$1,835,135
7/1/01-02	\$1,838,965	\$1,849,000	\$1,819,000	\$1,849,000	\$1,821,000		\$1,849,000
7/1/02-03	\$1,290,330	\$1,298,000	\$1,436,000	\$1,298,000	\$1,421,000		\$1,290,330
7/1/03-04	\$1,943,065	\$1,958,000	\$2,148,000	\$1,958,000	\$2,127,000		\$1,958,000
7/1/04-05	\$1,721,185	\$1,737,000	\$1,478,000	\$1,737,000	\$1,505,000		\$1,737,000
7/1/05-06	\$1,528,140	\$1,545,000	\$1,724,000	\$1,545,000	\$1,702,000		\$1,528,140
7/1/06-07	\$1,674,837	\$1,697,000	\$1,782,000	\$1,696,000	\$1,769,000		\$1,697,000
7/1/07-08	\$1,019,471	\$1,036,000	\$1,164,000	\$1,035,000	\$1,146,000	\$1,335,000	\$1,019,471
7/1/08-09	\$1,370,000	\$1,353,000	\$1,526,000	\$1,354,000	\$1,506,000	\$1,641,000	\$1,353,000
7/1/09-10	\$2,105,000	\$2,110,000	\$2,089,000	\$2,110,000	\$2,091,000	\$2,152,000	\$2,101,000
7/1/10-11	\$1,762,000	\$1,686,000	\$1,818,000	\$1,688,000	\$1,810,000	\$1,918,000	\$1,749,000
7/1/11-12	\$1,523,000	\$1,482,000	\$1,536,000	\$1,484,000	\$1,534,000	\$1,611,000	\$1,509,000
7/1/12-13	\$2,725,000	\$2,691,000	\$2,480,000	\$2,692,000	\$2,520,000	\$2,369,000	\$2,691,000
7/1/13-14	\$1,966,000	\$1,946,000	\$2,015,000	\$1,947,000	\$2,007,000	\$1,993,000	\$1,977,000
7/1/14-15	\$1,081,000	\$1,132,000	\$985,000	\$1,129,000	\$1,003,000	\$1,155,000	\$1,142,000
7/1/15-16	\$1,649,000	\$1,585,000	\$1,621,000	\$1,590,000	\$1,626,000	\$1,724,000	\$1,608,000
7/1/16-17	\$753,000	\$623,000	\$723,000	\$636,000	\$730,000	\$1,123,000	\$683,000
7/1/17-18	\$1,391,000	\$1,270,000	\$1,338,000	\$1,285,000	\$1,351,000	\$1,665,000	\$1,318,000
7/1/18-19	\$1,797,000	\$1,652,000	\$1,767,000	\$1,674,000	\$1,776,000	\$2,064,000	\$1,725,000
7/1/19-20	\$1,952,000	\$1,800,000	\$2,095,000	\$1,829,000	\$2,049,000	\$2,235,000	\$1,829,000
7/1/20-21	\$1,713,000	\$1,325,000	\$1,518,000	\$1,415,000	\$1,594,000	\$1,593,000	\$1,505,000
7/1/21-22	\$1,960,000	\$1,073,000	\$1,339,000	\$1,323,000	\$1,645,000	\$1,689,000	\$1,484,000
7/1/22-23	\$1,974,000	\$1,745,000	\$1,955,000	\$1,803,000	\$1,926,000	\$2,023,000	\$1,974,000
<b>Total</b>	<b>\$50,831,000</b>	<b>\$48,628,000</b>	<b>\$50,846,000</b>	<b>\$49,111,000</b>	<b>\$51,114,000</b>	<b>\$28,290,000</b>	<b>\$49,738,000</b>

Column (B): Previous actuarial report

Columns (C), (D): Exhibit 2-A

Columns (E), (F): Exhibit 2-B

Column (G): Exhibit 2-C

Column (H): Column (B) for 93-94, 94-95, 97-98, 98-99, 00-01, 02-03, 05-06, and 22-23

Reported losses for 95-96 and 07-08

Column (C) for 96-97, 99-00, 01-02, 03-04, 04-05, 06-07, 08-09, and 12-13

Average of (E) and (F) for 09-10 through 11-12, 13-14, 15-16 through 18-19, 20-21, and 21-22

Average of (E) and (G) for 14-15

Column (E) for 19-20

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,198,127	\$1,198,127	\$1,198,127	0%	\$1,198,127	\$1,198,127	0%
7/1/94-95	\$1,575,448	\$1,575,448	\$1,575,482	0%	\$1,575,448	\$1,575,448	0%
7/1/95-96	\$2,615,495	\$2,615,495	\$2,517,749	-4%	\$2,615,495	\$2,517,749	-4%
7/1/96-97	\$2,369,793	\$2,369,793	\$2,369,793	0%	\$2,369,793	\$2,375,000	0%
7/1/97-98	\$1,262,727	\$1,262,727	\$1,262,727	0%	\$1,262,727	\$1,262,727	0%
7/1/98-99	\$831,226	\$831,226	\$831,226	0%	\$831,226	\$831,226	0%
7/1/99-00	\$2,406,454	\$2,406,454	\$2,406,454	0%	\$2,406,454	\$2,416,000	0%
7/1/00-01	\$1,835,135	\$1,835,135	\$1,835,135	0%	\$1,835,135	\$1,835,135	0%
7/1/01-02	\$1,838,965	\$1,838,965	\$1,838,965	0%	\$1,838,965	\$1,849,000	1%
7/1/02-03	\$1,290,330	\$1,290,330	\$1,290,330	0%	\$1,290,330	\$1,290,330	0%
7/1/03-04	\$1,943,065	\$1,943,065	\$1,943,065	0%	\$1,943,065	\$1,958,000	1%
7/1/04-05	\$1,721,185	\$1,721,185	\$1,721,185	0%	\$1,721,185	\$1,737,000	1%
7/1/05-06	\$1,528,140	\$1,528,140	\$1,528,140	0%	\$1,528,140	\$1,528,140	0%
7/1/06-07	\$1,674,837	\$1,674,837	\$1,674,837	0%	\$1,674,837	\$1,697,000	1%
7/1/07-08	\$1,019,471	\$1,019,471	\$1,019,471	0%	\$1,019,471	\$1,019,471	0%
7/1/08-09	\$1,337,573	\$1,343,538	\$1,327,634	-1%	\$1,370,000	\$1,353,000	-1%
7/1/09-10	\$2,061,735	\$2,069,795	\$2,061,735	0%	\$2,105,000	\$2,101,000	0%
7/1/10-11	\$1,638,711	\$1,661,955	\$1,638,711	-1%	\$1,762,000	\$1,749,000	-1%
7/1/11-12	\$1,431,199	\$1,448,694	\$1,431,199	-1%	\$1,523,000	\$1,509,000	-1%
7/1/12-13	\$2,576,753	\$2,605,268	\$2,576,753	-1%	\$2,725,000	\$2,691,000	-1%
7/1/13-14	\$1,808,992	\$1,839,414	\$1,844,485	0%	\$1,966,000	\$1,977,000	1%
7/1/14-15	\$940,919	\$968,190	\$1,058,914	9%	\$1,081,000	\$1,142,000	6%
7/1/15-16	\$1,457,876	\$1,495,133	\$1,458,067	-2%	\$1,649,000	\$1,608,000	-2%
7/1/16-17	\$574,571	\$609,247	\$561,694	-8%	\$753,000	\$683,000	-9%
7/1/17-18	\$1,101,344	\$1,157,146	\$1,114,503	-4%	\$1,391,000	\$1,318,000	-5%
7/1/18-19	\$1,338,614	\$1,425,520	\$1,401,014	-2%	\$1,797,000	\$1,725,000	-4%
7/1/19-20	\$1,454,819	\$1,546,731	\$1,462,317	-5%	\$1,952,000	\$1,829,000	-6%
7/1/20-21	\$1,133,830	\$1,237,040	\$1,018,666	-18%	\$1,713,000	\$1,505,000	-12%
7/1/21-22	\$1,278,350	\$1,393,811	\$769,956	-45%	\$1,960,000	\$1,484,000	-24%
7/1/22-23	--	\$1,270,855	\$1,148,513	-10%	\$1,974,000	\$1,974,000	0%
<b>Total</b>	<b>\$45,245,683</b>	<b>\$47,182,734</b>	<b>\$45,886,846</b>	<b>-2.7%</b>	<b>\$50,831,000</b>	<b>\$49,738,000</b>	<b>-2.2%</b>
		<i>Variance in Incurred</i>	<b>(\$1,295,888)</b>		<i>Change in Ultimates</i>	<b>(\$1,093,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Paid Losses 6/30/2022	Expected Paid Losses 6/30/2023	Actual Paid Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
7/1/93-94	\$1,198,127	\$1,198,127	\$1,198,127	0%	\$1,198,127	\$1,198,127	0%
7/1/94-95	\$1,575,448	\$1,575,448	\$1,575,482	0%	\$1,575,448	\$1,575,448	0%
7/1/95-96	\$2,517,749	\$2,520,544	\$2,517,749	0%	\$2,615,495	\$2,517,749	-4%
7/1/96-97	\$1,674,112	\$1,694,711	\$1,702,652	0%	\$2,369,793	\$2,375,000	0%
7/1/97-98	\$1,262,727	\$1,262,727	\$1,262,727	0%	\$1,262,727	\$1,262,727	0%
7/1/98-99	\$831,226	\$831,226	\$831,226	0%	\$831,226	\$831,226	0%
7/1/99-00	\$2,315,182	\$2,318,205	\$2,322,359	0%	\$2,406,454	\$2,416,000	0%
7/1/00-01	\$1,835,135	\$1,835,135	\$1,835,135	0%	\$1,835,135	\$1,835,135	0%
7/1/01-02	\$1,636,499	\$1,643,782	\$1,641,142	0%	\$1,838,965	\$1,849,000	1%
7/1/02-03	\$1,290,330	\$1,290,330	\$1,290,330	0%	\$1,290,330	\$1,290,330	0%
7/1/03-04	\$1,918,767	\$1,919,723	\$1,922,339	0%	\$1,943,065	\$1,958,000	1%
7/1/04-05	\$1,310,540	\$1,327,505	\$1,316,449	-1%	\$1,721,185	\$1,737,000	1%
7/1/05-06	\$1,528,140	\$1,528,140	\$1,528,140	0%	\$1,528,140	\$1,528,140	0%
7/1/06-07	\$1,566,035	\$1,571,025	\$1,570,387	0%	\$1,674,837	\$1,697,000	1%
7/1/07-08	\$1,019,471	\$1,019,471	\$1,019,471	0%	\$1,019,471	\$1,019,471	0%
7/1/08-09	\$1,327,634	\$1,329,818	\$1,327,634	0%	\$1,370,000	\$1,353,000	-1%
7/1/09-10	\$1,785,975	\$1,803,509	\$1,803,466	0%	\$2,105,000	\$2,101,000	0%
7/1/10-11	\$1,544,776	\$1,557,563	\$1,555,854	0%	\$1,762,000	\$1,749,000	-1%
7/1/11-12	\$1,296,100	\$1,310,481	\$1,301,143	-1%	\$1,523,000	\$1,509,000	-1%
7/1/12-13	\$2,045,010	\$2,091,697	\$2,076,602	-1%	\$2,725,000	\$2,691,000	-1%
7/1/13-14	\$1,613,910	\$1,640,282	\$1,664,278	1%	\$1,966,000	\$1,977,000	1%
7/1/14-15	\$793,918	\$817,580	\$800,423	-2%	\$1,081,000	\$1,142,000	6%
7/1/15-16	\$1,290,193	\$1,323,089	\$1,290,781	-2%	\$1,649,000	\$1,608,000	-2%
7/1/16-17	\$561,694	\$581,464	\$561,694	-3%	\$753,000	\$683,000	-9%
7/1/17-18	\$990,485	\$1,037,946	\$1,006,620	-3%	\$1,391,000	\$1,318,000	-5%
7/1/18-19	\$1,224,323	\$1,303,983	\$1,272,980	-2%	\$1,797,000	\$1,725,000	-4%
7/1/19-20	\$1,369,386	\$1,467,823	\$1,417,525	-3%	\$1,952,000	\$1,829,000	-6%
7/1/20-21	\$874,210	\$1,056,034	\$930,098	-12%	\$1,713,000	\$1,505,000	-12%
7/1/21-22	\$401,733	\$886,403	\$677,947	-24%	\$1,960,000	\$1,484,000	-24%
7/1/22-23	--	\$501,970	\$535,716	7%	\$1,974,000	\$1,974,000	0%
<b>Total</b>	<b>\$40,598,838</b>	<b>\$42,245,746</b>	<b>\$41,756,477</b>	<b>-1.2%</b>	<b>\$50,831,000</b>	<b>\$49,738,000</b>	<b>-2.2%</b>
		<b>Variance in Paid</b>	<b>(\$489,268)</b>		<b>Change in Ultimates</b>	<b>(\$1,093,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1



**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Incurred Losses	(D) Paid Losses	(E) Case Reserves	(F) IBNR Reserves	(G) Total Required Reserves	(H) Discount Factor at 4.0%	(I) Total Discounted Reserves at 4.0%
7/1/93-94	\$1,198,127	\$1,198,127	\$1,198,127	\$0	\$0	\$0	1.000	\$0
7/1/94-95	\$1,575,448	\$1,575,482	\$1,575,482	\$0	\$0	\$0	0.981	\$0
7/1/95-96	\$2,517,749	\$2,517,749	\$2,517,749	\$0	\$0	\$0	0.944	\$0
7/1/96-97	\$2,375,000	\$2,369,793	\$1,702,652	\$667,140	\$5,000	\$672,000	0.909	\$611,000
7/1/97-98	\$1,262,727	\$1,262,727	\$1,262,727	\$0	\$0	\$0	0.878	\$0
7/1/98-99	\$831,226	\$831,226	\$831,226	\$0	\$0	\$0	0.848	\$0
7/1/99-00	\$2,416,000	\$2,406,454	\$2,322,359	\$84,095	\$10,000	\$94,000	0.820	\$77,000
7/1/00-01	\$1,835,135	\$1,835,135	\$1,835,135	\$0	\$0	\$0	0.795	\$0
7/1/01-02	\$1,849,000	\$1,838,965	\$1,641,142	\$197,823	\$10,000	\$208,000	0.771	\$160,000
7/1/02-03	\$1,290,330	\$1,290,330	\$1,290,330	\$0	\$0	\$0	0.750	\$0
7/1/03-04	\$1,958,000	\$1,943,065	\$1,922,339	\$20,726	\$15,000	\$36,000	0.730	\$26,000
7/1/04-05	\$1,737,000	\$1,721,185	\$1,316,449	\$404,736	\$16,000	\$421,000	0.712	\$300,000
7/1/05-06	\$1,528,140	\$1,528,140	\$1,528,140	\$0	\$0	\$0	0.697	\$0
7/1/06-07	\$1,697,000	\$1,674,837	\$1,570,387	\$104,450	\$22,000	\$127,000	0.683	\$87,000
7/1/07-08	\$1,019,471	\$1,019,471	\$1,019,471	\$0	\$0	\$0	0.670	\$0
7/1/08-09	\$1,353,000	\$1,327,634	\$1,327,634	\$0	\$25,000	\$25,000	0.660	\$17,000
7/1/09-10	\$2,101,000	\$2,061,735	\$1,803,466	\$258,268	\$39,000	\$298,000	0.652	\$194,000
7/1/10-11	\$1,749,000	\$1,638,711	\$1,555,854	\$82,857	\$110,000	\$193,000	0.645	\$125,000
7/1/11-12	\$1,509,000	\$1,431,199	\$1,301,143	\$130,056	\$78,000	\$208,000	0.641	\$133,000
7/1/12-13	\$2,691,000	\$2,576,753	\$2,076,602	\$500,151	\$114,000	\$614,000	0.638	\$392,000
7/1/13-14	\$1,977,000	\$1,844,485	\$1,664,278	\$180,207	\$133,000	\$313,000	0.637	\$200,000
7/1/14-15	\$1,142,000	\$1,058,914	\$800,423	\$258,491	\$83,000	\$342,000	0.639	\$219,000
7/1/15-16	\$1,608,000	\$1,458,067	\$1,290,781	\$167,285	\$150,000	\$317,000	0.643	\$204,000
7/1/16-17	\$683,000	\$561,694	\$561,694	\$0	\$121,000	\$121,000	0.651	\$79,000
7/1/17-18	\$1,318,000	\$1,114,503	\$1,006,620	\$107,883	\$203,000	\$311,000	0.661	\$205,000
7/1/18-19	\$1,725,000	\$1,401,014	\$1,272,980	\$128,035	\$324,000	\$452,000	0.675	\$305,000
7/1/19-20	\$1,829,000	\$1,462,317	\$1,417,525	\$44,791	\$367,000	\$411,000	0.694	\$285,000
7/1/20-21	\$1,505,000	\$1,018,666	\$930,098	\$88,568	\$486,000	\$575,000	0.719	\$413,000
7/1/21-22	\$1,484,000	\$769,956	\$677,947	\$92,009	\$714,000	\$806,000	0.753	\$607,000
7/1/22-23	\$1,974,000	\$1,148,513	\$535,716	\$612,797	\$825,000	\$1,438,000	0.806	\$1,160,000
<b>Total</b>	<b>\$49,738,000</b>	<b>\$45,886,846</b>	<b>\$41,756,477</b>	<b>\$4,130,369</b>	<b>\$3,850,000</b>	<b>\$7,982,000</b>		<b>\$5,799,000</b>

Column (B): Exhibit 3-A  
Columns (C), (D): Exhibit 1  
Column (E) = (C) - (D)  
Column (F) = (B) - (C)  
Column (G) = (B) - (D)  
Column (H): Appendix B  
Column (I) = (G) \* (H)

**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$1,198,127	\$1,198,000	\$1,203,000	\$1,207,000	\$1,215,000
7/1/94-95	\$1,575,448	\$1,575,000	\$1,584,000	\$1,590,000	\$1,603,000
7/1/95-96	\$2,517,749	\$2,517,000	\$2,534,000	\$2,547,000	\$2,574,000
7/1/96-97	\$2,375,000	\$2,374,000	\$2,394,000	\$2,409,000	\$2,441,000
7/1/97-98	\$1,262,727	\$1,262,000	\$1,273,000	\$1,281,000	\$1,298,000
7/1/98-99	\$831,226	\$831,000	\$838,000	\$843,000	\$854,000
7/1/99-00	\$2,416,000	\$2,415,000	\$2,436,000	\$2,451,000	\$2,483,000
7/1/00-01	\$1,835,135	\$1,835,000	\$1,850,000	\$1,862,000	\$1,886,000
7/1/01-02	\$1,849,000	\$1,849,000	\$1,864,000	\$1,876,000	\$1,900,000
7/1/02-03	\$1,290,330	\$1,289,000	\$1,313,000	\$1,332,000	\$1,373,000
7/1/03-04	\$1,958,000	\$1,956,000	\$1,993,000	\$2,022,000	\$2,083,000
7/1/04-05	\$1,737,000	\$1,735,000	\$1,770,000	\$1,796,000	\$1,853,000
7/1/05-06	\$1,528,140	\$1,525,000	\$1,561,000	\$1,588,000	\$1,647,000
7/1/06-07	\$1,697,000	\$1,694,000	\$1,735,000	\$1,766,000	\$1,835,000
7/1/07-08	\$1,019,471	\$1,016,000	\$1,047,000	\$1,071,000	\$1,123,000
7/1/08-09	\$1,353,000	\$1,349,000	\$1,391,000	\$1,423,000	\$1,493,000
7/1/09-10	\$2,101,000	\$2,094,000	\$2,161,000	\$2,212,000	\$2,325,000
7/1/10-11	\$1,749,000	\$1,742,000	\$1,804,000	\$1,852,000	\$1,957,000
7/1/11-12	\$1,509,000	\$1,502,000	\$1,558,000	\$1,601,000	\$1,696,000
7/1/12-13	\$2,691,000	\$2,678,000	\$2,782,000	\$2,862,000	\$3,038,000
7/1/13-14	\$1,977,000	\$1,967,000	\$2,046,000	\$2,108,000	\$2,244,000
7/1/14-15	\$1,142,000	\$1,135,000	\$1,184,000	\$1,221,000	\$1,304,000
7/1/15-16	\$1,608,000	\$1,597,000	\$1,670,000	\$1,726,000	\$1,850,000
7/1/16-17	\$683,000	\$675,000	\$715,000	\$747,000	\$818,000
7/1/17-18	\$1,318,000	\$1,302,000	\$1,383,000	\$1,447,000	\$1,591,000
7/1/18-19	\$1,725,000	\$1,693,000	\$1,824,000	\$1,928,000	\$2,167,000
7/1/19-20	\$1,829,000	\$1,792,000	\$1,937,000	\$2,053,000	\$2,320,000
7/1/20-21	\$1,505,000	\$1,469,000	\$1,599,000	\$1,705,000	\$1,949,000
7/1/21-22	\$1,484,000	\$1,438,000	\$1,584,000	\$1,703,000	\$1,982,000
7/1/22-23	\$1,974,000	\$1,904,000	\$2,112,000	\$2,283,000	\$2,688,000
(1) All Years*	\$49,738,000	\$49,697,000	\$50,116,000	\$50,442,000	\$51,128,000

(2) Total Paid Losses \$41,756,477

<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(3) All Years*	\$7,982,000	\$7,941,000	\$8,360,000	\$8,686,000	\$9,372,000

<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(4) All Years*	\$5,799,000	\$5,769,000	\$6,074,000	\$6,310,000	\$6,809,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Estimated Ultimate Claim Counts, Average Claim Size, and Cost Per \$100 Payroll  
Workers Compensation**

(A) Accident Period	(B) Number of Claims	(C) Claim Development Factor	(D) Estimated Ultimate Claims	(E) Estimated Ultimate Losses	(F) Severity*	(G) Estimated Fiscal Year Payroll (Hundreds)	(H) Claims Per \$1 Million Payroll	(I) Cost Per \$100 Payroll
7/1/93-94	804	1.000	804	\$1,198,127	\$1,500	\$4,444,341	1.81	\$0.27
7/1/94-95	751	1.000	751	\$1,575,448	\$2,100	\$4,776,291	1.57	\$0.33
7/1/95-96	819	1.000	819	\$2,517,749	\$3,100	\$4,930,147	1.66	\$0.51
7/1/96-97	718	1.000	718	\$2,375,000	\$3,300	\$4,958,956	1.45	\$0.48
7/1/97-98	548	1.000	548	\$1,262,727	\$2,300	\$5,045,243	1.09	\$0.25
7/1/98-99	489	1.000	489	\$831,226	\$1,700	\$5,193,649	0.94	\$0.16
7/1/99-00	486	1.000	486	\$2,416,000	\$5,000	\$5,298,756	0.92	\$0.46
7/1/00-01	522	1.000	522	\$1,835,135	\$3,500	\$5,485,021	0.95	\$0.33
7/1/01-02	519	1.000	519	\$1,849,000	\$3,600	\$5,903,745	0.88	\$0.31
7/1/02-03	476	1.000	476	\$1,290,330	\$2,700	\$6,387,912	0.75	\$0.20
7/1/03-04	419	1.000	419	\$1,958,000	\$4,700	\$6,791,034	0.62	\$0.29
7/1/04-05	415	1.000	415	\$1,737,000	\$4,200	\$6,939,244	0.60	\$0.25
7/1/05-06	470	1.000	470	\$1,528,140	\$3,300	\$7,036,114	0.67	\$0.22
7/1/06-07	444	1.000	444	\$1,697,000	\$3,800	\$7,324,905	0.61	\$0.23
7/1/07-08	437	1.000	437	\$1,019,471	\$2,300	\$7,659,633	0.57	\$0.13
7/1/08-09	413	1.000	413	\$1,353,000	\$3,300	\$7,950,681	0.52	\$0.17
7/1/09-10	437	1.000	437	\$2,101,000	\$4,800	\$8,144,999	0.54	\$0.26
7/1/10-11	421	1.000	421	\$1,749,000	\$4,200	\$8,316,872	0.51	\$0.21
7/1/11-12	344	1.000	344	\$1,509,000	\$4,400	\$8,491,078	0.41	\$0.18
7/1/12-13	316	1.000	316	\$2,691,000	\$8,500	\$8,548,039	0.37	\$0.31
7/1/13-14	340	1.000	340	\$1,977,000	\$5,800	\$8,643,197	0.39	\$0.23
7/1/14-15	346	1.000	346	\$1,142,000	\$3,300	\$8,840,462	0.39	\$0.13
7/1/15-16	388	1.000	388	\$1,608,000	\$4,100	\$9,058,044	0.43	\$0.18
7/1/16-17	452	1.000	452	\$683,000	\$1,500	\$9,406,250	0.48	\$0.07
7/1/17-18	477	1.000	477	\$1,318,000	\$2,800	\$9,755,389	0.49	\$0.14
7/1/18-19	515	1.000	515	\$1,725,000	\$3,300	\$9,853,978	0.52	\$0.18
7/1/19-20	476	1.000	476	\$1,829,000	\$3,800	\$10,029,396	0.47	\$0.18
7/1/20-21	342	1.001	342	\$1,505,000	\$4,400	\$10,210,831	0.34	\$0.15
7/1/21-22	437	1.002	438	\$1,484,000	\$3,400	\$10,849,185	0.40	\$0.14
7/1/22-23	420	1.027	432	\$1,974,000	\$4,600	\$12,020,589	0.36	\$0.16
<b>Total</b>	<b>14,441</b>		<b>14,454</b>	<b>\$49,738,000</b>	<b>\$3,400</b>	<b>\$228,293,980</b>	<b>0.63</b>	<b>\$0.22</b>

\* Estimated ultimate average claim size

Columns (B), (G): Exhibit 1

Column (C): Appendix A3

Column (D) = (B) \* (C)

Column (E): Exhibit 3-A

Column (F) = (E) / (D)

Column (G): Exhibit 1

Column (H) = (D) / (G) \* 10,000

Column (I) = (E) / (G)

**Analysis of Reported Loss Development  
Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
7/1/93-94					\$1,780	\$1,256	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237
7/1/94-95				\$2,024	\$1,742	\$1,577	\$1,563	\$1,565	\$1,510	\$1,540	\$1,600	\$1,602	\$1,591	\$1,586
7/1/95-96			\$2,315	\$1,812	\$1,812	\$1,807	\$1,896	\$1,896	\$1,896	\$1,896	\$1,895	\$1,888	\$1,888	\$1,889
7/1/96-97		\$1,364	\$1,234	\$1,230	\$1,207	\$1,191	\$1,219	\$1,622	\$1,643	\$1,643	\$1,643	\$1,643	\$1,645	\$1,645
7/1/97-98	\$1,480	\$1,022	\$1,174	\$1,302	\$1,213	\$1,236	\$1,239	\$1,246	\$1,215	\$1,220	\$1,246	\$1,235	\$1,251	\$1,251
7/1/98-99	\$623	\$736	\$899	\$966	\$923	\$916	\$906	\$882	\$882	\$882	\$882	\$882	\$882	\$882
7/1/99-00	\$740	\$1,297	\$1,579	\$1,720	\$1,758	\$1,669	\$1,712	\$1,716	\$1,747	\$1,766	\$1,867	\$1,847	\$1,920	\$1,978
7/1/00-01	\$1,342	\$1,971	\$2,083	\$1,948	\$1,934	\$1,900	\$1,886	\$1,846	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847
7/1/01-02	\$736	\$1,301	\$1,429	\$1,593	\$1,542	\$1,513	\$1,483	\$1,470	\$1,484	\$1,490	\$1,497	\$1,505	\$1,755	\$1,793
7/1/02-03	\$1,260	\$1,368	\$1,325	\$1,264	\$1,265	\$1,240	\$1,249	\$1,248	\$1,249	\$1,249	\$1,254	\$1,250	\$1,250	\$1,285
7/1/03-04	\$1,185	\$1,670	\$1,716	\$1,628	\$1,619	\$1,680	\$1,722	\$1,749	\$1,766	\$1,782	\$1,800	\$2,345	\$2,344	\$2,226
7/1/04-05	\$760	\$981	\$875	\$938	\$940	\$1,043	\$1,055	\$1,088	\$1,099	\$1,151	\$1,497	\$1,507	\$1,687	\$1,661
7/1/05-06	\$1,027	\$1,264	\$1,161	\$1,240	\$1,270	\$1,372	\$1,357	\$1,368	\$1,460	\$1,969	\$2,057	\$2,057	\$2,057	\$1,660
7/1/06-07	\$885	\$1,147	\$1,290	\$1,266	\$1,305	\$1,440	\$1,493	\$1,690	\$1,813	\$1,739	\$1,743	\$1,743	\$1,832	\$1,768
7/1/07-08	\$1,136	\$1,089	\$1,041	\$1,018	\$982	\$1,001	\$1,044	\$1,019	\$1,019	\$1,019	\$1,019	\$1,019	\$1,019	\$1,019
7/1/08-09	\$1,235	\$1,221	\$1,142	\$1,160	\$1,137	\$1,134	\$1,223	\$1,202	\$1,210	\$1,295	\$1,384	\$1,325	\$1,325	\$1,338
7/1/09-10	\$1,277	\$1,572	\$1,381	\$1,396	\$1,573	\$1,749	\$2,080	\$2,036	\$2,486	\$2,272	\$2,254	\$2,063	\$2,063	\$2,063
7/1/10-11	\$1,328	\$1,500	\$1,383	\$1,397	\$1,509	\$1,645	\$1,646	\$1,643	\$1,642	\$1,644	\$1,644	\$1,644	\$1,644	\$1,644
7/1/11-12	\$1,025	\$1,104	\$1,064	\$1,143	\$1,346	\$1,416	\$1,413	\$1,413	\$1,413	\$1,464	\$1,437	\$1,437		
7/1/12-13	\$998	\$1,323	\$1,543	\$1,532	\$1,810	\$1,851	\$2,188	\$2,183	\$2,189	\$2,598				
7/1/13-14	\$849	\$1,181	\$1,264	\$1,383	\$1,409	\$1,420	\$1,467	\$1,805	\$1,811	\$1,847				
7/1/14-15	\$922	\$779	\$798	\$801	\$830	\$822	\$969	\$1,087						
7/1/15-16	\$1,009	\$1,491	\$1,482	\$1,532	\$1,467	\$1,469	\$1,464	\$1,464						
7/1/16-17	\$820	\$684	\$577	\$575	\$575	\$575	\$562							
7/1/17-18	\$1,130	\$1,041	\$1,018	\$1,105	\$1,124	\$1,137								
7/1/18-19	\$1,018	\$1,233	\$1,338	\$1,340	\$1,403									
7/1/19-20	\$1,350	\$1,357	\$1,456	\$1,464										
7/1/20-21	\$1,465	\$1,146	\$1,031											
7/1/21-22	\$1,278	\$771												
7/1/22-23	\$1,149													

Year	Age to age development:*													
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180
7/1/93-94					0.705	0.985	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95				0.861	0.905	0.991	1.002	0.965	1.019	1.039	1.001	0.993	0.997	1.000
7/1/95-96			0.783	1.000	0.997	1.049	1.000	1.000	1.000	0.996	1.000	1.000	1.000	1.043
7/1/96-97		0.904	0.997	0.981	0.987	1.024	1.330	1.013	1.000	1.000	1.000	1.001	1.000	1.000
7/1/97-98	0.690	1.149	1.109	0.932	1.019	1.003	1.005	0.975	1.005	1.021	0.991	1.013	1.000	1.000
7/1/98-99	1.182	1.220	1.075	0.955	0.993	0.989	0.974	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/99-00	1.754	1.217	1.089	1.022	0.950	1.026	1.002	1.018	1.011	1.057	0.989	1.039	1.031	--
7/1/00-01	1.468	1.057	0.935	0.993	0.982	0.993	0.979	1.000	1.000	1.000	1.000	1.000	--	1.000
7/1/01-02	1.768	1.098	1.115	0.968	0.981	0.980	0.991	1.009	1.004	1.005	1.006	--	1.021	0.997
7/1/02-03	1.085	0.969	0.954	1.001	0.981	1.007	0.999	1.000	1.000	1.004	--	1.000	1.028	1.000
7/1/03-04	1.409	1.028	0.949	0.994	1.038	1.025	1.016	1.009	1.009	--	1.303	1.000	0.950	1.015
7/1/04-05	1.291	0.892	1.072	1.002	1.110	1.012	1.031	1.011	--	1.301	1.007	1.119	0.985	1.000
7/1/05-06	1.230	0.919	1.068	1.024	1.080	0.989	1.008	--	1.349	1.045	1.000	1.000	0.807	1.002
7/1/06-07	1.296	1.125	0.981	1.031	1.103	1.037	--	1.073	0.959	1.002	1.000	1.051	0.965	0.952
7/1/07-08	0.958	0.956	0.978	0.964	1.020	--	0.977	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/08-09	0.989	0.936	1.016	0.980	--	1.079	0.983	1.007	1.070	1.069	0.957	1.000	1.009	0.993
7/1/09-10	1.231	0.879	1.011	--	1.112	1.189	0.979	1.221	0.914	0.992	0.915	1.000	1.000	1.000
7/1/10-11	1.129	0.922	--	1.080	1.090	1.000	0.998	1.000	1.001	1.000	1.000	1.000		
7/1/11-12	1.076	--	1.074	1.178	1.052	0.998	1.000	1.000	1.036	0.981	1.000			
7/1/12-13	--	1.167	0.993	1.182	1.023	1.182	0.997	1.003	1.187	1.000				
7/1/13-14	1.391	1.071	1.094	1.018	1.008	1.033	1.230	1.004	1.020					
7/1/14-15	0.844	1.025	1.004	1.036	0.991	1.178	1.000	1.122						
7/1/15-16	1.477	0.994	1.034	0.957	1.002	0.997	1.000							
7/1/16-17	0.834	0.843	0.996	1.000	1.000	0.978								
7/1/17-18	0.921	0.978	1.086	1.017	1.012									
7/1/18-19	1.211	1.085	1.002	1.047										
7/1/19-20	1.005	1.074	1.005											
7/1/20-21	0.782	0.900												
7/1/21-22	0.603													
<b>Average</b>	1.151	1.017	1.017	1.009	1.006	1.032	1.023	1.021	1.029	1.027	1.009	1.013	0.987	1.000
<b>Avg Latest 3</b>	0.797	1.019	1.031	1.021	1.004	1.051	1.077	1.043	1.081	0.994	0.972	1.000	1.003	0.981
<b>Avg Latest 5</b>	0.904	0.976	1.025	1.011	1.002	1.073	1.046	1.026	1.031	1.008	0.975	1.010	0.956	0.989
<b>Wtd Avg</b>	1.117	1.016	1.006	1.006	1.000	1.035	1.020	1.023	1.028	1.023	1.010	1.013	0.982	1.001
<b>Wtd Avg Latest 3</b>	0.800	1.024	1.026	1.027	1.005	1.045	1.087	1.026	1.092	0.995	0.964	1.000	1.003	0.977
<b>Wtd Avg Latest 5</b>	0.889	0.993	1.025	1.008	1.004	1.084	1.044	1.016	1.030	1.005	0.968	1.011	0.946	0.988
<b>State (All Agencies)</b>	1.147	1.111	1.061	1.047	1.043	1.031	1.021	1.014	1.013	1.013	1.008	1.006	1.004	1.004
<b>Prior</b>	1.127	1.076	1.057	1.037	1.032	1.035	1.024	1.014	1.013	1.013	1.010	1.010	1.004	1.004
<b>Prior Implied</b>	1.138	1.115	1.095	1.076	1.061	1.048	1.038	1.029	1.022	1.017	1.013	1.010	1.008	1.006
<b>Industry**</b>	1.150	1.070	1.034	1.017	1.009	1.005	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000
<b>Selected</b>	1.117	1.065	1.046	1.037	1.032	1.032	1.021	1.021	1.013	1.013	1.008	1.006	1.004	1.004
<b>Cumulative</b>	1.533	1.372	1.288	1.231	1.187	1.150	1.114	1.091	1.068	1.055	1.041	1.034	1.027	1.023

\* Age to age development not shown on one diagonal due to change in reserving methodology

\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Analysis of Reported Loss Development  
Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$1,237	\$1,237			\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238
7/1/94-95	\$1,586	\$1,586		\$1,586	\$1,586	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587
7/1/95-96	\$1,971	\$1,971	\$1,971	\$1,914	\$1,914	\$1,914	\$1,914	\$2,668	\$2,668	\$2,668	\$2,668	\$2,668	\$2,668	\$2,668	\$2,570
7/1/96-97	\$1,645	\$1,645	\$1,349	\$2,358	\$2,107	\$2,107	\$2,107	\$2,368	\$2,368	\$2,368	\$2,368	\$2,368	\$2,370	\$2,370	\$2,370
7/1/97-98	\$1,251	\$1,256	\$1,304	\$1,304	\$1,304	\$1,278	\$1,278	\$1,278	\$1,278	\$1,278	\$1,278	\$1,278	\$1,278		
7/1/98-99	\$882	\$882	\$883	\$883	\$883	\$883	\$883	\$883	\$883	\$883	\$883				
7/1/99-00	\$3,565	\$3,668	\$3,214	\$3,366	\$3,366	\$3,355	\$3,355	\$2,423	\$2,413	\$2,413					
7/1/00-01	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847						
7/1/01-02	\$1,788	\$1,788	\$1,788	\$1,788	\$1,788	\$1,865	\$1,856	\$1,856							
7/1/02-03	\$1,286	\$1,286	\$1,286	\$1,286	\$1,286	\$1,297	\$1,290	\$1,290							
7/1/03-04	\$2,259	\$2,230	\$2,065	\$2,065	\$1,946	\$1,946									
7/1/04-05	\$1,661	\$1,666	\$1,669	\$1,727	\$1,727										
7/1/05-06	\$1,663	\$1,587	\$1,587	\$1,587											
7/1/06-07	\$1,683	\$1,683	\$1,683												
7/1/07-08	\$1,019	\$1,019													
7/1/08-09	\$1,328														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:**														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.000				1.000	--	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95	1.000			1.000	--	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/95-96	1.000	1.000	0.971	--	1.000	1.000	1.394	1.000	1.000	1.000	1.000	1.000	0.963		
7/1/96-97	1.000	0.820	--	0.893	1.000	1.000	1.124	1.000	1.000	1.000	1.001	1.000			
7/1/97-98	1.004	--	1.000	1.000	0.980	1.000	1.000	1.000	1.000	1.000	1.000				
7/1/98-99	--	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/99-00	1.029	0.876	1.047	1.000	0.997	1.000	0.722	0.996	1.000						
7/1/00-01	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
7/1/01-02	1.000	1.000	1.000	1.000	1.043	0.995	1.000								
7/1/02-03	1.000	1.000	1.000	1.009	0.995	1.000									
7/1/03-04	0.987	0.926	1.000	0.942	1.000										
7/1/04-05	1.003	1.002	1.035	1.000											
7/1/05-06	0.955	1.000	1.000												
7/1/06-07	1.000	1.000													
7/1/07-08	1.000														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	0.998	0.966	1.005	0.984	1.001	1.000	1.027	0.999	1.000	1.000	1.000	1.000	0.988	1.000	
<b>Avg Latest 3</b>	0.985	1.001	1.012	0.984	1.013	0.998	0.907	0.999	1.000	1.000	1.000	1.000	0.988		
<b>Avg Latest 5</b>	0.989	0.986	1.007	0.990	1.007	0.999	0.944	0.999	1.000	1.000	1.000				
<b>Wtd Avg</b>	1.000	0.955	1.009	0.980	1.002	0.999	1.005	0.999	1.000	1.000	1.000	1.000	0.982	1.000	
<b>Wtd Avg Latest 3</b>	0.983	1.001	1.011	0.979	1.014	0.998	0.868	0.998	1.000	1.000	1.000	1.000	0.982		
<b>Wtd Avg Latest 5</b>	0.988	0.981	1.007	0.988	1.006	0.999	0.899	0.999	1.000	1.000	1.000				
<b>State (All Agencies)</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior Impled</b>	1.004	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<b>Industry**</b>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Cumulative</b>	1.019	1.017	1.016	1.015	1.014	1.013	1.012	1.011	1.011	1.011	1.010	1.010	1.010	1.010	1.010

\* Age to age development not shown on one diagonal due to change in reserving methodology

\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Estimation of Cumulative Reported Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.533	-5.9925	-0.6300	35.910	0.3970	3.7755	360	1.001
24	1.372	-6.0220	-0.9901	36.265	0.9803	5.9624	348	1.002
36	1.288	-6.0507	-1.2464	36.611	1.5536	7.5418	336	1.002
48	1.231	-6.0786	-1.4667	36.949	2.1511	8.9152	324	1.002
60	1.187	-6.1057	-1.6784	37.280	2.8172	10.2481	312	1.003
72	1.150	-6.1321	-1.9003	37.603	3.6113	11.6532	300	1.003
84	1.114	-6.1578	-2.1752	37.919	4.7315	13.3946	288	1.004
96	1.091	-6.1829	-2.3960	38.229	5.7406	14.8140	276	1.004
108	1.068	-6.2074	-2.6843	38.532	7.2055	16.6625	264	1.005
120	1.055	-6.2313	-2.9059	38.829	8.4444	18.1077	252	1.006
132	1.041	-6.2546	-3.1870	39.120	10.1568	19.9333	240	1.008
144	1.034	-6.2774	-3.3950	39.406	11.5257	21.3116	228	1.009
156	1.027	-6.2997	-3.5950	39.686	12.9244	22.6477	216	1.011
168	1.023	-6.3215	-3.7565	39.961	14.1111	23.7466	204	1.013
180	1.019	-6.3428	-3.9482	40.232	15.5885	25.0430	192	1.016
192	1.017	-6.3637	-4.0597	40.497	16.4811	25.8348	180	1.019
							168	1.024
							156	1.029
							144	1.036
							132	1.044
							120	1.055
							108	1.069
							96	1.087
							84	1.110
							72	1.140
							60	1.179
							48	1.231
							36	1.301
							24	1.394
							12	1.519
Sum		-99.0209	-40.0148	613.0288	118.4201	249.5920		
Average		-6.1888	-2.5009	38.3143	7.4013	15.5995		

N =	16		
A =	1.51E+24		
B =	9.400	R^2 =	0.99813
C =	388		

\* Appendix A1, page 1

**Analysis of Paid Loss Development  
Workers Compensation**

Year	Gross Paid Losses in Thousands as of (Months):														
	12	24	36	48	60	72	84	96	108	120	132	144	156	168	
7/1/93-94					\$1,617	\$1,230	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237	\$1,237
7/1/94-95				\$1,679	\$1,312	\$1,365	\$1,441	\$1,453	\$1,487	\$1,497	\$1,546	\$1,579	\$1,586	\$1,586	\$1,586
7/1/95-96			\$1,710	\$1,636	\$1,750	\$1,752	\$1,842	\$1,856	\$1,872	\$1,887	\$1,888	\$1,888	\$1,888	\$1,888	\$1,889
7/1/96-97		\$899	\$984	\$1,027	\$1,113	\$1,167	\$1,185	\$1,189	\$1,251	\$1,263	\$1,269	\$1,277	\$1,290	\$1,303	\$1,303
7/1/97-98	\$432	\$680	\$986	\$1,146	\$1,163	\$1,173	\$1,208	\$1,214	\$1,215	\$1,217	\$1,223	\$1,234	\$1,243	\$1,246	\$1,246
7/1/98-99	\$247	\$563	\$743	\$847	\$881	\$881	\$881	\$882	\$882	\$882	\$882	\$882	\$882	\$882	\$882
7/1/99-00	\$263	\$786	\$1,014	\$1,331	\$1,422	\$1,516	\$1,609	\$1,642	\$1,676	\$1,702	\$1,771	\$1,807	\$1,858	\$1,939	\$1,939
7/1/00-01	\$439	\$1,093	\$1,385	\$1,569	\$1,655	\$1,734	\$1,794	\$1,846	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847
7/1/01-02	\$417	\$920	\$1,086	\$1,305	\$1,391	\$1,427	\$1,442	\$1,454	\$1,462	\$1,472	\$1,485	\$1,497	\$1,517	\$1,565	\$1,565
7/1/02-03	\$501	\$1,056	\$1,175	\$1,221	\$1,235	\$1,240	\$1,242	\$1,248	\$1,249	\$1,249	\$1,250	\$1,250	\$1,250	\$1,285	\$1,285
7/1/03-04	\$532	\$1,021	\$1,401	\$1,502	\$1,581	\$1,644	\$1,689	\$1,721	\$1,748	\$1,771	\$1,792	\$1,815	\$1,834	\$1,845	\$1,845
7/1/04-05	\$315	\$531	\$634	\$788	\$899	\$1,012	\$1,036	\$1,067	\$1,088	\$1,142	\$1,221	\$1,239	\$1,252	\$1,258	\$1,258
7/1/05-06	\$387	\$800	\$995	\$1,177	\$1,242	\$1,260	\$1,324	\$1,336	\$1,370	\$1,400	\$1,430	\$1,480	\$1,503	\$1,524	\$1,524
7/1/06-07	\$352	\$719	\$984	\$1,100	\$1,215	\$1,365	\$1,404	\$1,444	\$1,453	\$1,515	\$1,521	\$1,531	\$1,561	\$1,566	\$1,566
7/1/07-08	\$320	\$636	\$834	\$915	\$916	\$958	\$959	\$1,019	\$1,019	\$1,019	\$1,019	\$1,019	\$1,019	\$1,019	\$1,019
7/1/08-09	\$439	\$880	\$1,045	\$1,064	\$1,115	\$1,124	\$1,128	\$1,129	\$1,131	\$1,157	\$1,314	\$1,325	\$1,325	\$1,328	\$1,328
7/1/09-10	\$448	\$1,013	\$1,214	\$1,284	\$1,388	\$1,470	\$1,531	\$1,588	\$1,683	\$1,711	\$1,736	\$1,764	\$1,787	\$1,804	\$1,804
7/1/10-11	\$468	\$949	\$1,138	\$1,266	\$1,351	\$1,402	\$1,415	\$1,433	\$1,515	\$1,527	\$1,539	\$1,550	\$1,561		
7/1/11-12	\$400	\$694	\$896	\$987	\$1,086	\$1,221	\$1,250	\$1,279	\$1,286	\$1,296	\$1,302	\$1,307			
7/1/12-13	\$318	\$834	\$1,027	\$1,299	\$1,506	\$1,587	\$1,750	\$1,913	\$2,039	\$2,066	\$2,098				
7/1/13-14	\$302	\$702	\$1,048	\$1,233	\$1,255	\$1,282	\$1,416	\$1,599	\$1,616	\$1,667					
7/1/14-15	\$329	\$688	\$777	\$798	\$812	\$814	\$816	\$822	\$828						
7/1/15-16	\$415	\$1,083	\$1,193	\$1,265	\$1,292	\$1,296	\$1,296	\$1,297							
7/1/16-17	\$318	\$508	\$526	\$562	\$562	\$562	\$562								
7/1/17-18	\$405	\$800	\$947	\$963	\$1,013	\$1,030									
7/1/18-19	\$483	\$980	\$1,170	\$1,226	\$1,275										
7/1/19-20	\$638	\$1,203	\$1,371	\$1,419											
7/1/20-21	\$411	\$887	\$942												
7/1/21-22	\$402	\$679													
7/1/22-23	\$536														

Year	Age to age development:													
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180
7/1/93-94					0.761	1.005	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95				0.782	1.041	1.055	1.009	1.023	1.007	1.033	1.021	1.004	1.000	1.000
7/1/95-96			0.956	1.070	1.001	1.051	1.008	1.008	1.008	1.001	1.000	1.000	1.000	1.012
7/1/96-97		1.095	1.044	1.083	1.049	1.015	1.003	1.052	1.010	1.005	1.006	1.010	1.010	1.009
7/1/97-98	1.576	1.450	1.162	1.015	1.009	1.030	1.005	1.001	1.002	1.005	1.009	1.007	1.002	1.002
7/1/98-99	2.281	1.319	1.140	1.041	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/99-00	2.992	1.291	1.313	1.068	1.066	1.061	1.021	1.020	1.015	1.041	1.020	1.028	1.043	1.023
7/1/00-01	2.487	1.267	1.133	1.055	1.048	1.035	1.029	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/01-02	2.205	1.181	1.201	1.066	1.026	1.010	1.008	1.005	1.007	1.009	1.008	1.014	1.031	1.010
7/1/02-03	2.106	1.113	1.039	1.011	1.005	1.002	1.005	1.000	1.000	1.001	1.000	1.000	1.028	1.000
7/1/03-04	1.919	1.372	1.072	1.053	1.040	1.027	1.019	1.015	1.013	1.012	1.013	1.011	1.006	1.018
7/1/04-05	1.683	1.193	1.243	1.141	1.126	1.023	1.030	1.019	1.050	1.069	1.015	1.010	1.005	1.016
7/1/05-06	2.065	1.245	1.182	1.056	1.014	1.050	1.009	1.025	1.022	1.021	1.035	1.016	1.014	1.007
7/1/06-07	2.042	1.369	1.118	1.104	1.123	1.029	1.028	1.007	1.043	1.004	1.007	1.020	1.003	1.002
7/1/07-08	1.988	1.311	1.098	1.001	1.046	1.001	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/08-09	2.003	1.188	1.018	1.048	1.008	1.004	1.001	1.001	1.023	1.136	1.009	1.000	1.002	1.000
7/1/09-10	2.262	1.199	1.058	1.081	1.059	1.041	1.037	1.060	1.017	1.015	1.016	1.013	1.010	
7/1/10-11	2.028	1.199	1.112	1.067	1.038	1.010	1.012	1.058	1.008	1.007	1.007	1.007		
7/1/11-12	1.737	1.290	1.102	1.101	1.124	1.024	1.023	1.006	1.008	1.005	1.004			
7/1/12-13	2.621	1.231	1.265	1.159	1.054	1.103	1.093	1.066	1.013	1.015				
7/1/13-14	2.328	1.492	1.177	1.018	1.021	1.105	1.130	1.011	1.031					
7/1/14-15	2.095	1.129	1.027	1.018	1.002	1.003	1.006	1.008						
7/1/15-16	2.610	1.101	1.061	1.021	1.003	1.000	1.000							
7/1/16-17	1.596	1.035	1.069	1.000	1.000	1.000								
7/1/17-18	1.977	1.185	1.017	1.052	1.016									
7/1/18-19	2.028	1.194	1.048	1.040										
7/1/19-20	1.885	1.140	1.035											
7/1/20-21	2.158	1.063												
7/1/21-22	1.690													
<b>Average</b>	2.094	1.226	1.108	1.046	1.027	1.029	1.024	1.018	1.013	1.019	1.009	1.008	1.009	1.006
<b>Avg Latest 5</b>	1.947	1.123	1.046	1.026	1.009	1.042	1.050	1.030	1.015	1.036	1.007	1.008	1.006	1.005
<b>Wtd Avg</b>	2.074	1.219	1.101	1.042	1.024	1.032	1.025	1.019	1.013	1.018	1.009	1.008	1.010	1.007
<b>Wtd Avg Latest 5</b>	1.945	1.133	1.044	1.029	1.010	1.054	1.058	1.034	1.016	1.030	1.008	1.009	1.006	1.005
<b>State (All Agencies)</b>	2.088	1.236	1.111	1.067	1.050	1.035	1.024	1.017	1.015	1.015	1.014	1.014	1.014	1.013
<b>Prior</b>	2.090	1.183	1.074	1.055	1.043	1.040	1.037	1.032	1.015	1.015	1.013	1.011	1.010	
<b>Industry*</b>	2.047	1.215	1.100	1.059	1.039	1.028	1.021	1.017	1.013	1.011	1.009	1.008	1.007	1.006
<b>Selected</b>	2.009	1.176	1.062	1.044	1.039	1.038	1.037	1.030	1.017	1.015	1.014	1.012	1.011	1.010
<b>Cumulative</b>	3.723	1.853	1.576	1.484	1.421	1.368	1.318	1.271	1.234	1.214	1.196	1.179	1.166	1.153

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Analysis of Paid Loss Development  
Workers Compensation**

Year	Gross Paid Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$1,237	\$1,237			\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238	\$1,238
7/1/94-95	\$1,586	\$1,586		\$1,586	\$1,586	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587	\$1,587
7/1/95-96	\$1,912	\$1,914	\$1,914	\$1,914	\$1,914	\$1,914	\$1,914	\$2,553	\$2,557	\$2,562	\$2,565	\$2,568	\$2,570	\$2,570	
7/1/96-97	\$1,314	\$1,330	\$1,345	\$1,365	\$1,383	\$1,420	\$1,459	\$1,509	\$1,545	\$1,599	\$1,637	\$1,675	\$1,703		
7/1/97-98	\$1,248	\$1,248	\$1,250	\$1,251	\$1,253	\$1,254	\$1,278	\$1,278	\$1,278	\$1,278	\$1,278	\$1,278			
7/1/98-99	\$882	\$882	\$883	\$883	\$883	\$883	\$883	\$883	\$883	\$883	\$883				
7/1/99-00	\$1,983	\$2,035	\$2,113	\$2,134	\$2,150	\$2,218	\$2,231	\$2,312	\$2,322	\$2,329					
7/1/00-01	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847	\$1,847						
7/1/01-02	\$1,581	\$1,593	\$1,607	\$1,622	\$1,636	\$1,646	\$1,654	\$1,658							
7/1/02-03	\$1,286	\$1,286	\$1,286	\$1,286	\$1,290	\$1,290	\$1,290								
7/1/03-04	\$1,878	\$1,910	\$1,914	\$1,918	\$1,922	\$1,925									
7/1/04-05	\$1,278	\$1,291	\$1,308	\$1,317	\$1,323										
7/1/05-06	\$1,535	\$1,587	\$1,587	\$1,587											
7/1/06-07	\$1,570	\$1,574	\$1,578												
7/1/07-08	\$1,019	\$1,019													
7/1/08-09	\$1,328														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.000				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95	1.000			1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/95-96	1.001	1.000	1.000	1.000	1.000	1.000	1.334	1.001	1.002	1.001	1.001	1.001	1.001	1.000	1.000
7/1/96-97	1.012	1.011	1.015	1.014	1.026	1.028	1.034	1.024	1.035	1.024	1.023	1.017			
7/1/97-98	1.001	1.001	1.001	1.002	1.001	1.019	1.000	1.000	1.000	1.000	1.000				
7/1/98-99	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/99-00	1.026	1.038	1.010	1.008	1.032	1.006	1.036	1.004	1.003						
7/1/00-01	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
7/1/01-02	1.008	1.009	1.009	1.009	1.006	1.004	1.003								
7/1/02-03	1.000	1.000	1.000	1.004	1.000	1.000									
7/1/03-04	1.017	1.003	1.002	1.002	1.002										
7/1/04-05	1.010	1.014	1.006	1.004											
7/1/05-06	1.034	1.000	1.000												
7/1/06-07	1.003	1.003													
7/1/07-08	1.000														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	1.007	1.007	1.004	1.004	1.006	1.006	1.045	1.004	1.006	1.004	1.005	1.005	1.000	1.000	
<b>Avg Latest 5</b>	1.013	1.004	1.003	1.004	1.008	1.002	1.008	1.006	1.008	1.005	1.005				
<b>Wtd Avg</b>	1.008	1.007	1.004	1.004	1.007	1.006	1.055	1.004	1.006	1.004	1.005	1.004	1.000	1.000	
<b>Wtd Avg Latest 5</b>	1.014	1.004	1.003	1.004	1.009	1.003	1.011	1.006	1.008	1.005	1.005				
<b>State (All Agencies)</b>	1.012	1.010	1.008	1.008	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Prior</b>	1.010	1.009	1.007	1.007	1.006	1.006	1.006	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.060
<b>Industry*</b>	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.052
<b>Selected</b>	1.010	1.009	1.007	1.007	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Cumulative</b>	1.141	1.129	1.120	1.111	1.104	1.097	1.090	1.084	1.079	1.074	1.070	1.068	1.065	1.062	1.060

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin



**Estimation of Cumulative Paid Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	3.723	-1.5896	1.0018	2.527	1.0036	-1.5924	360	1.084
24	1.853	-2.8274	-0.1592	7.994	0.0253	0.4501	348	1.086
36	1.576	-3.3639	-0.5525	11.316	0.3052	1.8585	336	1.089
48	1.484	-3.7112	-0.7263	13.773	0.5275	2.6953	324	1.092
60	1.421	-3.9684	-0.8653	15.748	0.7487	3.4338	312	1.095
72	1.368	-4.1729	-1.0001	17.413	1.0001	4.1731	300	1.098
84	1.318	-4.3425	-1.1454	18.858	1.3119	4.9738	288	1.101
96	1.271	-4.4875	-1.3054	20.138	1.7041	5.8581	276	1.105
108	1.234	-4.6141	-1.4504	21.290	2.1038	6.6925	264	1.109
120	1.214	-4.7265	-1.5406	22.340	2.3735	7.2817	252	1.113
132	1.196	-4.8275	-1.6311	23.305	2.6604	7.8740	240	1.118
144	1.179	-4.9193	-1.7192	24.199	2.9555	8.4570	228	1.123
156	1.166	-5.0033	-1.7979	25.033	3.2325	8.9955	216	1.128
168	1.153	-5.0808	-1.8794	25.814	3.5323	9.5490	204	1.135
180	1.141	-5.1527	-1.9601	26.551	3.8418	10.0996	192	1.142
192	1.129	-5.2198	-2.0469	27.247	4.1898	10.6844	180	1.149
							168	1.158
							156	1.169
							144	1.180
							132	1.194
							120	1.211
							108	1.231
							96	1.256
							84	1.287
							72	1.329
							60	1.388
							48	1.478
							36	1.632
							24	1.975
							12	3.648
Sum		-68.0075	-18.7779	303.5451	31.5160	91.4842		
Average		-4.2505	-1.1736	18.9716	1.9698	5.7178		

N =	16		
A =	9.50E+00		
B =	0.806	R^2 =	0.99213
C =	-7		

\* Appendix A2, page 1

**Analysis of Reported Claim Development  
Workers Compensation**

Year	Reported Claims as of (Months):											
	12	24	36	48	60	72	84	96	108	120	132	144
7/1/93-94							803	803	803	803	803	803
7/1/94-95						751	751	751	751	751	751	751
7/1/95-96					818	818	818	818	818	818	818	818
7/1/96-97				718	718	718	718	718	718	718	718	718
7/1/97-98			548	548	548	548	548	548	548	548	548	548
7/1/98-99		488	489	489	489	489	489	489	489	489	489	489
7/1/99-00	454	481	484	486	486	486	486	486	486	486	486	486
7/1/00-01	462	520	520	521	522	522	522	522	522	522	522	522
7/1/01-02	481	516	519	519	519	519	519	519	519	519	519	519
7/1/02-03	436	472	475	475	476	476	476	476	476	476	476	476
7/1/03-04	393	418	418	418	419	419	419	419	419	419	419	419
7/1/04-05	386	414	414	415	415	415	415	415	415	415	415	415
7/1/05-06	440	467	468	469	470	470	470	470	470	470	470	470
7/1/06-07	410	441	443	444	444	444	444	444	444	444	444	444
7/1/07-08	441	437	437	437	437	437	437	437	437	437	437	437
7/1/08-09	382	414	414	413	413	413	413	413	413	413	413	413
7/1/09-10	409	435	436	436	436	436	436	436	436	437	437	437
7/1/10-11	379	418	419	419	420	421	421	421	421	421	421	421
7/1/11-12	317	343	345	344	344	344	344	344	344	344	344	344
7/1/12-13	291	315	316	316	316	316	316	316	316	316	316	316
7/1/13-14	306	338	340	340	340	340	340	340	340	340	340	340
7/1/14-15	335	344	345	345	345	345	345	345	346			
7/1/15-16	373	388	388	388	388	388	388	388				
7/1/16-17	445	451	452	452	452	452	452					
7/1/17-18	457	475	477	477	477	477						
7/1/18-19	502	515	515	515	515							
7/1/19-20	468	476	476	476								
7/1/20-21	334	342	342									
7/1/21-22	431	437										
7/1/22-23	420											

Year	Age to age development:											
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:ULT
7/1/93-94							1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95						1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/95-96					1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/96-97				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/97-98			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/98-99		1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/99-00	1.059	1.006	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/00-01	1.126	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/01-02	1.073	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/02-03	1.083	1.006	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/03-04	1.064	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/04-05	1.073	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/05-06	1.061	1.002	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/06-07	1.076	1.005	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/07-08	0.991	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/08-09	1.084	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/09-10	1.064	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000
7/1/10-11	1.103	1.002	1.000	1.002	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/11-12	1.082	1.006	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/12-13	1.082	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
7/1/13-14	1.105	1.006	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
7/1/14-15	1.027	1.003	1.000	1.000	1.000	1.000	1.000	1.003				
7/1/15-16	1.040	1.000	1.000	1.000	1.000	1.000	1.000					
7/1/16-17	1.013	1.002	1.000	1.000	1.000	1.000						
7/1/17-18	1.039	1.004	1.000	1.000	1.000							
7/1/18-19	1.026	1.000	1.000	1.000								
7/1/19-20	1.017	1.000	1.000									
7/1/20-21	1.024	1.000										
7/1/21-22	1.014											
<b>Average</b>	1.058	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Avg Latest 5</b>	1.024	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.000
<b>Wtd Avg</b>	1.056	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Wtd Avg Latest 5</b>	1.024	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.000	1.000	
<b>State (All Agencies)</b>	1.018	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Prior</b>	1.026	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Industry*</b>	1.083	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.025	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Cumulative</b>	1.027	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

\* Based on experience of several large carriers

**Estimation of Cumulative Reported Claim Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.027	-1.8777	-3.6046	3.526	12.9931	6.7685	360	1.000
24	1.002	-2.9199	-6.0629	8.526	36.7585	17.7028	348	1.000
36	1.001	-3.4190	-7.2403	11.690	52.4220	24.7546	336	1.000
							324	1.000
							312	1.000
							300	1.000
							288	1.000
							276	1.000
							264	1.000
							252	1.000
							240	1.000
							228	1.000
							216	1.000
							204	1.000
							192	1.000
							180	1.000
							168	1.000
							156	1.000
							144	1.000
							132	1.000
							120	1.000
							108	1.000
							96	1.000
							84	1.000
							72	1.000
							60	1.000
							48	1.000
							36	1.001
							24	1.002
							12	1.027
Sum		-8.2166	-16.9078	23.7410	102.1736	49.2258		
Average		-2.7389	-5.6359	7.9137	34.0579	16.4086		

N =	3		
A =	2.28E+00		
B =	2.359	R^2 =	1.00000
C =	-5		

\* Appendix A3, page 1

**Loss Forecasting Model**  
**Analysis of Historical Loss Patterns**  
**Variation in Reported Loss Development**  
**Workers Compensation**

Year	Variation in Reported Losses:														
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180	180:192
7/1/93-94					-0.349	-0.015	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7/1/94-95				-0.150	-0.100	-0.009	0.002	-0.035	0.019	0.038	0.001	-0.007	-0.003	0.000	0.000
7/1/95-96			-0.245	0.000	-0.003	0.048	0.000	0.000	0.000	0.000	-0.004	0.000	0.000	0.042	0.000
7/1/96-97		-0.101	-0.003	-0.019	-0.013	0.024	0.285	0.013	0.000	0.000	0.000	0.001	0.000	0.000	0.000
7/1/97-98	-0.371	0.139	0.104	-0.071	0.019	0.003	0.005	-0.025	0.005	0.021	-0.009	0.013	0.000	0.000	0.004
7/1/98-99	0.167	0.199	0.072	-0.046	-0.007	-0.011	-0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	--
7/1/99-00	0.562	0.197	0.086	0.022	-0.052	0.025	0.002	0.018	0.011	0.055	-0.011	0.038	0.030	--	0.029
7/1/00-01	0.384	0.055	-0.067	-0.007	-0.018	-0.008	-0.021	0.000	0.000	0.000	0.000	0.000	--	0.000	0.000
7/1/01-02	0.570	0.094	0.109	-0.033	-0.019	-0.020	-0.009	0.009	0.004	0.005	0.006	--	0.021	-0.003	0.000
7/1/02-03	0.082	-0.032	-0.048	0.001	-0.019	0.007	-0.001	0.000	0.000	0.004	--	0.000	0.028	0.000	0.000
7/1/03-04	0.343	0.027	-0.053	-0.006	0.037	0.025	0.016	0.009	0.009	--	--	0.000	-0.052	0.015	-0.013
7/1/04-05	0.255	-0.115	0.070	0.002	0.105	0.012	0.030	0.010	--	--	0.007	0.113	-0.015	0.000	0.003
7/1/05-06	0.207	-0.084	0.065	0.024	0.077	-0.011	0.008	--	--	0.044	0.000	0.000	-0.215	0.002	-0.046
7/1/06-07	0.259	0.118	-0.019	0.031	0.098	0.036	--	0.070	-0.041	0.002	0.000	0.050	-0.036	-0.049	0.000
7/1/07-08	-0.043	-0.045	-0.022	-0.036	0.020	--	-0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7/1/08-09	-0.012	-0.067	0.016	-0.020	--	0.076	-0.017	0.007	0.068	0.066	-0.043	0.000	0.009	-0.007	--
7/1/09-10	0.207	-0.129	0.011	--	0.106	0.173	-0.021	0.200	-0.090	-0.008	-0.089	0.000	0.000	--	--
7/1/10-11	0.121	-0.081	--	0.077	0.086	0.000	-0.002	0.000	0.001	0.000	0.000	0.000	0.000	--	--
7/1/11-12	0.073	--	0.072	0.164	0.051	-0.002	0.000	0.000	0.036	-0.019	0.000	--	--	--	--
7/1/12-13	--	0.154	-0.007	0.167	0.022	0.167	-0.003	0.003	0.171	0.000	--	--	--	--	--
7/1/13-14	0.330	0.068	0.090	0.018	0.008	0.033	0.207	0.004	0.019	--	--	--	--	--	--
7/1/14-15	-0.169	0.024	0.004	0.035	-0.009	0.164	0.000	0.115	--	--	--	--	--	--	--
7/1/15-16	0.390	-0.006	0.033	-0.044	0.002	-0.003	0.000	--	--	--	--	--	--	--	--
7/1/16-17	-0.181	-0.171	-0.004	0.000	0.000	-0.023	--	--	--	--	--	--	--	--	--
7/1/17-18	-0.083	-0.083	-0.022	0.083	0.017	0.012	--	--	--	--	--	--	--	--	--
7/1/18-19	0.191	0.082	0.002	0.046	--	--	--	--	--	--	--	--	--	--	--
7/1/19-20	0.004	0.071	0.005	--	--	--	--	--	--	--	--	--	--	--	--
7/1/20-21	-0.245	-0.106	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/21-22	-0.506	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- Excludes points impacted by change in reserving methodology

Variance	0.075	0.011	0.006	0.004	0.008	0.004	0.006	0.003	0.002	0.001	0.001	0.001	0.003	0.000	0.000
Sigma	0.367	0.243	0.218	0.205	0.194	0.172	0.161	0.143	0.133	0.123	0.121	0.119	0.115	0.100	0.098

Lognormal Parameters					
Year	Maturity	Ultimate Losses	Prior Sigma*	Selected Sigma	Mu
7/1/93-94	360	\$1,198,127		0.011	13.996
7/1/94-95	348	\$1,575,448	0.009	0.014	14.270
7/1/95-96	336	\$2,517,749	0.011	0.017	14.739
7/1/96-97	324	\$2,375,000	0.014	0.022	14.680
7/1/97-98	312	\$1,262,727	0.017	0.022	14.049
7/1/98-99	300	\$831,226	0.022	0.022	13.630
7/1/99-00	288	\$2,416,000	0.027	0.022	14.697
7/1/00-01	276	\$1,835,135	0.034	0.022	14.422
7/1/01-02	264	\$1,849,000	0.042	0.022	14.430
7/1/02-03	252	\$1,290,330	0.053	0.049	14.069
7/1/03-04	240	\$1,958,000	0.053	0.049	14.486
7/1/04-05	228	\$1,737,000	0.054	0.052	14.366
7/1/05-06	216	\$1,528,140	0.055	0.060	14.238
7/1/06-07	204	\$1,697,000	0.057	0.062	14.342
7/1/07-08	192	\$1,019,471	0.058	0.078	13.832
7/1/08-09	180	\$1,353,000	0.061	0.079	14.115
7/1/09-10	168	\$2,101,000	0.063	0.081	14.555
7/1/10-11	156	\$1,749,000	0.067	0.091	14.370
7/1/11-12	144	\$1,509,000	0.071	0.095	14.222
7/1/12-13	132	\$2,691,000	0.076	0.099	14.801
7/1/13-14	120	\$1,977,000	0.083	0.103	14.492
7/1/14-15	108	\$1,142,000	0.083	0.108	13.942
7/1/15-16	96	\$1,608,000	0.087	0.115	14.284
7/1/16-17	84	\$683,000	0.138	0.150	13.423
7/1/17-18	72	\$1,318,000	0.141	0.156	14.079
7/1/18-19	60	\$1,725,000	0.190	0.192	14.342
7/1/19-20	48	\$1,829,000	0.198	0.201	14.399
7/1/20-21	36	\$1,505,000	0.223	0.221	14.200
7/1/21-22	24	\$1,484,000	0.257	0.250	14.179
7/1/22-23	12	\$1,974,000	0.366	0.269	14.459

\* Prior sigma at indicated maturity

**Derivation of Discount Factors  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Maturity in Years at 6/30/2023	Cumulative Paid Loss Develop. Factor	% Losses Paid 6/30/2023	Midpoint Upcoming Period	% Losses Paid Upcoming Period	Column(F) Discounted 4.0%	Discount Factor at 4.0%
7/1/93-94	30	1.000	100.0%				<b>1.000</b>
7/1/94-95	29	1.086	92.0%	29.5	7.96%	0.0250	<b>0.981</b>
7/1/95-96	28	1.089	91.8%	28.5	0.21%	0.0007	<b>0.944</b>
7/1/96-97	27	1.092	91.6%	27.5	0.23%	0.0008	<b>0.909</b>
7/1/97-98	26	1.095	91.4%	26.5	0.24%	0.0009	<b>0.878</b>
7/1/98-99	25	1.098	91.1%	25.5	0.26%	0.0010	<b>0.848</b>
7/1/99-00	24	1.101	90.8%	24.5	0.28%	0.0011	<b>0.820</b>
7/1/00-01	23	1.105	90.5%	23.5	0.30%	0.0012	<b>0.795</b>
7/1/01-02	22	1.109	90.2%	22.5	0.32%	0.0013	<b>0.771</b>
7/1/02-03	21	1.113	89.9%	21.5	0.35%	0.0015	<b>0.750</b>
7/1/03-04	20	1.118	89.5%	20.5	0.38%	0.0017	<b>0.730</b>
7/1/04-05	19	1.123	89.1%	19.5	0.41%	0.0019	<b>0.712</b>
7/1/05-06	18	1.128	88.6%	18.5	0.45%	0.0022	<b>0.697</b>
7/1/06-07	17	1.135	88.1%	17.5	0.49%	0.0025	<b>0.683</b>
7/1/07-08	16	1.142	87.6%	16.5	0.54%	0.0028	<b>0.670</b>
7/1/08-09	15	1.149	87.0%	15.5	0.60%	0.0033	<b>0.660</b>
7/1/09-10	14	1.158	86.3%	14.5	0.67%	0.0038	<b>0.652</b>
7/1/10-11	13	1.169	85.6%	13.5	0.75%	0.0044	<b>0.645</b>
7/1/11-12	12	1.180	84.7%	12.5	0.86%	0.0052	<b>0.641</b>
7/1/12-13	11	1.194	83.7%	11.5	0.98%	0.0063	<b>0.638</b>
7/1/13-14	10	1.211	82.6%	10.5	1.14%	0.0075	<b>0.637</b>
7/1/14-15	9	1.231	81.3%	9.5	1.34%	0.0092	<b>0.639</b>
7/1/15-16	8	1.256	79.6%	8.5	1.61%	0.0115	<b>0.643</b>
7/1/16-17	7	1.287	77.7%	7.5	1.96%	0.0146	<b>0.651</b>
7/1/17-18	6	1.329	75.2%	6.5	2.46%	0.0191	<b>0.661</b>
7/1/18-19	5	1.388	72.0%	5.5	3.19%	0.0258	<b>0.675</b>
7/1/19-20	4	1.478	67.7%	4.5	4.37%	0.0366	<b>0.694</b>
7/1/20-21	3	1.632	61.3%	3.5	6.41%	0.0559	<b>0.719</b>
7/1/21-22	2	1.975	50.6%	2.5	10.62%	0.0963	<b>0.753</b>
7/1/22-23	1	3.648	27.4%	1.5	23.23%	0.2190	<b>0.806</b>

Column (C): Appendix A2, page 2

Column (D) = 1 / (C)

Column (E) = [ (B), current line + (B), previous line] / 2

Column (F) = (D), previous line - (D), current line

Column (G) = (F) x [ 1 + Interest Rate ]<sup>-(E)</sup>

Column (H) = [ 1 + Interest Rate ]<sup>-(B)</sup> / [ 1 - (D) ] x [ Downward Sum, (G) ]

**Summary of Experience  
Workers Compensation**

(A) Period Begin End		(B) Evaluation Date	(C) Maturity (months)	(D) Reported Claims	(E) Open Claims	(F) Paid Losses	(G) Case Reserves	(H) Incurred Losses	(I) Historic Calendar Year Payroll (Hundreds)	(J) Estimated Fiscal Year Payroll (Hundreds)
07/01/93	06/30/94	6/30/23	360	901	3	\$5,230,667	\$188,166	\$5,418,834	--	--
07/01/94	06/30/95	6/30/23	348	913	4	\$5,125,384	\$145,651	\$5,271,035	--	--
07/01/95	06/30/96	6/30/23	336	851	1	\$3,465,474	\$80,706	\$3,546,180	--	--
07/01/96	06/30/97	6/30/23	324	901	3	\$3,915,679	\$308,902	\$4,224,581	--	--
07/01/97	06/30/98	6/30/23	312	972	5	\$6,390,818	\$170,391	\$6,561,209	--	--
07/01/98	06/30/99	6/30/23	300	945	3	\$5,943,958	\$373,980	\$6,317,938	--	--
07/01/99	06/30/00	6/30/23	288	1,043	8	\$7,995,257	\$961,908	\$8,957,165	--	--
07/01/00	06/30/01	6/30/23	276	1,165	5	\$7,833,039	\$650,299	\$8,483,338	--	--
07/01/01	06/30/02	6/30/23	264	1,339	4	\$8,000,242	\$365,458	\$8,365,700	--	--
07/01/02	06/30/03	6/30/23	252	1,182	8	\$7,852,788	\$546,977	\$8,399,765	--	--
07/01/03	06/30/04	6/30/23	240	1,233	6	\$9,788,717	\$1,096,702	\$10,885,419	--	--
07/01/04	06/30/05	6/30/23	228	1,108	14	\$7,841,222	\$1,865,324	\$9,706,545	--	--
07/01/05	06/30/06	6/30/23	216	1,053	4	\$4,917,347	\$193,826	\$5,111,172	--	--
07/01/06	06/30/07	6/30/23	204	1,065	11	\$8,410,568	\$1,411,838	\$9,822,406	--	--
07/01/07	06/30/08	6/30/23	192	1,129	12	\$10,088,270	\$1,339,847	\$11,428,117	--	--
07/01/08	06/30/09	6/30/23	180	1,066	8	\$6,602,965	\$512,895	\$7,115,860	--	--
07/01/09	06/30/10	6/30/23	168	1,047	13	\$10,204,953	\$1,114,906	\$11,319,858	\$12,848,957	\$12,824,916
07/01/10	06/30/11	6/30/23	156	1,121	9	\$8,257,823	\$850,547	\$9,108,370	\$12,800,875	\$12,685,943
07/01/11	06/30/12	6/30/23	144	1,050	12	\$8,322,203	\$583,621	\$8,905,824	\$12,571,011	\$12,579,962
07/01/12	06/30/13	6/30/23	132	1,011	12	\$8,622,658	\$982,831	\$9,605,490	\$12,588,912	\$12,597,182
07/01/13	06/30/14	6/30/23	120	889	7	\$6,924,467	\$629,829	\$7,554,296	\$12,605,451	\$12,916,307
07/01/14	06/30/15	6/30/23	108	864	6	\$3,266,684	\$153,675	\$3,420,359	\$13,227,162	\$13,215,056
07/01/15	06/30/16	6/30/23	96	844	3	\$4,084,957	\$179,458	\$4,264,415	\$13,202,950	\$13,281,566
07/01/16	06/30/17	6/30/23	84	826	6	\$4,545,893	\$356,052	\$4,901,945	\$13,360,181	\$13,644,441
07/01/17	06/30/18	6/30/23	72	879	5	\$3,715,714	\$248,930	\$3,964,644	\$13,928,701	\$14,208,495
07/01/18	06/30/19	6/30/23	60	1,019	14	\$5,629,617	\$723,355	\$6,352,972	\$14,488,290	\$15,212,247
07/01/19	06/30/20	6/30/23	48	823	19	\$3,902,999	\$334,710	\$4,237,709	\$15,936,205	\$16,282,308
07/01/20	06/30/21	6/30/23	36	664	26	\$3,472,643	\$599,796	\$4,072,440	\$16,628,411	\$16,492,457
07/01/21	06/30/22	6/30/23	24	699	52	\$2,848,516	\$632,412	\$3,480,929	\$16,356,504	\$16,626,819
07/01/22	06/30/23	6/30/23	12	765	180	\$1,862,193	\$1,837,102	\$3,699,295	\$16,897,135	\$18,100,395
<b>Total</b>				<b>29,367</b>	<b>463</b>	<b>\$185,063,717</b>	<b>\$19,440,095</b>	<b>\$204,503,812</b>	<b>\$197,440,745</b>	<b>\$200,668,095</b>

- Loss information and payroll (hundreds) provided by The State of Tennessee, Risk Management Division  
- Loss information contains only pure losses, net of recoveries  
Column (J): Interpolation of (I)

**Estimation of Ultimate Losses  
Workers Compensation**

<i>Incurred Loss Development</i>				<i>Paid Loss Development</i>			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses	Incurred Develop. Factor	Estimated Ultimate Losses	Accident Period	Paid Losses	Paid Develop. Factor	Estimated Ultimate Losses
7/1/93-94	\$5,418,834	1.006	\$5,452,000	7/1/93-94	\$5,230,667	1.088	\$5,690,000
7/1/94-95	\$5,271,035	1.007	\$5,306,000	7/1/94-95	\$5,125,384	1.090	\$5,589,000
7/1/95-96	\$3,546,180	1.007	\$3,572,000	7/1/95-96	\$3,465,474	1.093	\$3,789,000
7/1/96-97	\$4,224,581	1.008	\$4,258,000	7/1/96-97	\$3,915,679	1.096	\$4,292,000
7/1/97-98	\$6,561,209	1.009	\$6,618,000	7/1/97-98	\$6,390,818	1.099	\$7,026,000
7/1/98-99	\$6,317,938	1.009	\$6,377,000	7/1/98-99	\$5,943,958	1.103	\$6,555,000
7/1/99-00	\$8,957,165	1.010	\$9,050,000	7/1/99-00	\$7,995,257	1.107	\$8,847,000
7/1/00-01	\$8,483,338	1.011	\$8,580,000	7/1/00-01	\$7,833,039	1.111	\$8,699,000
7/1/01-02	\$8,365,700	1.013	\$8,471,000	7/1/01-02	\$8,000,242	1.115	\$8,919,000
7/1/02-03	\$8,399,765	1.014	\$8,517,000	7/1/02-03	\$7,852,788	1.120	\$8,792,000
7/1/03-04	\$10,885,419	1.016	\$11,055,000	7/1/03-04	\$9,788,717	1.125	\$11,011,000
7/1/04-05	\$9,706,545	1.017	\$9,876,000	7/1/04-05	\$7,841,222	1.131	\$8,865,000
7/1/05-06	\$5,111,172	1.020	\$5,211,000	7/1/05-06	\$4,917,347	1.137	\$5,590,000
7/1/06-07	\$9,822,406	1.022	\$10,040,000	7/1/06-07	\$8,410,568	1.144	\$9,621,000
7/1/07-08	\$11,428,117	1.025	\$11,716,000	7/1/07-08	\$10,088,270	1.152	\$11,620,000
7/1/08-09	\$7,115,860	1.029	\$7,321,000	7/1/08-09	\$6,602,965	1.161	\$7,664,000
7/1/09-10	\$11,319,858	1.033	\$11,696,000	7/1/09-10	\$10,204,953	1.171	\$11,948,000
7/1/10-11	\$9,108,370	1.039	\$9,459,000	7/1/10-11	\$8,257,823	1.182	\$9,764,000
7/1/11-12	\$8,905,824	1.045	\$9,308,000	7/1/11-12	\$8,322,203	1.196	\$9,952,000
7/1/12-13	\$9,605,490	1.053	\$10,118,000	7/1/12-13	\$8,622,658	1.212	\$10,449,000
7/1/13-14	\$7,554,296	1.064	\$8,037,000	7/1/13-14	\$6,924,467	1.231	\$8,523,000
7/1/14-15	\$3,420,359	1.077	\$3,685,000	7/1/14-15	\$3,266,684	1.254	\$4,096,000
7/1/15-16	\$4,264,415	1.095	\$4,670,000	7/1/15-16	\$4,084,957	1.283	\$5,241,000
7/1/16-17	\$4,901,945	1.119	\$5,484,000	7/1/16-17	\$4,545,893	1.320	\$6,002,000
7/1/17-18	\$3,964,644	1.151	\$4,564,000	7/1/17-18	\$3,715,714	1.370	\$5,092,000
7/1/18-19	\$6,352,972	1.197	\$7,606,000	7/1/18-19	\$5,629,617	1.442	\$8,116,000
7/1/19-20	\$4,237,709	1.265	\$5,360,000	7/1/19-20	\$3,902,999	1.552	\$6,058,000
7/1/20-21	\$4,072,440	1.369	\$5,573,000	7/1/20-21	\$3,472,643	1.748	\$6,071,000
7/1/21-22	\$3,480,929	1.536	\$5,348,000	7/1/21-22	\$2,848,516	2.209	\$6,292,000
7/1/22-23	\$3,699,295	1.829	\$6,766,000	7/1/22-23	\$1,862,193	5.134	\$9,560,000
<b>Total</b>	<b>\$204,503,812</b>		<b>\$219,094,000</b>	<b>Total</b>	<b>\$185,063,717</b>		<b>\$229,733,000</b>

Columns (B), (F): Exhibit 1  
Column (C): Appendix A1  
Column (D) = (B) \* (C)  
Column (G): Appendix A2  
Column (H) = (F) \* (G)

**Estimation of Ultimate Losses  
Workers Compensation**

*Incurred Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Incurred Develop. Factor	Estimated Percent Unpaid	Estimated Unreported Losses	Incurred Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$5,436,000	1.006	0.6%	\$33,266	\$5,418,834	\$5,452,000
7/1/94-95	\$5,282,000	1.007	0.7%	\$34,988	\$5,271,035	\$5,306,000
7/1/95-96	\$3,566,000	1.007	0.7%	\$25,630	\$3,546,180	\$3,572,000
7/1/96-97	\$4,249,000	1.008	0.8%	\$33,219	\$4,224,581	\$4,258,000
7/1/97-98	\$6,612,000	1.009	0.9%	\$56,372	\$6,561,209	\$6,618,000
7/1/98-99	\$6,398,000	1.009	0.9%	\$59,650	\$6,317,938	\$6,378,000
7/1/99-00	\$8,974,000	1.010	1.0%	\$91,776	\$8,957,165	\$9,049,000
7/1/00-01	\$8,551,000	1.011	1.1%	\$96,233	\$8,483,338	\$8,580,000
7/1/01-02	\$8,432,000	1.013	1.2%	\$104,765	\$8,365,700	\$8,470,000
7/1/02-03	\$8,478,000	1.014	1.4%	\$116,718	\$8,399,765	\$8,516,000
7/1/03-04	\$10,992,000	1.016	1.5%	\$168,358	\$10,885,419	\$11,054,000
7/1/04-05	\$9,822,000	1.017	1.7%	\$168,073	\$9,706,545	\$9,875,000
7/1/05-06	\$5,226,000	1.020	1.9%	\$100,348	\$5,111,172	\$5,212,000
7/1/06-07	\$10,263,000	1.022	2.2%	\$222,217	\$9,822,406	\$10,045,000
7/1/07-08	\$11,623,000	1.025	2.5%	\$285,338	\$11,428,117	\$11,713,000
7/1/08-09	\$7,592,000	1.029	2.8%	\$212,541	\$7,115,860	\$7,328,000
7/1/09-10	\$11,630,000	1.033	3.2%	\$373,555	\$11,319,858	\$11,693,000
7/1/10-11	\$9,701,000	1.039	3.7%	\$359,954	\$9,108,370	\$9,468,000
7/1/11-12	\$9,638,000	1.045	4.3%	\$416,303	\$8,905,824	\$9,322,000
7/1/12-13	\$10,390,000	1.053	5.1%	\$526,734	\$9,605,490	\$10,132,000
7/1/13-14	\$8,280,000	1.064	6.0%	\$497,001	\$7,554,296	\$8,051,000
7/1/14-15	\$3,984,000	1.077	7.2%	\$285,928	\$3,420,359	\$3,706,000
7/1/15-16	\$4,890,000	1.095	8.7%	\$424,253	\$4,264,415	\$4,689,000
7/1/16-17	\$5,620,000	1.119	10.6%	\$596,333	\$4,901,945	\$5,498,000
7/1/17-18	\$4,742,000	1.151	13.1%	\$622,927	\$3,964,644	\$4,588,000
7/1/18-19	\$8,264,000	1.197	16.5%	\$1,361,553	\$6,352,972	\$7,715,000
7/1/19-20	\$6,439,000	1.265	20.9%	\$1,348,374	\$4,237,709	\$5,586,000
7/1/20-21	\$6,101,000	1.369	26.9%	\$1,643,084	\$4,072,440	\$5,716,000
7/1/21-22	\$6,277,000	1.536	34.9%	\$2,191,589	\$3,480,929	\$5,673,000
7/1/22-23	\$6,947,000	1.829	45.3%	\$3,148,528	\$3,699,295	\$6,848,000
<b>Total</b>	<b>\$224,399,000</b>			<b>\$15,605,608</b>	<b>\$204,503,812</b>	<b>\$220,111,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23  
 Column (C): Appendix A  
 Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)  
 Column (F): Exhibit 1  
 Column (G) = (E) + (F)



**Estimation of Ultimate Losses  
Workers Compensation**

*Paid Bornhuetter-Ferguson Method*

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Accident Period	Previous Ultimate or Forecast	Paid Develop. Factor	Estimated Percent Unpaid	Estimated Unpaid Losses	Paid Losses as of 6/30/2023	Estimated Ultimate Losses
7/1/93-94	\$5,436,000	1.088	8.1%	\$438,931	\$5,230,667	\$5,670,000
7/1/94-95	\$5,282,000	1.090	8.3%	\$438,091	\$5,125,384	\$5,563,000
7/1/95-96	\$3,566,000	1.093	8.5%	\$304,090	\$3,465,474	\$3,770,000
7/1/96-97	\$4,249,000	1.096	8.8%	\$372,889	\$3,915,679	\$4,289,000
7/1/97-98	\$6,612,000	1.099	9.0%	\$597,760	\$6,390,818	\$6,989,000
7/1/98-99	\$6,398,000	1.103	9.3%	\$596,513	\$5,943,958	\$6,540,000
7/1/99-00	\$8,974,000	1.107	9.6%	\$863,932	\$7,995,257	\$8,859,000
7/1/00-01	\$8,551,000	1.111	10.0%	\$851,115	\$7,833,039	\$8,684,000
7/1/01-02	\$8,432,000	1.115	10.3%	\$868,895	\$8,000,242	\$8,869,000
7/1/02-03	\$8,478,000	1.120	10.7%	\$905,847	\$7,852,788	\$8,759,000
7/1/03-04	\$10,992,000	1.125	11.1%	\$1,219,850	\$9,788,717	\$11,009,000
7/1/04-05	\$9,822,000	1.131	11.5%	\$1,134,204	\$7,841,222	\$8,975,000
7/1/05-06	\$5,226,000	1.137	12.0%	\$629,174	\$4,917,347	\$5,547,000
7/1/06-07	\$10,263,000	1.144	12.6%	\$1,291,075	\$8,410,568	\$9,702,000
7/1/07-08	\$11,623,000	1.152	13.2%	\$1,531,705	\$10,088,270	\$11,620,000
7/1/08-09	\$7,592,000	1.161	13.8%	\$1,050,998	\$6,602,965	\$7,654,000
7/1/09-10	\$11,630,000	1.171	14.6%	\$1,696,475	\$10,204,953	\$11,901,000
7/1/10-11	\$9,701,000	1.182	15.4%	\$1,496,429	\$8,257,823	\$9,754,000
7/1/11-12	\$9,638,000	1.196	16.4%	\$1,578,757	\$8,322,203	\$9,901,000
7/1/12-13	\$10,390,000	1.212	17.5%	\$1,815,957	\$8,622,658	\$10,439,000
7/1/13-14	\$8,280,000	1.231	18.8%	\$1,552,658	\$6,924,467	\$8,477,000
7/1/14-15	\$3,984,000	1.254	20.3%	\$806,901	\$3,266,684	\$4,074,000
7/1/15-16	\$4,890,000	1.283	22.1%	\$1,078,552	\$4,084,957	\$5,164,000
7/1/16-17	\$5,620,000	1.320	24.3%	\$1,363,604	\$4,545,893	\$5,909,000
7/1/17-18	\$4,742,000	1.370	27.0%	\$1,281,949	\$3,715,714	\$4,998,000
7/1/18-19	\$8,264,000	1.442	30.6%	\$2,532,002	\$5,629,617	\$8,162,000
7/1/19-20	\$6,439,000	1.552	35.6%	\$2,290,231	\$3,902,999	\$6,193,000
7/1/20-21	\$6,101,000	1.748	42.8%	\$2,611,062	\$3,472,643	\$6,084,000
7/1/21-22	\$6,277,000	2.209	54.7%	\$3,435,093	\$2,848,516	\$6,284,000
7/1/22-23	\$6,947,000	5.134	80.5%	\$5,593,760	\$1,862,193	\$7,456,000
<b>Total</b>	<b>\$224,399,000</b>			<b>\$42,228,500</b>	<b>\$185,063,717</b>	<b>\$227,295,000</b>

Column (B): Previous actuarial analysis; Forecast analysis for 2022-23

Column (C): Appendix A

Column (D) =  $1 - 1 / (C)$

Column (E) = (B) \* (D)

Column (F): Exhibit 1

Column (G) = (E) + (F)

Projection of Incremental Payments  
Workers Compensation

Accident Period	Ultimate Reported Claims	Incremental Paid Losses								
		0:12	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108
7/1/93-94	901						\$159,749	\$202,001	\$109,343	\$29,422
7/1/94-95	913					\$298,944	\$194,703	\$259,520	\$86,819	\$85,233
7/1/95-96	851				\$368,738	\$295,573	\$302,211	\$14,821	\$28,385	\$22,714
7/1/96-97	901			\$586,640	\$644,831	\$238,142	\$117,474	\$72,617	\$255,044	\$85,534
7/1/97-98	972	\$891,611	\$1,478,141	\$710,935	(\$355,036)	\$1,378,651	\$416,980	\$391,496	\$224,855	\$143,987
7/1/98-99	945	\$1,064,939	\$1,661,921	(\$121,496)	\$1,795,207	\$501,643	\$169,683	\$135,642	\$95,106	\$54,964
7/1/99-00	1,043	\$1,066,298	\$1,331,847	\$1,542,978	\$855,347	\$405,634	\$480,254	\$326,755	\$258,500	\$186,180
7/1/00-01	1,165	\$990,868	\$1,907,292	\$1,151,689	\$1,206,702	\$684,924	\$351,067	\$283,176	\$180,609	\$209,248
7/1/01-02	1,339	\$1,444,220	\$2,208,180	\$1,603,045	\$694,618	\$471,673	\$362,389	\$313,743	\$66,339	\$73,277
7/1/02-03	1,182	\$1,337,061	\$2,087,061	\$1,008,056	\$604,944	\$484,785	\$484,295	\$277,094	\$331,905	\$119,851
7/1/03-04	1,233	\$2,318,553	\$2,067,100	\$1,451,001	\$1,052,133	\$482,458	\$626,494	\$157,117	\$132,182	\$287,160
7/1/04-05	1,108	\$2,214,297	\$1,719,754	\$773,208	\$558,604	\$537,427	\$364,498	\$241,011	\$198,311	\$149,402
7/1/05-06	1,053	\$1,306,086	\$1,303,725	\$674,849	\$473,108	\$320,094	\$133,768	\$170,548	\$81,999	\$62,393
7/1/06-07	1,065	\$1,473,367	\$2,154,033	\$1,188,065	\$961,584	\$452,377	\$286,708	\$334,749	\$282,062	\$153,479
7/1/07-08	1,129	\$1,630,697	\$2,319,066	\$1,609,278	\$1,482,335	\$756,095	\$232,364	\$582,577	\$370,451	\$320,526
7/1/08-09	1,066	\$1,846,562	\$1,951,278	\$1,024,912	\$482,895	\$350,766	\$368,311	\$241,380	\$99,508	\$107,413
7/1/09-10	1,047	\$1,600,402	\$2,393,880	\$1,676,495	\$949,638	\$901,871	\$560,806	\$476,020	\$139,867	\$508,631
7/1/10-11	1,121	\$2,281,707	\$2,289,572	\$1,157,310	\$905,398	\$508,878	\$462,417	\$364,550	\$155,462	\$71,900
7/1/11-12	1,050	\$1,650,383	\$1,959,041	\$1,379,980	\$775,295	\$561,443	\$1,183,285	\$523,779	\$212,881	\$94,304
7/1/12-13	1,011	\$1,583,776	\$2,759,029	\$1,236,441	\$1,054,498	\$781,523	\$279,825	\$346,637	\$340,665	\$95,028
7/1/13-14	889	\$1,346,589	\$1,897,165	\$1,116,233	\$1,386,979	\$324,887	\$179,220	\$171,333	\$287,926	\$137,683
7/1/14-15	864	\$1,157,074	\$1,491,944	\$301,094	\$238,793	\$50,284	\$53,907	\$45,277	\$31,170	\$9,040
7/1/15-16	844	\$1,574,652	\$1,583,678	\$603,052	\$107,302	\$130,273	\$83,479	\$80,480	\$77,903	
7/1/16-17	826	\$1,454,994	\$1,192,680	\$466,266	\$405,767	\$190,395	\$631,026	\$289,487		
7/1/17-18	879	\$1,216,693	\$1,295,060	\$579,494	\$119,730	\$284,389	\$300,010			
7/1/18-19	1,019	\$1,290,608	\$2,483,913	\$1,231,968	\$465,142	\$283,840				
7/1/19-20	823	\$1,447,293	\$1,860,397	\$552,119	\$243,952					
7/1/20-21	664	\$1,096,419	\$1,615,287	\$870,308						
7/1/21-22	701	\$1,387,725	\$1,488,183							
7/1/22-23	787	\$1,865,020								

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level								
	0:12	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108
7/1/93-94						\$215	\$272	\$147	\$40
7/1/94-95					\$394	\$256	\$342	\$114	\$112
7/1/95-96				\$516	\$414	\$423	\$21	\$40	\$32
7/1/96-97			\$768	\$844	\$312	\$154	\$95	\$334	\$112
7/1/97-98	\$1,071	\$1,775	\$854	--	\$1,655	\$501	\$470	\$270	\$173
7/1/98-99	\$1,302	\$2,032	--	\$2,195	\$613	\$207	\$166	\$116	\$67
7/1/99-00	\$1,170	\$1,461	\$1,693	\$938	\$445	\$527	\$358	\$284	\$204
7/1/00-01	\$964	\$1,855	\$1,120	\$1,173	\$666	\$341	\$275	\$176	\$203
7/1/01-02	\$1,210	\$1,850	\$1,343	\$582	\$395	\$304	\$263	\$56	\$61
7/1/02-03	\$1,256	\$1,961	\$947	\$568	\$455	\$455	\$260	\$312	\$113
7/1/03-04	\$2,068	\$1,843	\$1,294	\$938	\$430	\$559	\$140	\$118	\$256
7/1/04-05	\$2,176	\$1,690	\$760	\$549	\$528	\$358	\$237	\$195	\$147
7/1/05-06	\$1,337	\$1,334	\$691	\$484	\$328	\$137	\$175	\$84	\$64
7/1/06-07	\$1,476	\$2,158	\$1,190	\$964	\$453	\$287	\$335	\$229	\$154
7/1/07-08	\$1,526	\$2,170	\$1,506	\$1,387	\$708	\$217	\$545	\$347	\$300
7/1/08-09	\$1,812	\$1,915	\$1,006	\$474	\$344	\$361	\$237	\$98	\$105
7/1/09-10	\$1,583	\$2,368	\$1,659	\$939	\$892	\$555	\$471	\$138	\$503
7/1/10-11	\$2,038	\$2,046	\$1,034	\$809	\$455	\$413	\$326	\$139	\$64
7/1/11-12	\$1,566	\$1,859	\$1,309	\$736	\$533	\$1,123	\$497	\$202	\$89
7/1/12-13	\$1,589	\$2,768	\$1,241	\$1,058	\$784	\$281	\$348	\$342	\$95
7/1/13-14	\$1,565	\$2,205	\$1,297	\$1,612	\$378	\$208	\$199	\$335	\$160
7/1/14-15	\$1,415	\$1,825	\$368	\$292	\$62	\$66	\$55	\$38	\$11
7/1/15-16	\$1,995	\$2,006	\$764	\$136	\$165	\$106	\$102	\$99	
7/1/16-17	\$1,891	\$1,550	\$606	\$527	\$247	\$820	\$376		
7/1/17-18	\$1,483	\$1,579	\$706	\$146	\$347	\$366			
7/1/18-19	\$1,342	\$2,583	\$1,281	\$484	\$295				
7/1/19-20	\$1,834	\$2,357	\$700	\$309					
7/1/20-21	\$1,693	\$2,494	\$1,344						
7/1/21-22	\$2,012	\$2,158							
7/1/22-23	\$2,394								
Average	\$1,606	\$1,994	\$1,062	\$778	\$492	\$370	\$274	\$183	\$139
Avg Latest 5	\$1,855	\$2,234	\$927	\$320	\$223	\$313	\$216	\$203	\$84
Prior	\$1,697	\$2,100	\$817	\$544	\$351	\$358	\$250	\$222	\$152
All Agencies	\$1,683	\$1,757	\$788	\$432	\$332	\$309	\$223	\$194	\$138
Selected	\$1,831	\$2,114	\$927	\$491	\$332	\$330	\$274	\$203	\$138

Accident Period	Projected Incremental Payments								
	0:12	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108
7/1/07-08									
7/1/08-09									
7/1/09-10									
7/1/10-11									
7/1/11-12									
7/1/12-13									
7/1/13-14									
7/1/14-15									
7/1/15-16									\$108,947
7/1/16-17								\$156,221	\$106,179
7/1/17-18							\$224,415	\$166,553	\$113,202
7/1/18-19						\$317,848	\$263,111	\$195,272	\$132,721
7/1/19-20					\$261,848	\$260,813	\$215,898	\$160,232	\$108,906
7/1/20-21				\$317,762	\$214,864	\$214,015	\$177,159	\$131,481	\$89,364
7/1/21-22			\$639,566	\$338,404	\$228,821	\$227,917	\$188,667	\$140,022	\$95,169
7/1/22-23		\$1,646,773	\$722,440	\$382,255	\$258,472	\$257,451	\$213,115	\$158,166	\$107,501

Projection of Incremental Payments  
Workers Compensation

Accident Period	Incremental Paid Losses							
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT
7/1/93-94	\$38,242	\$104,337	\$69,538	\$36,646	\$48,213	\$52,271	\$50,521	\$686,256
7/1/94-95	\$106,491	\$105,386	\$64,855	\$51,557	\$63,366	\$56,961	\$42,056	\$679,997
7/1/95-96	\$12,141	\$22,435	\$24,447	\$38,353	\$14,849	\$13,399	\$43,708	\$123,337
7/1/96-97	\$121,695	\$17,510	\$31,985	\$26,519	\$12,682	\$20,582	\$38,528	\$780,234
7/1/97-98	\$272,215	\$78,647	\$53,475	\$42,234	\$47,128	\$60,237	\$55,296	\$768,915
7/1/98-99	\$44,205	\$72,484	\$48,090	\$40,340	\$30,797	\$22,733	\$17,259	\$758,713
7/1/99-00	\$97,995	\$88,473	\$192,615	\$84,711	\$98,652	\$47,196	\$42,278	\$1,901,768
7/1/00-01	\$207,886	\$145,924	\$112,491	\$106,922	\$133,881	\$59,867	\$59,055	\$895,680
7/1/01-02	\$271,514	\$58,668	\$88,569	\$70,389	\$55,137	\$48,488	\$39,328	\$644,928
7/1/02-03	\$106,632	\$153,546	\$90,530	\$113,818	\$79,468	\$97,371	\$150,672	\$970,034
7/1/03-04	\$113,637	\$140,002	\$109,889	\$129,709	\$113,480	\$278,870	\$129,903	\$1,385,161
7/1/04-05	\$113,725	\$153,391	\$117,608	\$78,075	\$254,922	\$97,605	\$84,689	\$2,158,336
7/1/05-06	\$31,412	\$67,567	\$96,898	\$25,999	\$20,500	\$102,411	\$19,969	\$266,486
7/1/06-07	\$333,931	\$167,572	\$232,331	\$194,084	\$142,761	\$121,784	\$130,527	\$1,476,823
7/1/07-08	\$113,804	\$129,438	\$167,512	\$117,642	\$138,359	\$204,942	\$65,164	\$1,339,847
7/1/08-09	\$134,278	\$152,504	\$18,055	\$22,883	\$26,326	\$29,925		
7/1/09-10	\$209,880	\$107,099	\$289,513	\$226,609	\$208,777			
7/1/10-11	\$59,853	\$60,473	\$63,531	\$35,258				
7/1/11-12	\$33,235	\$34,746	\$28,469					
7/1/12-13	\$108,328	\$119,141						
7/1/13-14	\$195,608							
7/1/14-15								
7/1/15-16								
7/1/16-17								
7/1/17-18								
7/1/18-19								
7/1/19-20								
7/1/20-21								
7/1/21-22								
7/1/22-23								

Accident Period	Incremental Payments per Claim Trended to 7/1/24-25 Cost Level								Trend Factor to 7/1/24-25
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/93-94	\$52	\$141	\$94	\$49	\$65	\$70	\$68	\$925	1.215
7/1/94-95	\$140	\$139	\$85	\$68	\$83	\$75	\$55	\$896	1.203
7/1/95-96	\$17	\$31	\$34	\$54	\$21	\$19	\$61	\$173	1.191
7/1/96-97	\$159	\$23	\$42	\$35	\$17	\$27	\$50	\$1,021	1.179
7/1/97-98	\$327	\$94	\$64	\$51	\$57	\$72	\$66	\$923	1.167
7/1/98-99	\$54	\$89	\$59	\$49	\$38	\$28	\$21	\$928	1.156
7/1/99-00	\$108	\$97	\$211	\$93	\$108	\$52	\$46	\$2,086	1.144
7/1/00-01	\$202	\$142	\$109	\$104	\$130	\$58	\$57	\$871	1.133
7/1/01-02	\$227	\$49	\$74	\$59	\$46	\$41	\$33	\$540	1.122
7/1/02-03	\$100	\$144	\$85	\$107	\$75	\$91	\$142	\$911	1.111
7/1/03-04	\$101	\$125	\$98	\$116	\$101	\$249	\$116	\$1,235	1.100
7/1/04-05	\$112	\$151	\$116	\$77	\$250	\$96	\$83	\$2,121	1.089
7/1/05-06	\$32	\$69	\$99	\$27	\$21	\$105	\$20	\$273	1.078
7/1/06-07	\$335	\$168	\$233	\$194	\$143	\$122	\$131	\$1,480	1.067
7/1/07-08	\$107	\$121	\$157	\$110	\$129	\$192	\$61	\$1,254	1.057
7/1/08-09	\$132	\$150	\$18	\$22	\$26	\$29			1.046
7/1/09-10	\$208	\$106	\$286	\$224	\$207				1.036
7/1/10-11	\$53	\$54	\$57	\$31					1.002
7/1/11-12	\$32	\$33	\$27						0.996
7/1/12-13	\$109	\$120							1.014
7/1/13-14	\$227								1.033
7/1/14-15									1.057
7/1/15-16									1.069
7/1/16-17									1.074
7/1/17-18									1.072
7/1/18-19									1.060
7/1/19-20									1.043
7/1/20-21									1.026
7/1/21-22									1.016
7/1/22-23									1.010
Average	\$135	\$102	\$103	\$82	\$89	\$83	\$67	\$1,042	
Avg Latest 5	\$126	\$92	\$109	\$117	\$105	\$109	\$82	\$1,272	
Prior	\$133	\$131	\$119	\$107	\$88	\$88	\$75	\$1,037	
All Agencies	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$764	
Selected	\$133	\$131	\$112	\$105	\$93	\$88	\$75	\$1,117	

Accident Period	Projected Incremental Payments								Total Unpaid
	108:120	120:132	132:144	144:156	156:168	168:180	180:192	192:ULT	
7/1/07-08								\$1,193,765	\$1,194,000
7/1/08-09							\$76,552	\$1,138,424	\$1,215,000
7/1/09-10						\$88,545	\$75,939	\$1,129,317	\$1,294,000
7/1/10-11					\$104,604	\$98,048	\$84,090	\$1,250,527	\$1,537,000
7/1/11-12				\$110,574	\$98,508	\$92,334	\$79,189	\$1,177,648	\$1,558,000
7/1/12-13			\$112,079	\$104,545	\$93,137	\$87,300	\$74,872	\$1,113,440	\$1,585,000
7/1/13-14		\$112,828	\$96,770	\$90,265	\$80,416	\$75,376	\$64,645	\$961,355	\$1,482,000
7/1/14-15	\$108,666	\$107,197	\$91,940	\$85,760	\$76,402	\$71,614	\$61,418	\$913,374	\$1,516,000
7/1/15-16	\$104,935	\$103,517	\$88,784	\$82,816	\$73,779	\$69,155	\$59,310	\$882,015	\$1,573,000
7/1/16-17	\$102,269	\$100,887	\$86,528	\$80,712	\$71,905	\$67,398	\$57,803	\$859,607	\$1,690,000
7/1/17-18	\$109,033	\$107,560	\$92,251	\$86,050	\$76,661	\$71,856	\$61,626	\$916,462	\$2,026,000
7/1/18-19	\$127,833	\$126,106	\$108,158	\$100,887	\$89,879	\$84,246	\$72,252	\$1,074,486	\$2,693,000
7/1/19-20	\$104,895	\$103,477	\$88,750	\$82,784	\$73,751	\$69,129	\$59,287	\$881,681	\$2,471,000
7/1/20-21	\$86,073	\$84,910	\$72,825	\$67,930	\$60,518	\$56,725	\$48,649	\$723,477	\$2,346,000
7/1/21-22	\$91,665	\$90,426	\$77,556	\$72,343	\$64,449	\$60,410	\$51,809	\$770,475	\$3,138,000
7/1/22-23	\$103,543	\$102,143	\$87,606	\$81,717	\$72,800	\$68,238	\$58,523	\$870,313	\$5,191,000

**Estimation of Ultimate Losses  
Incremental Paid Method  
Workers Compensation**

(A) Accident Period	(B) Paid Losses As of 6/30/23	(C) Estimated Unpaid Losses	(D) Estimate Ultimate Losses
7/1/07-08	\$10,088,270	\$1,194,000	\$11,282,000
7/1/08-09	\$6,602,965	\$1,215,000	\$7,818,000
7/1/09-10	\$10,204,953	\$1,294,000	\$11,499,000
7/1/10-11	\$8,257,823	\$1,537,000	\$9,795,000
7/1/11-12	\$8,322,203	\$1,558,000	\$9,880,000
7/1/12-13	\$8,622,658	\$1,585,000	\$10,208,000
7/1/13-14	\$6,924,467	\$1,482,000	\$8,406,000
7/1/14-15	\$3,266,684	\$1,516,000	\$4,783,000
7/1/15-16	\$4,084,957	\$1,573,000	\$5,658,000
7/1/16-17	\$4,545,893	\$1,690,000	\$6,236,000
7/1/17-18	\$3,715,714	\$2,026,000	\$5,742,000
7/1/18-19	\$5,629,617	\$2,693,000	\$8,323,000
7/1/19-20	\$3,902,999	\$2,471,000	\$6,374,000
7/1/20-21	\$3,472,643	\$2,346,000	\$5,819,000
7/1/21-22	\$2,848,516	\$3,138,000	\$5,987,000
7/1/22-23	\$1,862,193	\$5,191,000	\$7,053,000
<b>Total</b>	<b>\$92,352,556</b>	<b>\$32,509,000</b>	<b>\$124,863,000</b>

Column (B): Exhibit 1  
Column (C): Exhibit 2-C, page 1 and 2  
Column (D) = (B) + (C)

**Summary and Selection of Ultimate Losses  
Workers Compensation**

(A)	(B)	(C) Incurred Loss Development Method	(D) Paid Loss Development Method	(E) Incurred Bornhuetter- Ferguson Method	(F) Paid Bornhuetter- Ferguson Method	(G) Incremental Paid Method	(H) Selected Ultimate Losses
7/1/93-94	\$5,436,000	\$5,452,000	\$5,690,000	\$5,452,000	\$5,670,000		\$5,452,000
7/1/94-95	\$5,282,000	\$5,306,000	\$5,589,000	\$5,306,000	\$5,563,000		\$5,306,000
7/1/95-96	\$3,566,000	\$3,572,000	\$3,789,000	\$3,572,000	\$3,770,000		\$3,566,000
7/1/96-97	\$4,249,000	\$4,258,000	\$4,292,000	\$4,258,000	\$4,289,000		\$4,258,000
7/1/97-98	\$6,612,000	\$6,618,000	\$7,026,000	\$6,618,000	\$6,989,000		\$6,618,000
7/1/98-99	\$6,398,000	\$6,377,000	\$6,555,000	\$6,378,000	\$6,540,000		\$6,377,000
7/1/99-00	\$8,974,000	\$9,050,000	\$8,847,000	\$9,049,000	\$8,859,000		\$9,050,000
7/1/00-01	\$8,551,000	\$8,580,000	\$8,699,000	\$8,580,000	\$8,684,000		\$8,551,000
7/1/01-02	\$8,432,000	\$8,471,000	\$8,919,000	\$8,470,000	\$8,869,000		\$8,432,000
7/1/02-03	\$8,478,000	\$8,517,000	\$8,792,000	\$8,516,000	\$8,759,000		\$8,517,000
7/1/03-04	\$10,992,000	\$11,055,000	\$11,011,000	\$11,054,000	\$11,009,000		\$11,055,000
7/1/04-05	\$9,822,000	\$9,876,000	\$8,865,000	\$9,875,000	\$8,975,000		\$9,822,000
7/1/05-06	\$5,226,000	\$5,211,000	\$5,590,000	\$5,212,000	\$5,547,000		\$5,211,000
7/1/06-07	\$10,263,000	\$10,040,000	\$9,621,000	\$10,045,000	\$9,702,000		\$10,040,000
7/1/07-08	\$11,623,000	\$11,716,000	\$11,620,000	\$11,713,000	\$11,620,000	\$11,282,000	\$11,716,000
7/1/08-09	\$7,592,000	\$7,321,000	\$7,664,000	\$7,328,000	\$7,654,000	\$7,818,000	\$7,491,000
7/1/09-10	\$11,630,000	\$11,696,000	\$11,948,000	\$11,693,000	\$11,901,000	\$11,499,000	\$11,797,000
7/1/10-11	\$9,701,000	\$9,459,000	\$9,764,000	\$9,468,000	\$9,754,000	\$9,795,000	\$9,611,000
7/1/11-12	\$9,638,000	\$9,308,000	\$9,952,000	\$9,322,000	\$9,901,000	\$9,880,000	\$9,612,000
7/1/12-13	\$10,390,000	\$10,118,000	\$10,449,000	\$10,132,000	\$10,439,000	\$10,208,000	\$10,286,000
7/1/13-14	\$8,280,000	\$8,037,000	\$8,523,000	\$8,051,000	\$8,477,000	\$8,406,000	\$8,264,000
7/1/14-15	\$3,984,000	\$3,685,000	\$4,096,000	\$3,706,000	\$4,074,000	\$4,783,000	\$3,890,000
7/1/15-16	\$4,890,000	\$4,670,000	\$5,241,000	\$4,689,000	\$5,164,000	\$5,658,000	\$4,927,000
7/1/16-17	\$5,620,000	\$5,484,000	\$6,002,000	\$5,498,000	\$5,909,000	\$6,236,000	\$5,704,000
7/1/17-18	\$4,742,000	\$4,564,000	\$5,092,000	\$4,588,000	\$4,998,000	\$5,742,000	\$4,793,000
7/1/18-19	\$8,264,000	\$7,606,000	\$8,116,000	\$7,715,000	\$8,162,000	\$8,323,000	\$7,939,000
7/1/19-20	\$6,439,000	\$5,360,000	\$6,058,000	\$5,586,000	\$6,193,000	\$6,374,000	\$5,890,000
7/1/20-21	\$6,101,000	\$5,573,000	\$6,071,000	\$5,716,000	\$6,084,000	\$5,819,000	\$6,084,000
7/1/21-22	\$6,277,000	\$5,348,000	\$6,292,000	\$5,673,000	\$6,284,000	\$5,987,000	\$5,979,000
7/1/22-23	\$6,784,000	\$6,766,000	\$9,560,000	\$6,848,000	\$7,456,000	\$7,053,000	\$7,152,000
<b>Total</b>	<b>\$224,236,000</b>	<b>\$219,094,000</b>	<b>\$229,733,000</b>	<b>\$220,111,000</b>	<b>\$227,295,000</b>	<b>\$124,863,000</b>	<b>\$223,390,000</b>

Column (B): Previous actuarial report

Columns (C), (D): Exhibit 2-A

Columns (E), (F): Exhibit 2-B

Column (G): Exhibit 2-C

Column (H): Column (C) for 93-94, 94-95, 96-97 through 99-00, 02-03, 03-04, and 05-06 through 07-08

Column (B) for 95-96, 00-01, 01-02, and 04-05

Average of (E) and (F) for 08-09 through 19-20, 21-22, and 22-23

Column (E) for 20-21

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Incurred Losses 6/30/2022	Expected Incurred Losses 6/30/2023	Actual Incurred Losses 6/30/2023	Percent Difference	Estimated Ultimate Losses 6/30/2022	Estimated Ultimate Losses 6/30/2023	Percent Difference
Prior	\$56,830,933	\$56,855,208	\$56,843,694	0%	\$57,139,000	\$57,168,000	0%
7/1/93-94	\$5,418,834	\$5,420,222	\$5,418,834	0%	\$5,436,000	\$5,452,000	0%
7/1/94-95	\$5,264,035	\$5,265,528	\$5,271,035	0%	\$5,282,000	\$5,306,000	0%
7/1/95-96	\$3,546,180	\$3,547,873	\$3,546,180	0%	\$3,566,000	\$3,566,000	0%
7/1/96-97	\$4,224,581	\$4,226,727	\$4,224,581	0%	\$4,249,000	\$4,258,000	0%
7/1/97-98	\$6,569,826	\$6,573,642	\$6,561,209	0%	\$6,612,000	\$6,618,000	0%
7/1/98-99	\$6,353,499	\$6,357,648	\$6,317,938	-1%	\$6,398,000	\$6,377,000	0%
7/1/99-00	\$8,924,758	\$8,929,493	\$8,957,165	0%	\$8,974,000	\$9,050,000	1%
7/1/00-01	\$8,480,338	\$8,487,353	\$8,483,338	0%	\$8,551,000	\$8,551,000	0%
7/1/01-02	\$8,373,885	\$8,379,846	\$8,365,700	0%	\$8,432,000	\$8,432,000	0%
7/1/02-03	\$8,399,765	\$8,408,064	\$8,399,765	0%	\$8,478,000	\$8,517,000	0%
7/1/03-04	\$10,878,779	\$10,891,215	\$10,885,419	0%	\$10,992,000	\$11,055,000	1%
7/1/04-05	\$9,707,633	\$9,720,654	\$9,706,545	0%	\$9,822,000	\$9,822,000	0%
7/1/05-06	\$5,111,172	\$5,124,738	\$5,111,172	0%	\$5,226,000	\$5,211,000	0%
7/1/06-07	\$10,006,129	\$10,037,657	\$9,822,406	-2%	\$10,263,000	\$10,040,000	-2%
7/1/07-08	\$11,289,685	\$11,332,243	\$11,428,117	1%	\$11,623,000	\$11,716,000	1%
7/1/08-09	\$7,240,975	\$7,287,658	\$7,115,860	-2%	\$7,592,000	\$7,491,000	-1%
7/1/09-10	\$11,183,808	\$11,245,692	\$11,319,858	1%	\$11,630,000	\$11,797,000	1%
7/1/10-11	\$9,135,190	\$9,217,132	\$9,108,370	-1%	\$9,701,000	\$9,611,000	-1%
7/1/11-12	\$8,919,964	\$9,028,690	\$8,905,824	-1%	\$9,638,000	\$9,612,000	0%
7/1/12-13	\$9,651,903	\$9,768,889	\$9,605,490	-2%	\$10,390,000	\$10,286,000	-1%
7/1/13-14	\$7,452,839	\$7,590,185	\$7,554,296	0%	\$8,280,000	\$8,264,000	0%
7/1/14-15	\$3,420,116	\$3,518,260	\$3,420,359	-3%	\$3,984,000	\$3,890,000	-2%
7/1/15-16	\$4,320,695	\$4,424,566	\$4,264,415	-4%	\$4,890,000	\$4,927,000	1%
7/1/16-17	\$4,864,757	\$5,009,069	\$4,901,945	-2%	\$5,620,000	\$5,704,000	1%
7/1/17-18	\$3,670,720	\$3,884,563	\$3,964,644	2%	\$4,742,000	\$4,793,000	1%
7/1/18-19	\$6,246,049	\$6,664,836	\$6,352,972	-5%	\$8,264,000	\$7,939,000	-4%
7/1/19-20	\$4,184,161	\$4,666,526	\$4,237,709	-9%	\$6,439,000	\$5,890,000	-9%
7/1/20-21	\$3,511,096	\$4,073,914	\$4,072,440	0%	\$6,101,000	\$6,084,000	0%
7/1/21-22	\$2,914,945	\$3,639,429	\$3,480,929	-4%	\$6,277,000	\$5,979,000	-5%
7/1/22-23	--	\$3,721,654	\$3,699,295	-1%	\$6,784,000	\$7,152,000	5%
<b>Total</b>	<b>\$256,097,251</b>	<b>\$263,299,171</b>	<b>\$261,347,506</b>	<b>-0.7%</b>	<b>\$281,375,000</b>	<b>\$280,558,000</b>	<b>-0.3%</b>
		<i>Variance in Incurred</i>	<b>(\$1,951,665)</b>		<i>Change in Ultimates</i>	<b>(\$817,000)</b>	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) =  $[(D) / (C)] - 1$   
 Column (G): Exhibit 3-A  
 Column (H) =  $[(G) / (F)] - 1$

**Comparison of Results with Report Valued as of June 30, 2022**  
**Workers Compensation**

(I) Accident Period	(J) Paid Losses 6/30/2022	(K) Expected Paid Losses 6/30/2023	(L) Actual Paid Losses 6/30/2023	(M) Percent Difference	(N) Estimated Ultimate Losses 6/30/2022	(O) Estimated Ultimate Losses 6/30/2023	(P) Percent Difference
Prior	\$55,327,394	\$55,375,269	\$55,506,603	0%	\$57,139,000	\$57,168,000	0%
7/1/93-94	\$5,190,801	\$5,197,487	\$5,230,667	1%	\$5,436,000	\$5,452,000	0%
7/1/94-95	\$5,088,872	\$5,094,311	\$5,125,384	1%	\$5,282,000	\$5,306,000	0%
7/1/95-96	\$3,463,944	\$3,466,916	\$3,465,474	0%	\$3,566,000	\$3,566,000	0%
7/1/96-97	\$3,891,531	\$3,902,307	\$3,915,679	0%	\$4,249,000	\$4,258,000	0%
7/1/97-98	\$6,372,489	\$6,379,973	\$6,390,818	0%	\$6,612,000	\$6,618,000	0%
7/1/98-99	\$5,913,795	\$5,929,498	\$5,943,958	0%	\$6,398,000	\$6,377,000	0%
7/1/99-00	\$7,809,824	\$7,849,069	\$7,995,257	2%	\$8,974,000	\$9,050,000	1%
7/1/00-01	\$7,807,911	\$7,833,990	\$7,833,039	0%	\$8,551,000	\$8,551,000	0%
7/1/01-02	\$7,973,650	\$7,990,424	\$8,000,242	0%	\$8,432,000	\$8,432,000	0%
7/1/02-03	\$7,749,433	\$7,777,291	\$7,852,788	1%	\$8,478,000	\$8,517,000	0%
7/1/03-04	\$9,687,374	\$9,739,601	\$9,788,717	1%	\$10,992,000	\$11,055,000	1%
7/1/04-05	\$7,767,630	\$7,853,927	\$7,841,222	0%	\$9,822,000	\$9,822,000	0%
7/1/05-06	\$4,907,820	\$4,921,879	\$4,917,347	0%	\$5,226,000	\$5,211,000	0%
7/1/06-07	\$8,345,583	\$8,434,940	\$8,410,568	0%	\$10,263,000	\$10,040,000	-2%
7/1/07-08	\$10,023,106	\$10,101,994	\$10,088,270	0%	\$11,623,000	\$11,716,000	1%
7/1/08-09	\$6,573,040	\$6,626,384	\$6,602,965	0%	\$7,592,000	\$7,491,000	-1%
7/1/09-10	\$9,996,175	\$10,087,333	\$10,204,953	1%	\$11,630,000	\$11,797,000	1%
7/1/10-11	\$8,222,565	\$8,310,870	\$8,257,823	-1%	\$9,701,000	\$9,611,000	-1%
7/1/11-12	\$8,293,734	\$8,380,138	\$8,322,203	-1%	\$9,638,000	\$9,612,000	0%
7/1/12-13	\$8,503,517	\$8,634,787	\$8,622,658	0%	\$10,390,000	\$10,286,000	-1%
7/1/13-14	\$6,728,859	\$6,846,525	\$6,924,467	1%	\$8,280,000	\$8,264,000	0%
7/1/14-15	\$3,257,645	\$3,318,222	\$3,266,684	-2%	\$3,984,000	\$3,890,000	-2%
7/1/15-16	\$4,007,054	\$4,088,869	\$4,084,957	0%	\$4,890,000	\$4,927,000	1%
7/1/16-17	\$4,256,406	\$4,398,634	\$4,545,893	3%	\$5,620,000	\$5,704,000	1%
7/1/17-18	\$3,415,704	\$3,574,049	\$3,715,714	4%	\$4,742,000	\$4,793,000	1%
7/1/18-19	\$5,361,263	\$5,767,092	\$5,629,617	-2%	\$8,264,000	\$7,939,000	-4%
7/1/19-20	\$3,705,319	\$4,167,998	\$3,902,999	-6%	\$6,439,000	\$5,890,000	-9%
7/1/20-21	\$2,697,589	\$3,432,986	\$3,472,643	1%	\$6,101,000	\$6,084,000	0%
7/1/21-22	\$1,382,009	\$2,890,510	\$2,848,516	-1%	\$6,277,000	\$5,979,000	-5%
7/1/22-23	--	\$1,335,585	\$1,862,193	39%	\$6,784,000	\$7,152,000	5%
<b>Total</b>	<b>\$233,722,035</b>	<b>\$239,708,857</b>	<b>\$240,570,320</b>	<b>0.4%</b>	<b>\$281,375,000</b>	<b>\$280,558,000</b>	<b>-0.3%</b>
		<i>Variance in Paid</i>	\$861,464		<i>Change in Ultimates</i>	(\$817,000)	

Column (B), (F): From previous actuarial report  
 Column (C): Derived from (B) and (F) using LDF's from previous report  
 Column (D): Exhibit 1

Column (E) = [(D) / (C)] - 1  
 Column (G): Exhibit 3-A  
 Column (H) = [(G) / (F)] - 1

**Calculation of Required Reserves  
As of June 30, 2023  
Workers Compensation**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Incurred Losses	(D) Paid Losses	(E) Case Reserves	(F) IBNR Reserves	(G) Total Required Reserves	(H) Discount Factor at 4.0%	(I) Total Discounted Reserves at 4.0%
7/1/93-94	\$5,452,000	\$5,418,834	\$5,230,667	\$188,166	\$33,000	\$221,000	1.000	\$221,000
7/1/94-95	\$5,306,000	\$5,271,035	\$5,125,384	\$145,651	\$35,000	\$181,000	0.981	\$177,000
7/1/95-96	\$3,566,000	\$3,546,180	\$3,465,474	\$80,706	\$20,000	\$101,000	0.944	\$95,000
7/1/96-97	\$4,258,000	\$4,224,581	\$3,915,679	\$308,902	\$33,000	\$342,000	0.910	\$311,000
7/1/97-98	\$6,618,000	\$6,561,209	\$6,390,818	\$170,391	\$57,000	\$227,000	0.878	\$199,000
7/1/98-99	\$6,377,000	\$6,317,938	\$5,943,958	\$373,980	\$59,000	\$433,000	0.848	\$367,000
7/1/99-00	\$9,050,000	\$8,957,165	\$7,995,257	\$961,908	\$93,000	\$1,055,000	0.821	\$866,000
7/1/00-01	\$8,551,000	\$8,483,338	\$7,833,039	\$650,299	\$68,000	\$718,000	0.795	\$571,000
7/1/01-02	\$8,432,000	\$8,365,700	\$8,000,242	\$365,458	\$66,000	\$432,000	0.772	\$334,000
7/1/02-03	\$8,517,000	\$8,399,765	\$7,852,788	\$546,977	\$117,000	\$664,000	0.751	\$499,000
7/1/03-04	\$11,055,000	\$10,885,419	\$9,788,717	\$1,096,702	\$170,000	\$1,266,000	0.732	\$926,000
7/1/04-05	\$9,822,000	\$9,706,545	\$7,841,222	\$1,865,324	\$115,000	\$1,981,000	0.714	\$1,415,000
7/1/05-06	\$5,211,000	\$5,111,172	\$4,917,347	\$193,826	\$100,000	\$294,000	0.699	\$205,000
7/1/06-07	\$10,040,000	\$9,822,406	\$8,410,568	\$1,411,838	\$218,000	\$1,629,000	0.685	\$1,116,000
7/1/07-08	\$11,716,000	\$11,428,117	\$10,088,270	\$1,339,847	\$288,000	\$1,628,000	0.674	\$1,096,000
7/1/08-09	\$7,491,000	\$7,115,860	\$6,602,965	\$512,895	\$375,000	\$888,000	0.664	\$589,000
7/1/09-10	\$11,797,000	\$11,319,858	\$10,204,953	\$1,114,906	\$477,000	\$1,592,000	0.656	\$1,044,000
7/1/10-11	\$9,611,000	\$9,108,370	\$8,257,823	\$850,547	\$503,000	\$1,353,000	0.649	\$879,000
7/1/11-12	\$9,612,000	\$8,905,824	\$8,322,203	\$583,621	\$706,000	\$1,290,000	0.645	\$832,000
7/1/12-13	\$10,286,000	\$9,605,490	\$8,622,658	\$982,831	\$681,000	\$1,663,000	0.643	\$1,069,000
7/1/13-14	\$8,264,000	\$7,554,296	\$6,924,467	\$629,829	\$710,000	\$1,340,000	0.643	\$861,000
7/1/14-15	\$3,890,000	\$3,420,359	\$3,266,684	\$153,675	\$470,000	\$623,000	0.645	\$402,000
7/1/15-16	\$4,927,000	\$4,264,415	\$4,084,957	\$179,458	\$663,000	\$842,000	0.650	\$547,000
7/1/16-17	\$5,704,000	\$4,901,945	\$4,545,893	\$356,052	\$802,000	\$1,158,000	0.657	\$761,000
7/1/17-18	\$4,793,000	\$3,964,644	\$3,715,714	\$248,930	\$828,000	\$1,077,000	0.668	\$719,000
7/1/18-19	\$7,939,000	\$6,352,972	\$5,629,617	\$723,355	\$1,586,000	\$2,309,000	0.682	\$1,574,000
7/1/19-20	\$5,890,000	\$4,237,709	\$3,902,999	\$334,710	\$1,652,000	\$1,987,000	0.701	\$1,392,000
7/1/20-21	\$6,084,000	\$4,072,440	\$3,472,643	\$599,796	\$2,012,000	\$2,611,000	0.725	\$1,894,000
7/1/21-22	\$5,979,000	\$3,480,929	\$2,848,516	\$632,412	\$2,498,000	\$3,130,000	0.759	\$2,376,000
7/1/22-23	\$7,152,000	\$3,699,295	\$1,862,193	\$1,837,102	\$3,453,000	\$5,290,000	0.810	\$4,287,000
<b>Total</b>	<b>\$223,390,000</b>	<b>\$204,503,812</b>	<b>\$185,063,717</b>	<b>\$19,440,095</b>	<b>\$18,888,000</b>	<b>\$38,325,000</b>		<b>\$27,624,000</b>

Column (B): Exhibit 3-A  
Columns (C), (D): Exhibit 1  
Column (E) = (C) - (D)  
Column (F) = (B) - (C)  
Column (G) = (B) - (D)  
Column (H): Appendix B  
Column (I) = (G) \* (H)



**Percentile Estimates of Ultimate Losses and Required Reserves  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)
Accident Year	Expected Value	50th Percentile	65th Percentile	75th Percentile	90th Percentile
7/1/93-94	\$5,452,000	\$5,452,000	\$5,472,000	\$5,487,000	\$5,518,000
7/1/94-95	\$5,306,000	\$5,306,000	\$5,330,000	\$5,348,000	\$5,387,000
7/1/95-96	\$3,566,000	\$3,566,000	\$3,586,000	\$3,601,000	\$3,634,000
7/1/96-97	\$4,258,000	\$4,257,000	\$4,293,000	\$4,320,000	\$4,377,000
7/1/97-98	\$6,618,000	\$6,616,000	\$6,675,000	\$6,719,000	\$6,812,000
7/1/98-99	\$6,377,000	\$6,375,000	\$6,432,000	\$6,474,000	\$6,564,000
7/1/99-00	\$9,050,000	\$9,045,000	\$9,158,000	\$9,244,000	\$9,426,000
7/1/00-01	\$8,551,000	\$8,547,000	\$8,654,000	\$8,736,000	\$8,909,000
7/1/01-02	\$8,432,000	\$8,427,000	\$8,536,000	\$8,619,000	\$8,796,000
7/1/02-03	\$8,517,000	\$8,505,000	\$8,678,000	\$8,809,000	\$9,091,000
7/1/03-04	\$11,055,000	\$11,040,000	\$11,265,000	\$11,437,000	\$11,806,000
7/1/04-05	\$9,822,000	\$9,807,000	\$10,015,000	\$10,174,000	\$10,516,000
7/1/05-06	\$5,211,000	\$5,203,000	\$5,314,000	\$5,399,000	\$5,582,000
7/1/06-07	\$10,040,000	\$10,023,000	\$10,250,000	\$10,423,000	\$10,797,000
7/1/07-08	\$11,716,000	\$11,691,000	\$11,989,000	\$12,217,000	\$12,711,000
7/1/08-09	\$7,491,000	\$7,474,000	\$7,673,000	\$7,826,000	\$8,156,000
7/1/09-10	\$11,797,000	\$11,768,000	\$12,089,000	\$12,335,000	\$12,867,000
7/1/10-11	\$9,611,000	\$9,586,000	\$9,858,000	\$10,068,000	\$10,522,000
7/1/11-12	\$9,612,000	\$9,583,000	\$9,872,000	\$10,095,000	\$10,578,000
7/1/12-13	\$10,286,000	\$10,255,000	\$10,568,000	\$10,810,000	\$11,336,000
7/1/13-14	\$8,264,000	\$8,238,000	\$8,494,000	\$8,691,000	\$9,119,000
7/1/14-15	\$3,890,000	\$3,877,000	\$4,002,000	\$4,099,000	\$4,311,000
7/1/15-16	\$4,927,000	\$4,907,000	\$5,081,000	\$5,216,000	\$5,511,000
7/1/16-17	\$5,704,000	\$5,679,000	\$5,887,000	\$6,048,000	\$6,400,000
7/1/17-18	\$4,793,000	\$4,771,000	\$4,952,000	\$5,092,000	\$5,399,000
7/1/18-19	\$7,939,000	\$7,886,000	\$8,247,000	\$8,528,000	\$9,151,000
7/1/19-20	\$5,890,000	\$5,829,000	\$6,161,000	\$6,423,000	\$7,009,000
7/1/20-21	\$6,084,000	\$6,011,000	\$6,382,000	\$6,675,000	\$7,334,000
7/1/21-22	\$5,979,000	\$5,896,000	\$6,289,000	\$6,601,000	\$7,308,000
7/1/22-23	\$7,152,000	\$7,036,000	\$7,544,000	\$7,949,000	\$8,873,000
(1) All Years*	\$223,390,000	\$223,304,000	\$224,690,000	\$225,674,000	\$227,793,000
(2) Total Paid Losses		\$185,063,717			

<b>Percentile Estimates of Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(3) All Years*	\$38,325,000	\$38,240,000	\$39,626,000	\$40,610,000	\$42,729,000

<b>Percentile Estimates of Discounted Required Reserves as of June 30, 2023</b>					
	Expected	50th %-ile	65th %-ile	75th %-ile	90th %-ile
(4) All Years*	\$27,624,000	\$27,563,000	\$28,562,000	\$29,271,000	\$30,798,000

\* Percentile estimates are based on a lognormal distribution as shown in Appendix A4

Line (1): Totals are not summed, but are based on the combined distribution of all years experience

Line (2): Exhibit 4

Line (3) = Line (1) - Line (2)

Line (4): Line (3), discounted at 4.0%

**Estimated Ultimate Claim Counts, Average Claim Size, and Cost Per \$100 Payroll  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Accident Period	Number of Claims	Claim Development Factor	Estimated Ultimate Claims	Estimated Ultimate Losses	Severity*	Estimated Fiscal Year Payroll (Hundreds)	Claims Per \$1 Million Payroll	Cost Per \$100 Payroll
7/1/93-94	901	1.000	901	\$5,452,000	\$6,100	--	--	--
7/1/94-95	913	1.000	913	\$5,306,000	\$5,800	--	--	--
7/1/95-96	851	1.000	851	\$3,566,000	\$4,200	--	--	--
7/1/96-97	901	1.000	901	\$4,258,000	\$4,700	--	--	--
7/1/97-98	972	1.000	972	\$6,618,000	\$6,800	--	--	--
7/1/98-99	945	1.000	945	\$6,377,000	\$6,700	--	--	--
7/1/99-00	1,043	1.000	1,043	\$9,050,000	\$8,700	--	--	--
7/1/00-01	1,165	1.000	1,165	\$8,551,000	\$7,300	--	--	--
7/1/01-02	1,339	1.000	1,339	\$8,432,000	\$6,300	--	--	--
7/1/02-03	1,182	1.000	1,182	\$8,517,000	\$7,200	--	--	--
7/1/03-04	1,233	1.000	1,233	\$11,055,000	\$9,000	--	--	--
7/1/04-05	1,108	1.000	1,108	\$9,822,000	\$8,900	--	--	--
7/1/05-06	1,053	1.000	1,053	\$5,211,000	\$4,900	--	--	--
7/1/06-07	1,065	1.000	1,065	\$10,040,000	\$9,400	--	--	--
7/1/07-08	1,129	1.000	1,129	\$11,716,000	\$10,400	--	--	--
7/1/08-09	1,066	1.000	1,066	\$7,491,000	\$7,000	--	--	--
7/1/09-10	1,047	1.000	1,047	\$11,797,000	\$11,300	\$12,824,916	0.816	\$0.92
7/1/10-11	1,121	1.000	1,121	\$9,611,000	\$8,600	\$12,685,943	0.884	\$0.76
7/1/11-12	1,050	1.000	1,050	\$9,612,000	\$9,200	\$12,579,962	0.835	\$0.76
7/1/12-13	1,011	1.000	1,011	\$10,286,000	\$10,200	\$12,597,182	0.803	\$0.82
7/1/13-14	889	1.000	889	\$8,264,000	\$9,300	\$12,916,307	0.688	\$0.64
7/1/14-15	864	1.000	864	\$3,890,000	\$4,500	\$13,215,056	0.654	\$0.29
7/1/15-16	844	1.000	844	\$4,927,000	\$5,800	\$13,281,566	0.636	\$0.37
7/1/16-17	826	1.000	826	\$5,704,000	\$6,900	\$13,644,441	0.605	\$0.42
7/1/17-18	879	1.000	879	\$4,793,000	\$5,500	\$14,208,495	0.619	\$0.34
7/1/18-19	1,019	1.000	1,019	\$7,939,000	\$7,800	\$15,212,247	0.670	\$0.52
7/1/19-20	823	1.000	823	\$5,890,000	\$7,200	\$16,282,308	0.506	\$0.36
7/1/20-21	664	1.001	664	\$6,084,000	\$9,200	\$16,492,457	0.403	\$0.37
7/1/21-22	699	1.002	701	\$5,979,000	\$8,500	\$16,626,819	0.421	\$0.36
7/1/22-23	765	1.029	787	\$7,152,000	\$9,100	\$18,100,395	0.435	\$0.40
<b>Total</b>	<b>29,367</b>		<b>29,392</b>	<b>\$223,390,000</b>	<b>\$7,600</b>	<b>\$200,668,095</b>	<b>0.624</b>	<b>\$0.51</b>

\* Estimated ultimate average claim size

Columns (B), (G): Exhibit 1

Column (C): Appendix A3

Column (D) = (B) \* (C)

Column (E): Exhibit 3-A

Column (F) = (E) / (D)

Column (G): Exhibit 1

Column (H) = (D) / (G) \* 10,000

Column (I) = (E) / (G)

**Analysis of Reported Loss Development  
Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
7/1/93-94					\$4,397	\$4,642	\$4,498	\$4,675	\$4,751	\$4,856	\$4,966	\$4,968	\$4,972	\$4,955
7/1/94-95				\$4,121	\$4,166	\$4,035	\$4,205	\$4,232	\$4,609	\$4,633	\$4,663	\$4,688	\$4,751	\$4,766
7/1/95-96			\$3,165	\$3,305	\$3,194	\$3,371	\$3,405	\$3,464	\$3,492	\$3,476	\$3,463	\$3,530	\$3,547	\$3,572
7/1/96-97		\$2,093	\$2,934	\$2,766	\$3,143	\$3,198	\$3,241	\$3,476	\$3,492	\$3,489	\$3,524	\$3,521	\$3,538	\$3,528
7/1/97-98	\$2,844	\$3,938	\$4,201	\$3,353	\$4,897	\$5,516	\$5,516	\$5,537	\$5,525	\$5,692	\$5,752	\$5,796	\$5,816	\$5,851
7/1/98-99	\$2,849	\$4,097	\$3,264	\$5,317	\$5,536	\$5,615	\$5,559	\$5,466	\$5,562	\$5,581	\$5,597	\$5,640	\$5,638	\$5,642
7/1/99-00	\$2,744	\$4,211	\$5,607	\$7,044	\$6,833	\$7,129	\$7,021	\$7,069	\$6,931	\$6,892	\$7,058	\$7,138	\$7,163	\$7,098
7/1/00-01	\$2,996	\$5,214	\$6,160	\$6,944	\$6,898	\$6,938	\$7,026	\$7,065	\$7,229	\$7,530	\$7,494	\$7,587	\$7,637	\$7,986
7/1/01-02	\$4,178	\$8,029	\$7,857	\$7,431	\$7,569	\$7,451	\$7,941	\$8,012	\$8,045	\$8,158	\$8,162	\$8,089	\$8,183	\$8,599
7/1/02-03	\$4,414	\$6,298	\$6,595	\$6,431	\$6,481	\$6,580	\$6,574	\$6,841	\$6,924	\$6,982	\$7,094	\$7,320	\$8,726	\$8,898
7/1/03-04	\$5,299	\$7,651	\$8,022	\$8,256	\$8,240	\$8,634	\$8,680	\$8,702	\$8,957	\$9,089	\$10,073	\$11,140	\$10,909	\$11,125
7/1/04-05	\$5,357	\$6,034	\$6,188	\$6,242	\$6,389	\$6,599	\$6,756	\$6,953	\$6,944	\$7,291	\$8,725	\$8,709	\$8,678	\$8,931
7/1/05-06	\$3,321	\$4,148	\$4,016	\$4,251	\$4,532	\$4,484	\$4,707	\$4,556	\$4,723	\$5,610	\$5,444	\$5,301	\$5,238	\$5,153
7/1/06-07	\$4,369	\$6,160	\$6,378	\$6,874	\$7,075	\$7,069	\$7,237	\$8,700	\$10,983	\$11,581	\$11,390	\$11,191	\$11,148	\$10,638
7/1/07-08	\$6,413	\$6,873	\$7,589	\$8,186	\$8,574	\$8,554	\$9,620	\$12,094	\$11,292	\$11,778	\$11,724	\$11,428	\$11,042	\$11,070
7/1/08-09	\$5,088	\$5,410	\$5,829	\$6,065	\$6,181	\$7,357	\$7,892	\$8,035	\$7,982	\$8,142	\$8,119	\$8,117	\$7,390	\$7,495
7/1/09-10	\$5,119	\$6,499	\$7,203	\$7,520	\$9,002	\$10,406	\$10,694	\$10,705	\$11,437	\$11,091	\$11,119	\$11,301	\$11,228	\$11,364
7/1/10-11	\$6,537	\$6,931	\$7,181	\$8,098	\$9,257	\$8,630	\$9,004	\$8,978	\$8,713	\$9,139	\$9,274	\$9,294	\$9,267	
7/1/11-12	\$5,442	\$6,235	\$7,174	\$7,827	\$7,424	\$9,267	\$9,202	\$9,181	\$8,991	\$8,998	\$9,035	\$9,020		
7/1/12-13	\$5,059	\$7,594	\$8,827	\$8,389	\$8,838	\$9,235	\$9,217	\$9,391	\$10,076	\$9,734	\$9,688			
7/1/13-14	\$3,914	\$5,821	\$6,016	\$7,217	\$7,133	\$7,587	\$7,760	\$7,895	\$7,572	\$7,673				
7/1/14-15	\$3,439	\$3,671	\$3,329	\$3,360	\$3,394	\$3,508	\$3,530	\$3,532	\$3,532					
7/1/15-16	\$4,241	\$4,366	\$4,316	\$4,291	\$4,467	\$4,481	\$4,477	\$4,420						
7/1/16-17	\$3,177	\$3,874	\$3,898	\$4,235	\$4,255	\$4,949	\$4,987							
7/1/17-18	\$2,639	\$3,446	\$3,380	\$3,453	\$3,750	\$4,044								
7/1/18-19	\$3,234	\$5,720	\$6,015	\$6,356	\$6,479									
7/1/19-20	\$3,329	\$3,979	\$4,339	\$4,438										
7/1/20-21	\$3,292	\$3,525	\$4,182											
7/1/21-22	\$2,921	\$3,508												
7/1/22-23	\$3,702													

Year	Age to age development:**													
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180
7/1/93-94					1.056	0.969	1.039	1.016	1.022	1.023	1.000	1.001	0.997	1.004
7/1/94-95				1.011	0.969	1.042	1.006	1.089	1.005	1.006	1.006	1.013	1.003	1.006
7/1/95-96			1.044	0.966	1.056	1.010	1.018	1.008	0.996	0.996	1.019	1.005	1.007	1.000
7/1/96-97		1.402	0.943	1.136	1.017	1.014	1.073	1.004	0.999	1.010	0.999	1.005	0.997	1.000
7/1/97-98	1.384	1.067	0.798	1.460	1.126	1.000	1.004	0.998	1.030	1.010	1.008	1.003	1.006	1.006
7/1/98-99	1.438	0.797	1.629	1.041	1.014	0.990	0.983	1.018	1.003	1.003	1.008	1.000	1.001	1.000
7/1/99-00	1.534	1.332	1.256	0.970	1.043	0.985	1.007	0.980	0.994	1.024	1.011	1.003	0.991	--
7/1/00-01	1.740	1.181	1.127	0.993	1.006	1.013	1.006	1.023	1.042	0.995	1.012	1.007	--	1.177
7/1/01-02	1.922	0.979	0.946	1.019	0.984	1.066	1.009	1.004	1.014	1.000	0.991	--	1.051	0.987
7/1/02-03	1.427	1.047	0.975	1.008	1.015	0.999	1.041	1.012	1.008	1.016	--	1.192	1.020	0.976
7/1/03-04	1.444	1.049	1.029	0.998	1.048	1.005	1.003	1.029	1.015	--	1.106	0.979	1.020	1.015
7/1/04-05	1.126	1.025	1.009	1.023	1.033	1.024	1.029	0.999	--	1.197	0.998	0.996	1.029	1.001
7/1/05-06	1.249	0.968	1.059	1.066	0.989	1.050	0.968	--	1.188	0.970	0.974	0.988	0.984	1.009
7/1/06-07	1.410	1.035	1.078	1.029	0.999	1.024	--	1.262	1.054	0.983	0.983	0.996	0.954	0.995
7/1/07-08	1.072	1.104	1.079	1.047	0.998	--	1.257	0.934	1.043	0.995	0.975	0.966	1.003	1.034
7/1/08-09	1.063	1.077	1.040	1.019	--	1.073	1.018	0.993	1.020	0.997	1.000	0.910	1.014	0.983
7/1/09-10	1.270	1.108	1.044	--	1.156	1.028	1.001	1.068	0.970	1.003	1.016	0.994	1.012	
7/1/10-11	1.060	1.036	--	1.143	0.932	1.043	0.997	0.970	1.049	1.015	1.002	0.997		
7/1/11-12	1.146	--	1.091	0.949	1.248	0.993	0.998	0.979	1.001	1.004	0.998			
7/1/12-13	--	1.162	0.950	1.054	1.045	0.998	1.019	1.073	0.966	0.995				
7/1/13-14	1.487	1.034	1.200	0.988	1.064	1.023	1.017	0.959	1.013					
7/1/14-15	1.067	0.907	1.009	1.010	1.034	1.006	1.001	1.000						
7/1/15-16	1.029	0.989	0.994	1.041	1.003	0.999	0.987							
7/1/16-17	1.219	1.006	1.086	1.004	1.163	1.008								
7/1/17-18	1.306	0.981	1.022	1.086	1.078									
7/1/18-19	1.769	1.052	1.057	1.019										
7/1/19-20	1.195	1.090	1.023											
7/1/20-21	1.071	1.186												
7/1/21-22	1.201													
<b>Average</b>	1.318	1.067	1.062	1.045	1.045	1.016	1.022	1.020	1.022	1.013	1.006	1.003	1.006	1.013
<b>Avg Latest 3</b>	1.156	1.109	1.034	1.037	1.082	1.004	1.002	1.011	0.993	1.005	1.006	0.967	1.010	1.004
<b>Avg Latest 5</b>	1.308	1.063	1.036	1.032	1.068	1.007	1.004	0.996	1.000	1.003	0.998	0.973	0.993	1.004
<b>Wtd Avg</b>	1.293	1.062	1.055	1.035	1.045	1.017	1.026	1.020	1.019	1.012	1.006	1.000	1.006	1.015
<b>Wtd Avg Latest 3</b>	1.154	1.099	1.037	1.031	1.080	1.004	1.005	1.017	0.991	1.004	1.006	0.971	1.009	1.006
<b>Wtd Avg Latest 5</b>	1.309	1.062	1.038	1.030	1.068	1.007	1.007	0.998	0.997	1.003	0.998	0.976	0.993	1.006
<b>State (All Agencies)</b>	1.147	1.111	1.061	1.047	1.043	1.031	1.021	1.014	1.013	1.013	1.008	1.006	1.004	1.004
<b>Prior</b>	1.268	1.089	1.071	1.055	1.050	1.029	1.019	1.014	1.013	1.013	1.010	1.010	1.004	1.004
<b>Prior Implied</b>	1.138	1.115	1.095	1.076	1.061	1.048	1.038	1.029	1.022	1.017	1.013	1.010	1.008	1.006
<b>Industry**</b>	1.150	1.070	1.034	1.017	1.009	1.005	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000
<b>Selected</b>	1.261	1.089	1.067	1.055	1.054	1.029	1.019	1.014	1.013	1.013	1.008	1.006	1.004	1.004
<b>Cumulative</b>	1.871	1.484	1.363	1.278	1.211	1.148	1.116	1.094	1.079	1.065	1.052	1.044	1.038	1.034

\* Age to age development not shown on one diagonal due to change in reserving methodology  
\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Analysis of Reported Loss Development  
 Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):															
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348	
7/1/93-94	\$4,976	\$4,992			\$5,135	\$5,130	\$6,144	\$6,144	\$6,144	\$6,144	\$6,144	\$5,835	\$5,835	\$5,835	\$5,730	\$5,618
7/1/94-95	\$4,795	\$4,796		\$4,967	\$4,961	\$5,270	\$5,293	\$5,121	\$5,221	\$5,246	\$5,246	\$5,247	\$5,320	\$5,392	\$5,399	
7/1/95-96	\$3,573	\$3,618	\$3,631	\$3,617	\$3,714	\$3,714	\$3,714	\$3,714	\$3,714	\$3,714	\$3,714	\$3,714	\$3,714	\$3,714	\$3,714	
7/1/96-97	\$3,528	\$3,567	\$3,657	\$4,045	\$4,045	\$4,045	\$4,045	\$4,241	\$4,262	\$4,265	\$4,325	\$4,325	\$4,325			
7/1/97-98	\$5,888	\$5,977	\$6,537	\$6,932	\$6,932	\$6,815	\$6,758	\$6,555	\$6,592	\$6,668	\$6,660					
7/1/98-99	\$5,640	\$6,009	\$6,067	\$6,114	\$6,207	\$6,460	\$6,469	\$6,461	\$6,428	\$6,428	\$6,392					
7/1/99-00	\$7,874	\$7,907	\$7,906	\$7,983	\$8,102	\$8,177	\$8,203	\$9,023	\$8,975	\$9,007						
7/1/00-01	\$9,401	\$9,260	\$8,588	\$8,631	\$8,609	\$8,749	\$8,684	\$8,684	\$8,687							
7/1/01-02	\$8,488	\$8,475	\$8,475	\$8,440	\$8,419	\$8,420	\$8,523	\$8,515								
7/1/02-03	\$8,680	\$8,632	\$8,483	\$8,426	\$8,497	\$8,497										
7/1/03-04	\$11,292	\$11,069	\$10,898	\$10,996	\$10,968	\$10,975										
7/1/04-05	\$8,938	\$9,408	\$9,818	\$9,816	\$9,815											
7/1/05-06	\$5,202	\$5,204	\$5,158	\$5,158												
7/1/06-07	\$10,581	\$10,216	\$10,032													
7/1/07-08	\$11,442	\$11,580														
7/1/08-09	\$7,370															
7/1/09-10																
7/1/10-11																
7/1/11-12																
7/1/12-13																
7/1/13-14																
7/1/14-15																
7/1/15-16																
7/1/16-17																
7/1/17-18																
7/1/18-19																
7/1/19-20																
7/1/20-21																
7/1/21-22																
7/1/22-23																

Year	Age to age development:*														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.003				0.999	--	1.000	1.000	1.000	0.950	1.000	1.000	0.982	0.981	
7/1/94-95	1.000			0.999	--	1.004	0.968	1.020	1.005	1.000	1.000	1.014	1.014	1.001	
7/1/95-96	1.013	1.004	0.996	--	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
7/1/96-97	1.011	1.025	--	1.000	1.000	1.000	1.049	1.005	1.001	1.014	1.000	1.000			
7/1/97-98	1.015	--	1.060	1.000	0.983	0.992	0.970	1.006	1.012	1.000	0.999				
7/1/98-99	--	1.010	1.008	1.015	1.041	1.001	0.999	0.995	1.000	0.994					
7/1/99-00	1.004	1.000	1.010	1.015	1.009	1.003	1.100	0.995	1.004						
7/1/00-01	0.985	0.927	1.005	0.997	1.016	0.993	1.000	1.000							
7/1/01-02	0.999	1.000	0.996	0.998	1.000	1.012	0.999								
7/1/02-03	0.995	0.983	0.993	1.009	1.000	1.000									
7/1/03-04	0.980	0.985	1.009	0.997	1.001										
7/1/04-05	1.053	1.044	1.000	1.000											
7/1/05-06	1.001	0.991	1.000												
7/1/06-07	0.966	0.982													
7/1/07-08	1.012														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	1.003	0.995	1.008	1.003	1.005	1.001	1.009	1.003	1.003	0.993	1.000	1.004	0.998	0.991	
<b>Avg Latest 3</b>	0.993	1.006	1.003	1.002	1.000	1.002	1.033	0.997	1.005	1.003	1.000	1.005	0.998		
<b>Avg Latest 5</b>	1.002	0.997	1.000	1.000	1.005	1.002	1.014	1.000	1.003	1.002	1.000				
<b>Wtd Avg</b>	1.000	0.992	1.007	1.003	1.005	1.001	1.011	1.002	1.003	0.991	1.000	1.004	0.998	0.991	
<b>Wtd Avg Latest 3</b>	0.992	1.007	1.004	1.001	1.000	1.002	1.032	0.997	1.005	1.001	0.999	1.006	0.998		
<b>Wtd Avg Latest 5</b>	1.000	0.997	1.000	1.000	1.005	1.002	1.016	0.999	1.004	1.001	1.000				
<b>State (All Agencies)</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior</b>	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.010
<b>Prior Implied Industry**</b>	1.004	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000
<b>Industry**</b>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.010
<b>Cumulative</b>	1.029	1.027	1.025	1.023	1.021	1.019	1.017	1.015	1.014	1.013	1.012	1.011	1.010	1.010	1.010

\* Age to age development not shown on one diagonal due to change in reserving methodology

\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Estimation of Cumulative Reported Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.871	-4.2421	-0.1379	17.996	0.0190	0.5852	360	1.006
24	1.484	-4.4013	-0.7251	19.371	0.5257	3.1913	348	1.007
36	1.363	-4.5386	-1.0143	20.599	1.0289	4.6037	336	1.007
48	1.278	-4.6592	-1.2818	21.709	1.6430	5.9723	324	1.008
60	1.211	-4.7669	-1.5562	22.724	2.4218	7.4184	312	1.009
72	1.148	-4.8641	-1.9078	23.660	3.6397	9.2798	300	1.009
84	1.116	-4.9527	-2.1572	24.529	4.6534	10.6839	288	1.010
96	1.094	-5.0341	-2.3594	25.342	5.5668	11.8774	276	1.011
108	1.079	-5.1093	-2.5389	26.105	6.4459	12.9719	264	1.013
120	1.065	-5.1793	-2.7296	26.825	7.4505	14.1372	252	1.014
132	1.052	-5.2447	-2.9621	27.507	8.7738	15.5351	240	1.016
144	1.044	-5.3061	-3.1263	28.154	9.7737	16.5883	228	1.017
156	1.038	-5.3639	-3.2771	28.771	10.7395	17.5781	216	1.020
168	1.034	-5.4186	-3.3932	29.361	11.5135	18.3861	204	1.022
180	1.029	-5.4704	-3.5239	29.925	12.4178	19.2771	192	1.025
							180	1.029
							168	1.033
							156	1.039
							144	1.045
							132	1.053
							120	1.064
							108	1.077
							96	1.095
							84	1.119
							72	1.151
							60	1.197
							48	1.265
							36	1.369
							24	1.536
							12	1.829
Sum		-74.5513	-32.6908	372.5778	86.6132	168.0858		
Average		-4.9701	-2.1794	24.8385	5.7742	11.2057		

N =	15		
A =	9.06E+04		
B =	2.735	R^2 =	0.99839
C =	58		

\* Appendix A1, page 1

**Analysis of Paid Loss Development**  
**Workers Compensation**

Gross Paid Losses in Thousands as of (Months):														
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
7/1/93-94					\$4,032	\$4,191	\$4,393	\$4,503	\$4,532	\$4,570	\$4,675	\$4,744	\$4,781	\$4,829
7/1/94-95				\$3,303	\$3,602	\$3,797	\$4,056	\$4,143	\$4,228	\$4,335	\$4,440	\$4,505	\$4,557	\$4,620
7/1/95-96			\$2,389	\$2,758	\$3,053	\$3,355	\$3,370	\$3,399	\$3,421	\$3,433	\$3,456	\$3,480	\$3,519	\$3,534
7/1/96-97		\$1,275	\$1,861	\$2,506	\$2,744	\$2,862	\$2,934	\$3,189	\$3,275	\$3,397	\$3,414	\$3,446	\$3,473	\$3,485
7/1/97-98	\$892	\$2,370	\$3,081	\$2,726	\$4,104	\$4,521	\$4,913	\$5,138	\$5,282	\$5,554	\$5,632	\$5,686	\$5,728	\$5,775
7/1/98-99	\$1,065	\$2,727	\$2,605	\$4,401	\$4,902	\$5,072	\$5,208	\$5,303	\$5,358	\$5,402	\$5,474	\$5,522	\$5,563	\$5,594
7/1/99-00	\$1,066	\$2,398	\$3,941	\$4,796	\$5,202	\$5,682	\$6,009	\$6,268	\$6,454	\$6,552	\$6,640	\$6,833	\$6,918	\$7,016
7/1/00-01	\$991	\$2,898	\$4,050	\$5,257	\$5,941	\$6,293	\$6,576	\$6,756	\$6,966	\$7,173	\$7,319	\$7,432	\$7,539	\$7,673
7/1/01-02	\$1,444	\$3,652	\$5,255	\$5,950	\$6,422	\$6,784	\$7,098	\$7,164	\$7,237	\$7,509	\$7,568	\$7,656	\$7,727	\$7,782
7/1/02-03	\$1,337	\$3,424	\$4,432	\$5,037	\$5,522	\$6,006	\$6,283	\$6,615	\$6,735	\$6,842	\$6,995	\$7,086	\$7,200	\$7,279
7/1/03-04	\$2,319	\$4,386	\$5,837	\$6,889	\$7,371	\$7,998	\$8,155	\$8,287	\$8,574	\$8,688	\$8,828	\$8,938	\$9,067	\$9,181
7/1/04-05	\$2,214	\$3,934	\$4,707	\$5,266	\$5,803	\$6,168	\$6,409	\$6,607	\$6,757	\$6,870	\$7,024	\$7,141	\$7,219	\$7,474
7/1/05-06	\$1,306	\$2,610	\$3,285	\$3,758	\$4,078	\$4,212	\$4,382	\$4,464	\$4,527	\$4,558	\$4,626	\$4,722	\$4,748	\$4,769
7/1/06-07	\$1,473	\$3,627	\$4,815	\$5,777	\$6,229	\$6,516	\$6,851	\$7,079	\$7,232	\$7,566	\$7,734	\$7,966	\$8,160	\$8,303
7/1/07-08	\$1,631	\$3,950	\$5,559	\$7,041	\$7,797	\$8,030	\$8,612	\$8,983	\$9,303	\$9,417	\$9,547	\$9,714	\$9,832	\$9,970
7/1/08-09	\$1,847	\$3,798	\$4,823	\$5,306	\$5,656	\$6,025	\$6,266	\$6,366	\$6,473	\$6,607	\$6,760	\$6,778	\$6,801	\$6,827
7/1/09-10	\$1,600	\$3,994	\$5,671	\$6,620	\$7,522	\$8,083	\$8,559	\$8,699	\$9,208	\$9,417	\$9,525	\$9,814	\$10,041	\$10,249
7/1/10-11	\$2,282	\$4,571	\$5,729	\$6,634	\$7,143	\$7,605	\$7,970	\$8,125	\$8,197	\$8,257	\$8,318	\$8,381	\$8,416	
7/1/11-12	\$1,650	\$3,609	\$4,989	\$5,765	\$6,326	\$7,509	\$8,033	\$8,246	\$8,340	\$8,374	\$8,408	\$8,437		
7/1/12-13	\$1,584	\$4,343	\$5,579	\$6,634	\$7,415	\$7,695	\$8,042	\$8,382	\$8,477	\$8,586	\$8,705			
7/1/13-14	\$1,347	\$3,244	\$4,360	\$5,747	\$6,072	\$6,251	\$6,422	\$6,710	\$6,848	\$7,044				
7/1/14-15	\$1,157	\$2,649	\$2,950	\$3,189	\$3,239	\$3,293	\$3,338	\$3,370	\$3,379					
7/1/15-16	\$1,575	\$3,158	\$3,761	\$3,869	\$3,999	\$4,082	\$4,163	\$4,241						
7/1/16-17	\$1,455	\$2,648	\$3,114	\$3,520	\$3,710	\$4,341	\$4,631							
7/1/17-18	\$1,217	\$2,512	\$3,091	\$3,211	\$3,495	\$3,795								
7/1/18-19	\$1,291	\$3,775	\$5,006	\$5,472	\$5,755									
7/1/19-20	\$1,447	\$3,308	\$3,860	\$4,104										
7/1/20-21	\$1,096	\$2,712	\$3,582											
7/1/21-22	\$1,388	\$2,876												
7/1/22-23	\$1,865													

Age to age development:															
Year	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180	
7/1/93-94					1.040	1.048	1.025	1.007	1.008	1.023	1.015	1.008	1.010	1.011	
7/1/94-95				1.091	1.054	1.068	1.021	1.021	1.025	1.024	1.015	1.011	1.014	1.012	
7/1/95-96			1.154	1.107	1.099	1.004	1.008	1.007	1.004	1.007	1.007	1.011	1.004	1.004	
7/1/96-97		1.460	1.346	1.095	1.043	1.025	1.087	1.027	1.037	1.005	1.009	1.008	1.004	1.006	
7/1/97-98	2.658	1.300	0.885	1.506	1.102	1.087	1.046	1.028	1.052	1.014	1.009	1.007	1.008	1.010	
7/1/98-99	2.561	0.955	1.689	1.114	1.035	1.027	1.018	1.010	1.008	1.013	1.009	1.007	1.006	1.004	
7/1/99-00	2.249	1.643	1.217	1.085	1.092	1.058	1.043	1.030	1.015	1.014	1.029	1.012	1.014	1.007	
7/1/00-01	2.925	1.397	1.298	1.130	1.059	1.045	1.027	1.031	1.030	1.020	1.015	1.014	1.018	1.008	
7/1/01-02	2.529	1.439	1.132	1.079	1.056	1.046	1.009	1.010	1.038	1.008	1.012	1.009	1.007	1.006	
7/1/02-03	2.561	1.294	1.136	1.096	1.088	1.046	1.053	1.018	1.016	1.022	1.013	1.016	1.011	1.013	
7/1/03-04	1.892	1.331	1.180	1.070	1.085	1.020	1.016	1.035	1.013	1.016	1.012	1.015	1.013	1.030	
7/1/04-05	1.777	1.197	1.119	1.102	1.063	1.039	1.031	1.023	1.017	1.022	1.017	1.011	1.035	1.013	
7/1/05-06	1.998	1.259	1.144	1.085	1.033	1.040	1.019	1.014	1.007	1.015	1.021	1.006	1.004	1.021	
7/1/06-07	2.462	1.328	1.200	1.078	1.046	1.051	1.033	1.022	1.046	1.022	1.030	1.024	1.017	1.015	
7/1/07-08	2.422	1.407	1.267	1.107	1.030	1.073	1.043	1.036	1.012	1.014	1.018	1.012	1.014	1.021	
7/1/08-09	2.057	1.270	1.100	1.066	1.065	1.040	1.016	1.017	1.021	1.023	1.003	1.003	1.004	1.004	
7/1/09-10	2.496	1.420	1.167	1.136	1.075	1.059	1.016	1.058	1.023	1.011	1.030	1.023	1.021		
7/1/10-11	2.003	1.253	1.158	1.077	1.065	1.048	1.020	1.009	1.007	1.007	1.008	1.004			
7/1/11-12	2.187	1.382	1.155	1.097	1.187	1.070	1.027	1.011	1.004	1.004	1.003				
7/1/12-13	2.742	1.285	1.189	1.118	1.038	1.045	1.042	1.011	1.013	1.014					
7/1/13-14	2.409	1.344	1.318	1.057	1.030	1.027	1.045	1.021	1.029						
7/1/14-15	2.289	1.114	1.081	1.016	1.017	1.014	1.009	1.003							
7/1/15-16	2.006	1.191	1.029	1.034	1.021	1.020	1.019								
7/1/16-17	1.820	1.176	1.130	1.054	1.170	1.067									
7/1/17-18	2.064	1.231	1.039	1.089	1.086										
7/1/18-19	2.925	1.326	1.093	1.052											
7/1/19-20	2.285	1.167	1.063												
7/1/20-21	2.473	1.321													
7/1/21-22	2.072														
<b>Average</b>	2.314	1.300	1.172	1.102	1.067	1.044	1.029	1.020	1.020	1.015	1.014	1.011	1.012	1.012	
<b>Avg Latest 5</b>	2.364	1.244	1.071	1.049	1.065	1.035	1.028	1.011	1.015	1.012	1.012	1.013	1.012	1.015	
<b>Wtd Avg</b>	2.268	1.299	1.167	1.096	1.067	1.046	1.029	1.022	1.020	1.015	1.015	1.012	1.013	1.013	
<b>Wtd Avg Latest 5</b>	2.358	1.247	1.071	1.049	1.061	1.036	1.032	1.012	1.015	1.011	1.013	1.014	1.014	1.015	
<b>State (All Agencies)</b>	2.088	1.236	1.111	1.067	1.050	1.035	1.024	1.017	1.015	1.015	1.014	1.014	1.014	1.013	
<b>Prior</b>	2.313	1.251	1.120	1.080	1.061	1.037	1.027	1.021	1.017	1.015	1.015	1.015	1.015	1.015	
<b>Industry*</b>	2.047	1.215	1.100	1.059	1.039	1.028	1.021	1.017	1.013	1.011	1.009	1.008	1.007	1.006	
<b>Selected</b>	2.358	1.260	1.111	1.067	1.066	1.039	1.025	1.019	1.018	1.015	1.014	1.014	1.014	1.013	
<b>Cumulative</b>	5.135	2.178	1.729	1.555	1.458	1.368	1.316	1.283	1.260	1.238	1.219	1.202	1.186	1.170	

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Analysis of Paid Loss Development  
Workers Compensation**

Year	Gross Paid Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$4,881	\$4,932			\$5,071	\$5,108	\$5,141	\$5,173	\$5,213	\$5,264	\$5,288	\$5,314	\$5,336	\$5,363	\$5,390
7/1/94-95	\$4,677	\$4,719		\$4,839	\$4,887	\$4,923	\$4,948	\$4,980	\$5,021	\$5,067	\$5,097	\$5,133	\$5,185	\$5,217	\$5,253
7/1/95-96	\$3,547	\$3,591	\$3,609	\$3,612	\$3,616	\$3,620	\$3,623	\$3,623	\$3,624	\$3,626	\$3,628	\$3,630	\$3,632	\$3,633	
7/1/96-97	\$3,506	\$3,545	\$3,604	\$3,654	\$3,685	\$3,709	\$3,725	\$3,907	\$3,921	\$3,941	\$3,969	\$3,992	\$4,016		
7/1/97-98	\$5,836	\$5,891	\$5,956	\$6,010	\$6,057	\$6,127	\$6,165	\$6,255	\$6,294	\$6,448	\$6,471	\$6,489			
7/1/98-99	\$5,616	\$5,634	\$5,660	\$5,688	\$5,790	\$5,865	\$5,897	\$5,928	\$5,960	\$5,988	\$6,018				
7/1/99-00	\$7,063	\$7,106	\$7,158	\$7,233	\$7,328	\$7,467	\$7,665	\$7,811	\$7,860	\$8,046					
7/1/00-01	\$7,733	\$7,792	\$7,839	\$7,881	\$7,919	\$7,945	\$7,977	\$8,012	\$8,037						
7/1/01-02	\$7,830	\$7,870	\$7,910	\$7,959	\$8,005	\$8,040	\$8,122	\$8,149							
7/1/02-03	\$7,376	\$7,527	\$7,607	\$7,675	\$7,760	\$7,847	\$7,950								
7/1/03-04	\$9,460	\$9,590	\$9,657	\$9,721	\$9,777	\$9,878									
7/1/04-05	\$7,572	\$7,657	\$7,745	\$7,876	\$7,950										
7/1/05-06	\$4,871	\$4,891	\$4,954	\$4,964											
7/1/06-07	\$8,425	\$8,555	\$8,620												
7/1/07-08	\$10,175	\$10,240													
7/1/08-09	\$6,857														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.010				1.007	1.006	1.006	1.008	1.010	1.005	1.005	1.004	1.005	1.005	
7/1/94-95	1.009			1.010	1.007	1.005	1.007	1.008	1.009	1.006	1.007	1.010	1.006	1.007	
7/1/95-96	1.012	1.005	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	
7/1/96-97	1.011	1.017	1.014	1.008	1.007	1.004	1.049	1.004	1.005	1.007	1.006	1.006			
7/1/97-98	1.009	1.011	1.009	1.008	1.012	1.006	1.015	1.006	1.025	1.003	1.003				
7/1/98-99	1.003	1.005	1.005	1.018	1.013	1.005	1.005	1.005	1.005	1.005					
7/1/99-00	1.006	1.007	1.010	1.013	1.019	1.026	1.019	1.006	1.024						
7/1/00-01	1.008	1.006	1.005	1.005	1.003	1.004	1.004	1.003							
7/1/01-02	1.005	1.005	1.006	1.006	1.004	1.010	1.003								
7/1/02-03	1.020	1.011	1.009	1.011	1.011	1.013									
7/1/03-04	1.014	1.007	1.007	1.006	1.010										
7/1/04-05	1.011	1.012	1.017	1.009											
7/1/05-06	1.004	1.013	1.002												
7/1/06-07	1.015	1.008													
7/1/07-08	1.006														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	1.010	1.009	1.008	1.009	1.009	1.008	1.012	1.005	1.011	1.004	1.004	1.005	1.004	1.006	
<b>Avg Latest 5</b>	1.010	1.010	1.008	1.007	1.010	1.012	1.009	1.005	1.012	1.004	1.004				
<b>Wtd Avg</b>	1.010	1.008	1.008	1.009	1.009	1.009	1.011	1.005	1.013	1.005	1.004	1.005	1.004	1.006	
<b>Wtd Avg Latest 5</b>	1.011	1.010	1.008	1.007	1.010	1.012	1.009	1.005	1.014	1.005	1.004				
<b>State (All Agencies)</b>	1.012	1.010	1.008	1.008	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Prior</b>	1.013	1.009	1.008	1.008	1.008	1.008	1.007	1.006	1.005	1.003	1.003	1.003	1.002	1.002	1.060
<b>Industry*</b>	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.052
<b>Selected</b>	1.012	1.009	1.009	1.009	1.009	1.008	1.007	1.005	1.005	1.003	1.003	1.003	1.003	1.002	1.060
<b>Cumulative</b>	1.155	1.141	1.131	1.121	1.111	1.102	1.093	1.085	1.079	1.074	1.070	1.068	1.065	1.062	1.060

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Estimation of Cumulative Paid Loss Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	5.135	-1.2935	1.4196	1.673	2.0152	-1.8362	360	1.088
24	2.178	-2.7502	0.1638	7.564	0.0268	-0.4505	348	1.090
36	1.729	-3.3195	-0.3165	11.019	0.1002	1.0506	336	1.093
48	1.555	-3.6800	-0.5883	13.542	0.3461	2.1648	324	1.096
60	1.458	-3.9444	-0.7820	15.558	0.6114	3.0843	312	1.099
72	1.368	-4.1533	-1.0010	17.250	1.0020	4.1574	300	1.103
84	1.316	-4.3261	-1.1534	18.715	1.3303	4.9896	288	1.107
96	1.283	-4.4733	-1.2623	20.010	1.5933	5.6464	276	1.111
108	1.260	-4.6016	-1.3482	21.175	1.8177	6.2040	264	1.115
120	1.238	-4.7153	-1.4360	22.234	2.0622	6.7714	252	1.120
132	1.219	-4.8174	-1.5188	23.208	2.3067	7.3167	240	1.125
144	1.202	-4.9100	-1.5987	24.109	2.5560	7.8499	228	1.131
156	1.186	-4.9948	-1.6818	24.948	2.8284	8.4002	216	1.137
168	1.170	-5.0730	-1.7708	25.735	3.1357	8.9832	204	1.144
180	1.155	-5.1454	-1.8652	26.475	3.4790	9.5972	192	1.152
192	1.141	-5.2130	-1.9592	27.175	3.8383	10.2131	180	1.161
							168	1.171
							156	1.182
							144	1.196
							132	1.212
							120	1.231
							108	1.254
							96	1.283
							84	1.320
							72	1.370
							60	1.442
							48	1.552
							36	1.748
							24	2.209
							12	5.134
Sum		-67.4109	-16.6987	300.3907	29.0492	84.1422		
Average		-4.2132	-1.0437	18.7744	1.8156	5.2589		

N =	16		
A =	1.22E+01		
B =	0.842	R^2 =	0.99883
C =	-8		

\* Appendix A2, page 1



**Analysis of Reported Claim Development  
Workers Compensation**

Year	Reported Claims as of (Months):											
	12	24	36	48	60	72	84	96	108	120	132	144
7/1/93-94								901	901	901	901	901
7/1/94-95						912	912	912	912	912	912	912
7/1/95-96					851	851	851	851	851	851	851	851
7/1/96-97				898	900	900	900	900	900	900	900	900
7/1/97-98			966	967	967	968	968	969	969	969	969	970
7/1/98-99		936	942	943	944	944	944	944	944	944	944	944
7/1/99-00	965	1,029	1,037	1,038	1,040	1,040	1,040	1,040	1,040	1,040	1,041	1,042
7/1/00-01	1,084	1,154	1,160	1,163	1,165	1,165	1,165	1,165	1,165	1,165	1,165	1,165
7/1/01-02	1,249	1,331	1,336	1,338	1,339	1,339	1,339	1,339	1,339	1,339	1,339	1,339
7/1/02-03	1,086	1,174	1,180	1,183	1,183	1,183	1,182	1,182	1,182	1,182	1,182	1,182
7/1/03-04	1,165	1,230	1,231	1,234	1,237	1,233	1,233	1,233	1,233	1,233	1,233	1,233
7/1/04-05	1,056	1,105	1,108	1,108	1,105	1,105	1,106	1,106	1,106	1,107	1,107	1,107
7/1/05-06	1,013	1,051	1,051	1,050	1,051	1,051	1,052	1,052	1,052	1,052	1,052	1,052
7/1/06-07	1,013	1,066	1,062	1,063	1,063	1,063	1,064	1,064	1,064	1,065	1,065	1,065
7/1/07-08	1,074	1,124	1,126	1,126	1,126	1,126	1,126	1,127	1,127	1,127	1,128	1,130
7/1/08-09	1,036	1,064	1,065	1,066	1,066	1,066	1,066	1,066	1,066	1,066	1,067	1,066
7/1/09-10	1,009	1,044	1,046	1,047	1,047	1,047	1,047	1,046	1,046	1,047	1,047	1,047
7/1/10-11	1,087	1,117	1,119	1,119	1,120	1,121	1,121	1,121	1,122	1,122	1,121	1,121
7/1/11-12	1,009	1,043	1,046	1,047	1,047	1,048	1,049	1,049	1,050	1,050	1,050	1,050
7/1/12-13	985	1,011	1,011	1,011	1,011	1,011	1,011	1,011	1,011	1,011	1,011	1,011
7/1/13-14	864	889	889	888	888	888	889	889	889	889		
7/1/14-15	837	857	866	867	867	867	867	867	864			
7/1/15-16	793	838	840	843	844	844	844	844				
7/1/16-17	805	822	825	827	827	827	826					
7/1/17-18	848	878	879	879	879	879						
7/1/18-19	988	1,016	1,017	1,018	1,019							
7/1/19-20	814	822	823	823								
7/1/20-21	651	663	664									
7/1/21-22	681	699										
7/1/22-23	765											

Year	Age to age development:											
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:ULT
7/1/93-94							1.000	1.000	1.000	1.000	1.000	1.000
7/1/94-95						1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/95-96					1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/96-97				1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/97-98			1.001	1.000	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.001
7/1/98-99		1.006	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/99-00	1.066	1.008	1.001	1.002	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001
7/1/00-01	1.065	1.005	1.003	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/01-02	1.066	1.004	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/02-03	1.081	1.005	1.003	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000
7/1/03-04	1.056	1.001	1.002	1.002	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/04-05	1.046	1.003	1.000	0.997	1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.000
7/1/05-06	1.038	1.000	0.999	1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
7/1/06-07	1.052	0.996	1.001	1.000	1.000	1.001	1.000	1.000	1.001	1.000	1.000	1.000
7/1/07-08	1.047	1.002	1.000	1.000	1.000	1.000	1.001	1.000	1.000	1.001	1.001	1.002
7/1/08-09	1.027	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001	0.999	0.999
7/1/09-10	1.035	1.002	1.001	1.000	1.000	1.000	0.999	1.000	1.001	1.000	1.000	1.000
7/1/10-11	1.028	1.002	1.000	1.001	1.001	1.000	1.000	1.001	0.999	1.000	1.000	1.000
7/1/11-12	1.034	1.003	1.001	1.000	1.001	1.001	1.000	1.001	1.000	1.000	1.000	1.000
7/1/12-13	1.026	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/13-14	1.029	1.000	0.999	1.000	1.001	1.000	1.000	1.000	1.000	1.000		
7/1/14-15	1.024	1.011	1.001	1.000	1.000	1.000	1.000	0.997				
7/1/15-16	1.057	1.002	1.004	1.001	1.000	1.000	1.000					
7/1/16-17	1.021	1.004	1.002	1.000	1.000	0.999						
7/1/17-18	1.035	1.001	1.000	1.000	1.000							
7/1/18-19	1.028	1.001	1.001	1.001								
7/1/19-20	1.010	1.001	1.000									
7/1/20-21	1.018	1.002										
7/1/21-22	1.026											
<b>Average</b>	1.040	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Avg Latest 5</b>	1.024	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Wtd Avg</b>	1.041	1.003	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Wtd Avg Latest 5</b>	1.024	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>State (All Agencies)</b>	1.018	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Prior</b>	1.026	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Industry*</b>	1.083	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.026	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Cumulative</b>	1.028	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

\* Based on experience of several large carriers

**Estimation of Cumulative Reported Claim Development Factors  
Using "The Method of Least Squares"  
Workers Compensation**

Curve :  $Y = A(1/(X+C))^B + 1$  (Modified Inverse Power Curve)

Months of Maturity X	Cumulative Factors Y*	Transformed Values for Regression					Fitted Values	
		X' LN(1/(X+C))	Y' LN(Y-1)	(X')^2	(Y')^2	X' x Y'	X	Cumulative Factor Y
12	1.028	-1.8318	-3.5654	3.355	12.7119	6.5309	360	1.000
24	1.002	-2.9039	-6.0629	8.433	36.7585	17.6059	348	1.000
36	1.001	-3.4093	-7.2403	11.624	52.4220	24.6846	336	1.000
							324	1.000
							312	1.000
							300	1.000
							288	1.000
							276	1.000
							264	1.000
							252	1.000
							240	1.000
							228	1.000
							216	1.000
							204	1.000
							192	1.000
							180	1.000
							168	1.000
							156	1.000
							144	1.000
							132	1.000
							120	1.000
							108	1.000
							96	1.000
							84	1.000
							72	1.000
							60	1.000
							48	1.000
							36	1.001
							24	1.002
							12	1.029
Sum		-8.1450	-16.8686	23.4114	101.8925	48.8214		
Average		-2.7150	-5.6229	7.8038	33.9642	16.2738		

N =	3		
A =	2.02E+00		
B =	2.329	R^2 =	1.00000
C =	-6		

\* Appendix A3, page 1

**Loss Forecasting Model**  
**Analysis of Historical Loss Patterns**  
**Variation in Reported Loss Development**  
**Workers Compensation**

Year	Variation in Reported Losses:														
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180	180:192
7/1/93-94					0.054	-0.032	0.038	0.016	0.022	0.022	0.000	0.001	-0.003	0.004	0.003
7/1/94-95				0.011	-0.032	0.041	0.006	0.085	0.005	0.006	0.006	0.013	0.003	0.006	0.000
7/1/95-96			0.043	-0.034	0.054	0.010	0.017	0.008	-0.004	-0.004	0.019	0.005	0.007	0.000	0.013
7/1/96-97		0.338	-0.059	0.128	0.017	0.013	0.070	0.004	-0.001	0.010	-0.001	0.005	-0.003	0.000	0.011
7/1/97-98	0.325	0.065	-0.225	0.379	0.119	0.000	0.004	-0.002	0.030	0.010	0.008	0.003	0.006	0.006	0.015
7/1/98-99	0.363	-0.227	0.488	0.040	0.014	-0.010	-0.017	0.017	0.003	0.003	0.008	0.000	0.001	0.000	--
7/1/99-00	0.428	0.286	0.228	-0.031	0.042	-0.015	0.007	-0.020	-0.006	0.024	0.011	0.003	-0.009	--	0.004
7/1/00-01	0.554	0.167	0.120	-0.007	0.006	0.013	0.006	0.023	0.041	-0.005	0.012	0.007	--	--	-0.015
7/1/01-02	0.653	-0.022	-0.056	0.019	-0.016	0.064	0.009	0.004	0.014	0.000	-0.009	--	0.050	-0.013	-0.001
7/1/02-03	0.355	0.046	-0.025	0.008	0.015	-0.001	0.040	0.012	0.008	0.016	--	--	0.019	-0.025	-0.005
7/1/03-04	0.367	0.047	0.029	-0.002	0.047	0.005	0.003	0.029	0.015	--	--	-0.021	0.020	0.015	-0.020
7/1/04-05	0.119	0.025	0.009	0.023	0.032	0.024	0.029	-0.001	--	--	-0.002	-0.004	0.029	0.001	0.051
7/1/05-06	0.222	-0.032	0.057	0.064	-0.011	0.049	-0.033	--	--	-0.030	-0.027	-0.012	-0.016	0.009	0.001
7/1/06-07	0.344	0.035	0.075	0.029	-0.001	0.023	--	--	0.053	-0.017	-0.018	-0.004	-0.047	-0.005	-0.035
7/1/07-08	0.069	0.099	0.076	0.046	-0.002	--	--	-0.069	0.042	-0.005	-0.026	-0.034	0.003	0.033	0.012
7/1/08-09	0.061	0.075	0.040	0.019	--	0.070	0.018	-0.007	0.020	-0.003	0.000	-0.094	0.014	-0.017	--
7/1/09-10	0.239	0.103	0.043	--	0.145	0.027	0.001	0.066	-0.031	0.003	0.016	-0.006	0.012	--	--
7/1/10-11	0.059	0.035	--	0.134	-0.070	0.042	-0.003	-0.030	0.048	0.015	0.002	-0.003	--	--	--
7/1/11-12	0.136	--	0.087	-0.053	0.222	-0.007	-0.002	-0.021	0.001	0.004	-0.002	--	--	--	--
7/1/12-13	--	0.150	-0.051	0.052	0.044	-0.002	0.019	0.070	-0.035	-0.005	--	--	--	--	--
7/1/13-14	0.397	0.033	0.182	-0.012	0.062	0.023	0.017	-0.042	0.013	--	--	--	--	--	--
7/1/14-15	0.065	-0.098	0.009	0.010	0.033	0.006	0.001	0.000	--	--	--	--	--	--	--
7/1/15-16	0.029	-0.011	-0.006	0.040	0.003	-0.001	-0.013	--	--	--	--	--	--	--	--
7/1/16-17	0.198	0.006	0.083	0.004	0.151	0.007	--	--	--	--	--	--	--	--	--
7/1/17-18	0.267	-0.019	0.021	0.083	0.075	--	--	--	--	--	--	--	--	--	--
7/1/18-19	0.570	0.050	0.055	0.019	--	--	--	--	--	--	--	--	--	--	--
7/1/19-20	0.178	0.086	0.023	--	--	--	--	--	--	--	--	--	--	--	--
7/1/20-21	0.068	0.171	--	--	--	--	--	--	--	--	--	--	--	--	--
7/1/21-22	0.183	--	--	--	--	--	--	--	--	--	--	--	--	--	--

- Excludes points impacted by change in reserving methodology

Variance	0.032	0.013	0.016	0.007	0.004	0.001	0.000	0.001	0.001	0.000	0.000	0.001	0.000	0.000	0.000
Sigma	0.286	0.224	0.192	0.144	0.116	0.097	0.093	0.091	0.083	0.079	0.078	0.077	0.073	0.070	0.068

Lognormal Parameters					
Year	Maturity	Ultimate Losses	Prior Sigma*	Sigma	Mu
7/1/93-94	360	\$5,452,000		0.009	15.511
7/1/94-95	348	\$5,306,000	0.008	0.012	15.484
7/1/95-96	336	\$3,566,000	0.010	0.015	15.087
7/1/96-97	324	\$4,258,000	0.012	0.022	15.264
7/1/97-98	312	\$6,618,000	0.016	0.023	15.705
7/1/98-99	300	\$6,377,000	0.019	0.023	15.668
7/1/99-00	288	\$9,050,000	0.024	0.032	16.018
7/1/00-01	276	\$8,551,000	0.030	0.032	15.961
7/1/01-02	264	\$8,432,000	0.038	0.033	15.947
7/1/02-03	252	\$8,517,000	0.051	0.052	15.956
7/1/03-04	240	\$11,055,000	0.051	0.052	16.217
7/1/04-05	228	\$9,822,000	0.051	0.054	16.099
7/1/05-06	216	\$5,211,000	0.052	0.055	15.465
7/1/06-07	204	\$10,040,000	0.052	0.058	16.120
7/1/07-08	192	\$11,716,000	0.053	0.065	16.274
7/1/08-09	180	\$7,491,000	0.054	0.068	15.827
7/1/09-10	168	\$11,797,000	0.055	0.070	16.281
7/1/10-11	156	\$9,611,000	0.057	0.073	16.076
7/1/11-12	144	\$9,612,000	0.060	0.077	16.076
7/1/12-13	132	\$10,286,000	0.063	0.078	16.143
7/1/13-14	120	\$8,264,000	0.066	0.079	15.924
7/1/14-15	108	\$3,890,000	0.072	0.083	15.170
7/1/15-16	96	\$4,927,000	0.084	0.091	15.406
7/1/16-17	84	\$5,704,000	0.093	0.093	15.552
7/1/17-18	72	\$4,793,000	0.100	0.097	15.378
7/1/18-19	60	\$7,939,000	0.112	0.116	15.881
7/1/19-20	48	\$5,890,000	0.168	0.144	15.578
7/1/20-21	36	\$6,084,000	0.245	0.155	15.609
7/1/21-22	24	\$5,979,000	0.285	0.168	15.590
7/1/22-23	12	\$7,152,000	0.346	0.181	15.767

\* Prior sigma at indicated maturity

**Derivation of Discount Factors  
Workers Compensation**

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Accident Period	Maturity in Years at 6/30/2023	Cumulative Paid Loss Develop. Factor	% Losses Paid 6/30/2023	Midpoint Upcoming Period	% Losses Paid Upcoming Period	Column(F) Discounted 4.0%	Discount Factor at 4.0%
7/1/93-94	30	1.000	100.0%				<b>1.000</b>
7/1/94-95	29	1.090	91.7%	29.5	8.29%	0.0261	<b>0.981</b>
7/1/95-96	28	1.093	91.5%	28.5	0.23%	0.0008	<b>0.944</b>
7/1/96-97	27	1.096	91.2%	27.5	0.25%	0.0008	<b>0.910</b>
7/1/97-98	26	1.099	91.0%	26.5	0.26%	0.0009	<b>0.878</b>
7/1/98-99	25	1.103	90.7%	25.5	0.28%	0.0010	<b>0.848</b>
7/1/99-00	24	1.107	90.4%	24.5	0.30%	0.0012	<b>0.821</b>
7/1/00-01	23	1.111	90.0%	23.5	0.33%	0.0013	<b>0.795</b>
7/1/01-02	22	1.115	89.7%	22.5	0.35%	0.0015	<b>0.772</b>
7/1/02-03	21	1.120	89.3%	21.5	0.38%	0.0016	<b>0.751</b>
7/1/03-04	20	1.125	88.9%	20.5	0.41%	0.0018	<b>0.732</b>
7/1/04-05	19	1.131	88.5%	19.5	0.45%	0.0021	<b>0.714</b>
7/1/05-06	18	1.137	88.0%	18.5	0.49%	0.0024	<b>0.699</b>
7/1/06-07	17	1.144	87.4%	17.5	0.54%	0.0027	<b>0.685</b>
7/1/07-08	16	1.152	86.8%	16.5	0.60%	0.0031	<b>0.674</b>
7/1/08-09	15	1.161	86.2%	15.5	0.67%	0.0036	<b>0.664</b>
7/1/09-10	14	1.171	85.4%	14.5	0.74%	0.0042	<b>0.656</b>
7/1/10-11	13	1.182	84.6%	13.5	0.84%	0.0049	<b>0.649</b>
7/1/11-12	12	1.196	83.6%	12.5	0.96%	0.0058	<b>0.645</b>
7/1/12-13	11	1.212	82.5%	11.5	1.10%	0.0070	<b>0.643</b>
7/1/13-14	10	1.231	81.2%	10.5	1.27%	0.0084	<b>0.643</b>
7/1/14-15	9	1.254	79.7%	9.5	1.50%	0.0103	<b>0.645</b>
7/1/15-16	8	1.283	77.9%	8.5	1.80%	0.0129	<b>0.650</b>
7/1/16-17	7	1.320	75.7%	7.5	2.21%	0.0164	<b>0.657</b>
7/1/17-18	6	1.370	73.0%	6.5	2.77%	0.0215	<b>0.668</b>
7/1/18-19	5	1.442	69.4%	5.5	3.61%	0.0291	<b>0.682</b>
7/1/19-20	4	1.552	64.4%	4.5	4.93%	0.0413	<b>0.701</b>
7/1/20-21	3	1.748	57.2%	3.5	7.23%	0.0630	<b>0.725</b>
7/1/21-22	2	2.209	45.3%	2.5	11.93%	0.1081	<b>0.759</b>
7/1/22-23	1	5.134	19.5%	1.5	25.80%	0.2432	<b>0.810</b>

Column (C): Appendix A2, page 2

Column (D) = 1 / (C)

Column (E) = [ (B), current line + (B), previous line ] / 2

Column (F) = (D), previous line - (D), current line

Column (G) = (F) x [ 1 + Interest Rate ]<sup>-(E)</sup>

Column (H) = [ 1 + Interest Rate ]<sup>-(B)</sup> / [ 1 - (D) ] x [ Downward Sum, (G) ]

**Estimation of Ultimate and Outstanding Losses  
For Claims Occurring Prior to 7/1/1993  
Workers Compensation**

**IBNR to Case Ratio Method**

(A) Accident Period	(B) Incurred Losses	(C) Paid Losses	(D) Case Reserves	(E) Incurred Development Factor	(F) Paid Development Factor	(G) IBNR to Case Factor	(H) Estimated IBNR Losses	(I) Estimate Ultimate Losses
7/1/1969 - 6/30/1993	\$56,843,694	\$55,506,603	\$1,337,091	1.006	1.085	0.078	\$104,000	\$56,948,000

**Incurred Bornhuetter Ferguson Method**

(A) Accident Period	(B) Previous Ultimate	(C) Reported LDF	(D) Estimated Percent Unreported	(E) Estimated Unreported Losses	(F) Incurred Losses as of 6/30/2023	(G) Estimated Ultimate Losses
7/1/1969 - 6/30/1993	\$57,139,000	1.006	0.57%	\$324,000	\$56,843,694	\$57,168,000

**Paid Bornhuetter Ferguson Method**

(A) Accident Period	(B) Previous Ultimate	(C) Paid LDF	(D) Estimated Percent Unpaid	(E) Estimated Unpaid Losses	(F) Paid Losses as of 6/30/2023	(G) Estimated Ultimate Losses
7/1/1969 - 6/30/1993	\$57,139,000	1.085	7.87%	\$4,495,000	\$55,506,603	\$60,002,000

**Summary of Ultimate Loss Estimates**

(A) Accident Period	(B) Previous Ultimate	(C) Incurred Bornhuetter- Ferguson Method	(D) Paid Bornhuetter- Ferguson Method	(E) IBNR to Case Ratio Method	(F) Selected Ultimate Losses
7/1/1969 - 6/30/1993	\$57,139,000	\$57,168,000	\$60,002,000	\$56,948,000	\$57,168,000

**Calculation of Outstanding Losses**

(A) Accident Period	(B) Selected Ultimate Losses	(C) Incurred Losses	(D) Paid Losses	(E) Case Reserves	(F) IBNR Reserves	(G) Total Required Reserves	(H) Discount Factor at 4.0%	(I) Total Discounted Reserves at 4.0%
7/1/1969 - 6/30/1993	\$57,168,000	\$56,843,694	\$55,506,603	\$1,337,091	\$324,000	\$1,661,000	1.000	\$1,661,000

**Analysis of Reported Loss Development  
Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):													
	12	24	36	48	60	72	84	96	108	120	132	144	156	168
7/1/93-94					\$13,579	\$13,559	\$13,423	\$13,708	\$13,922	\$14,385	\$14,632	\$14,627	\$14,725	\$14,871
7/1/94-95				\$13,833	\$14,230	\$13,931	\$14,530	\$14,607	\$15,100	\$14,729	\$14,808	\$14,905	\$14,966	\$15,048
7/1/95-96			\$13,173	\$13,065	\$13,173	\$13,539	\$13,934	\$14,132	\$14,128	\$14,166	\$14,158	\$14,227	\$14,375	\$14,462
7/1/96-97		\$8,777	\$9,888	\$9,963	\$10,531	\$10,788	\$10,953	\$11,788	\$11,861	\$11,832	\$11,847	\$11,859	\$11,910	\$11,946
7/1/97-98	\$9,012	\$11,225	\$11,806	\$11,545	\$13,179	\$14,423	\$14,204	\$14,239	\$14,167	\$14,292	\$14,426	\$14,567	\$14,698	\$14,830
7/1/98-99	\$8,734	\$12,864	\$13,752	\$15,932	\$19,113	\$17,324	\$17,237	\$17,155	\$17,284	\$17,455	\$17,571	\$17,847	\$17,779	\$17,813
7/1/99-00	\$9,411	\$13,965	\$16,892	\$19,331	\$19,106	\$19,401	\$19,393	\$19,480	\$19,430	\$19,501	\$19,867	\$19,959	\$20,065	\$20,127
7/1/00-01	\$9,764	\$16,005	\$18,621	\$19,098	\$18,936	\$18,865	\$18,994	\$19,040	\$19,164	\$19,564	\$19,757	\$19,859	\$19,912	\$22,477
7/1/01-02	\$11,500	\$18,982	\$19,265	\$19,040	\$18,921	\$18,674	\$19,150	\$19,247	\$19,283	\$19,598	\$19,701	\$19,681	\$20,062	\$21,420
7/1/02-03	\$13,918	\$18,519	\$19,363	\$19,002	\$19,209	\$19,215	\$19,313	\$19,620	\$19,711	\$19,929	\$20,084	\$20,856	\$22,987	\$23,188
7/1/03-04	\$12,760	\$18,210	\$19,351	\$19,896	\$19,989	\$20,625	\$20,893	\$21,221	\$21,656	\$21,704	\$23,407	\$25,523	\$25,463	\$25,335
7/1/04-05	\$14,960	\$19,099	\$19,944	\$20,811	\$21,295	\$21,957	\$22,427	\$22,858	\$23,104	\$24,396	\$28,570	\$28,252	\$28,380	\$28,144
7/1/05-06	\$11,099	\$15,590	\$16,609	\$17,871	\$18,757	\$19,274	\$19,393	\$19,279	\$20,657	\$23,713	\$23,632	\$23,398	\$23,265	\$22,636
7/1/06-07	\$14,232	\$18,285	\$19,923	\$21,751	\$22,807	\$23,443	\$24,085	\$28,553	\$36,563	\$36,804	\$36,600	\$38,977	\$38,690	\$37,931
7/1/07-08	\$15,553	\$17,456	\$18,950	\$20,265	\$20,993	\$21,097	\$23,764	\$28,005	\$26,662	\$27,438	\$27,394	\$27,156	\$26,776	\$26,708
7/1/08-09	\$14,176	\$17,521	\$18,288	\$19,250	\$19,758	\$21,571	\$25,651	\$25,044	\$24,368	\$24,679	\$24,670	\$24,431	\$24,269	\$24,111
7/1/09-10	\$15,579	\$19,499	\$21,017	\$22,315	\$26,230	\$30,253	\$29,615	\$30,735	\$31,799	\$31,154	\$30,989	\$30,902	\$30,679	\$30,948
7/1/10-11	\$18,687	\$22,609	\$23,147	\$28,568	\$33,465	\$31,979	\$30,599	\$30,568	\$30,239	\$30,355	\$30,678	\$29,984	\$29,940	
7/1/11-12	\$17,805	\$20,563	\$24,578	\$27,586	\$27,299	\$30,548	\$30,413	\$30,586	\$30,229	\$30,394	\$31,336	\$31,276		
7/1/12-13	\$14,421	\$21,390	\$24,375	\$25,381	\$26,193	\$26,590	\$27,006	\$27,777	\$29,057	\$29,152	\$29,384			
7/1/13-14	\$14,226	\$20,984	\$22,152	\$24,582	\$25,180	\$25,550	\$26,038	\$26,894	\$26,221	\$26,338				
7/1/14-15	\$12,088	\$13,562	\$12,978	\$13,624	\$13,833	\$14,381	\$14,840	\$14,975	\$14,912					
7/1/15-16	\$11,034	\$12,917	\$14,687	\$13,525	\$13,611	\$14,189	\$13,956	\$13,958						
7/1/16-17	\$11,614	\$11,726	\$11,648	\$12,620	\$12,867	\$13,929	\$14,438							
7/1/17-18	\$8,611	\$9,544	\$9,703	\$10,196	\$10,804	\$11,165								
7/1/18-19	\$9,119	\$13,637	\$14,648	\$15,499	\$15,859									
7/1/19-20	\$8,967	\$10,557	\$11,923	\$12,066										
7/1/20-21	\$9,746	\$10,251	\$11,381											
7/1/21-22	\$8,699	\$8,836												
7/1/22-23	\$8,479													

Year	Age to age development:*													
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180
7/1/93-94					0.998	0.990	1.021	1.016	1.033	1.017	1.000	1.007	1.010	1.001
7/1/94-95				1.029	0.979	1.043	1.005	1.034	0.975	1.005	1.007	1.004	1.006	1.003
7/1/95-96			0.992	1.008	1.028	1.029	1.014	1.000	1.003	0.999	1.005	1.010	1.006	1.009
7/1/96-97		1.127	1.008	1.057	1.024	1.015	1.076	1.006	0.998	1.001	1.001	1.004	1.003	1.000
7/1/97-98	1.246	1.052	0.978	1.141	1.094	0.985	1.002	0.995	1.009	1.009	1.010	1.009	1.009	1.005
7/1/98-99	1.473	1.069	1.159	1.200	0.906	0.995	0.995	1.008	1.010	1.007	1.016	0.996	1.002	1.002
7/1/99-00	1.484	1.210	1.144	0.988	1.015	1.000	1.005	0.997	1.004	1.019	1.005	1.005	1.003	--
7/1/00-01	1.639	1.163	1.026	0.991	0.996	1.007	1.002	1.007	1.021	1.010	1.005	1.003	--	1.034
7/1/01-02	1.651	1.015	0.988	0.994	0.987	1.026	1.005	1.002	1.016	1.005	0.999	--	1.068	1.001
7/1/02-03	1.331	1.046	0.981	1.011	1.000	1.005	1.016	1.005	1.011	1.008	--	1.102	1.009	0.998
7/1/03-04	1.427	1.063	1.028	1.005	1.032	1.013	1.016	1.020	1.002	--	1.090	0.998	0.995	1.011
7/1/04-05	1.277	1.044	1.043	1.023	1.031	1.021	1.019	1.011	--	1.171	0.989	1.005	0.992	1.012
7/1/05-06	1.405	1.065	1.076	1.050	1.028	1.006	0.994	--	1.148	0.997	0.990	0.994	0.973	1.003
7/1/06-07	1.285	1.090	1.092	1.049	1.028	1.027	--	1.281	1.007	0.994	1.065	0.993	0.980	0.988
7/1/07-08	1.122	1.086	1.069	1.036	1.005	--	1.178	0.952	1.029	0.998	0.991	0.986	0.997	1.009
7/1/08-09	1.236	1.044	1.053	1.026	--	1.189	0.976	0.973	1.013	1.000	0.990	0.993	0.994	0.970
7/1/09-10	1.252	1.078	1.062	--	1.153	0.979	1.038	1.035	0.980	0.995	0.997	0.993	1.009	
7/1/10-11	1.210	1.024	--	1.171	0.956	0.957	0.999	0.989	1.004	1.011	0.977	0.999		
7/1/11-12	1.155	--	1.122	0.990	1.119	0.996	1.006	0.988	1.005	1.031	0.998			
7/1/12-13	--	1.140	1.041	1.032	1.015	1.016	1.029	1.046	1.003	1.008				
7/1/13-14	1.475	1.056	1.110	1.024	1.015	1.019	1.033	0.975	1.004					
7/1/14-15	1.122	0.957	1.050	1.015	1.040	1.032	1.009	0.996						
7/1/15-16	1.171	1.137	0.921	1.006	1.042	0.984	1.000							
7/1/16-17	1.010	0.993	1.083	1.020	1.083	1.037								
7/1/17-18	1.108	1.017	1.051	1.060	1.033									
7/1/18-19	1.496	1.074	1.058	1.023										
7/1/19-20	1.177	1.129	1.012											
7/1/20-21	1.052	1.110												
7/1/21-22	1.016													
<b>Average</b>	1.284	1.074	1.048	1.040	1.025	1.016	1.020	1.016	1.014	1.015	1.008	1.006	1.003	1.003
<b>Avg Latest 3</b>	1.082	1.105	1.040	1.034	1.053	1.017	1.014	1.006	1.004	1.017	0.991	0.995	1.000	0.989
<b>Avg Latest 5</b>	1.170	1.065	1.025	1.025	1.043	1.017	1.015	0.999	0.999	1.009	0.991	0.993	0.991	0.996
<b>Wtd Avg</b>	1.278	1.073	1.051	1.039	1.025	1.014	1.021	1.019	1.013	1.016	1.008	1.004	1.001	1.002
<b>Wtd Avg Latest 3</b>	1.081	1.102	1.041	1.032	1.054	1.017	1.018	1.008	1.004	1.017	0.991	0.995	1.001	0.990
<b>Wtd Avg Latest 5</b>	1.170	1.064	1.021	1.023	1.038	1.017	1.017	0.999	0.999	1.009	0.991	0.993	0.991	0.996
<b>Industry**</b>	1.150	1.070	1.034	1.017	1.009	1.005	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000
<b>Prior</b>	1.169	1.118	1.071	1.055	1.045	1.031	1.024	1.014	1.013	1.013	1.010	1.010	1.004	1.004
<b>Prior Implied</b>	1.138	1.115	1.095	1.076	1.061	1.048	1.038	1.029	1.022	1.017	1.013	1.010	1.008	1.006
<b>Selected</b>	1.147	1.111	1.061	1.047	1.043	1.031	1.021	1.014	1.013	1.013	1.008	1.006	1.004	1.004
<b>Cumulative</b>	1.684	1.468	1.321	1.245	1.189	1.140	1.106	1.084	1.068	1.055	1.041	1.034	1.027	1.023

\* Age to age development not shown on one diagonal due to change in reserving methodology  
\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021,  
adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Analysis of Reported Loss Development  
Workers Compensation**

Year	Gross Reported Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$14,890	\$14,913			\$15,187	\$15,235	\$17,303	\$17,069	\$17,080	\$17,070	\$16,788	\$16,633	\$16,463	\$16,337	\$16,129
7/1/94-95	\$15,088	\$15,114		\$15,320	\$15,268	\$15,947	\$15,971	\$15,801	\$15,791	\$15,699	\$15,700	\$15,774	\$15,749	\$15,822	\$15,829
7/1/95-96	\$14,588	\$14,645	\$14,691	\$14,618	\$15,788	\$15,800	\$15,822	\$16,086	\$15,951	\$15,954	\$15,960	\$15,986	\$15,976	\$15,961	
7/1/96-97	\$11,948	\$11,990	\$11,779	\$13,269	\$12,947	\$12,972	\$12,994	\$13,117	\$13,140	\$13,145	\$13,205	\$13,219	\$13,219		
7/1/97-98	\$14,897	\$15,000	\$16,196	\$16,608	\$16,633	\$16,415	\$16,410	\$16,130	\$16,108	\$16,076	\$16,069	\$16,032			
7/1/98-99	\$17,855	\$19,334	\$18,999	\$19,034	\$18,638	\$18,891	\$18,754	\$18,752	\$18,735	\$18,726	\$18,690				
7/1/99-00	\$23,655	\$23,936	\$23,869	\$23,830	\$24,359	\$24,101	\$23,681	\$23,579	\$23,521	\$23,480					
7/1/00-01	\$23,237	\$22,414	\$21,743	\$21,820	\$21,791	\$21,857	\$21,901	\$21,901	\$21,860						
7/1/01-02	\$21,445	\$21,221	\$21,385	\$21,398	\$21,545	\$21,864	\$21,913	\$21,862							
7/1/02-03	\$23,147	\$22,757	\$22,667	\$22,574	\$22,667	\$22,277	\$22,086	\$22,198							
7/1/03-04	\$25,607	\$25,424	\$24,751	\$24,595	\$24,459	\$24,470									
7/1/04-05	\$28,482	\$29,102	\$29,401	\$29,203	\$29,213										
7/1/05-06	\$22,693	\$23,113	\$23,022	\$22,772											
7/1/06-07	\$37,491	\$36,595	\$36,524												
7/1/07-08	\$26,953	\$26,850													
7/1/08-09	\$23,383														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:**														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.002				1.003	--	0.986	1.001	0.999	0.983	0.991	0.990	0.992	0.987	
7/1/94-95	1.002			0.997	--	1.002	0.989	0.999	0.994	1.000	1.005	0.998	1.005	1.000	
7/1/95-96	1.004	1.003	0.995	--	1.001	1.001	1.017	0.992	1.000	1.000	1.002	0.999	0.999		
7/1/96-97	1.004	0.982	--	0.976	1.002	1.002	1.009	1.002	1.000	1.005	1.001	1.000			
7/1/97-98	1.007	--	1.025	1.002	0.987	1.000	0.983	0.999	0.998	1.000	0.998				
7/1/98-99	--	0.983	1.002	0.979	1.014	0.993	1.000	0.999	1.000	0.998					
7/1/99-00	1.012	0.997	0.998	1.022	0.989	0.983	0.996	0.998	0.998						
7/1/00-01	0.965	0.970	1.004	0.999	1.003	1.002	1.000	0.998							
7/1/01-02	0.990	1.008	1.001	1.007	1.015	1.002	0.998								
7/1/02-03	0.983	0.996	0.996	0.987	0.991	1.005									
7/1/03-04	0.993	0.974	0.994	0.994	1.000										
7/1/04-05	1.022	1.010	0.993	1.000											
7/1/05-06	1.018	0.996	0.989												
7/1/06-07	0.976	0.998													
7/1/07-08	0.996														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	0.998	0.992	1.000	0.996	1.001	0.999	0.998	0.998	0.999	0.998	0.999	0.997	0.999	0.994	
<b>Avg Latest 3</b>	0.997	1.001	0.992	0.994	1.002	1.003	0.998	0.998	0.999	1.001	1.000	0.999	0.999		
<b>Avg Latest 5</b>	1.001	0.995	0.995	0.997	1.000	0.997	0.995	0.999	0.999	1.001	0.999				
<b>Wtd Avg</b>	0.997	0.993	0.999	0.997	1.000	0.998	0.997	0.998	0.999	0.997	0.999	0.997	0.999	0.994	
<b>Wtd Avg Latest 3</b>	0.993	1.002	0.992	0.994	1.002	1.003	0.998	0.998	0.999	1.000	1.000	0.999	0.999		
<b>Wtd Avg Latest 5</b>	0.999	0.995	0.994	0.997	1.000	0.997	0.996	0.999	0.999	1.000	0.999				
<b>Industry**</b>	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Prior</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Prior Implied</b>	1.004	1.003	1.003	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.002	1.001	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.010
<b>Cumulative</b>	1.019	1.017	1.016	1.015	1.014	1.013	1.012	1.011	1.011	1.011	1.010	1.010	1.010	1.010	1.010

\* Age to age development not shown on one diagonal due to change in reserving methodology  
\*\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

Analysis of Paid Loss Development  
Workers Compensation

Gross Paid Losses in Thousands as of (Months):														
Year	12	24	36	48	60	72	84	96	108	120	132	144	156	168
7/1/93-94					\$12,246	\$12,485	\$12,973	\$13,228	\$13,350	\$13,542	\$13,723	\$13,977	\$14,178	\$14,301
7/1/94-95				\$11,355	\$12,199	\$12,893	\$13,449	\$13,784	\$14,004	\$14,219	\$14,404	\$14,574	\$14,660	\$14,812
7/1/95-96			\$9,821	\$10,828	\$12,054	\$12,743	\$13,188	\$13,531	\$13,642	\$13,784	\$13,891	\$13,980	\$14,089	\$14,200
7/1/96-97		\$5,253	\$6,966	\$8,632	\$9,452	\$9,963	\$10,334	\$10,721	\$10,902	\$11,084	\$11,117	\$11,206	\$11,282	\$11,329
7/1/97-98	\$2,764	\$6,665	\$9,141	\$9,576	\$11,624	\$12,465	\$13,097	\$13,454	\$13,681	\$14,004	\$14,149	\$14,333	\$14,452	\$14,622
7/1/98-99	\$3,503	\$8,952	\$10,745	\$13,664	\$15,026	\$15,666	\$16,047	\$16,332	\$16,543	\$16,787	\$16,979	\$17,127	\$17,288	\$17,406
7/1/99-00	\$4,310	\$8,783	\$12,647	\$14,891	\$15,911	\$16,950	\$17,622	\$18,143	\$18,506	\$18,812	\$19,061	\$19,358	\$19,578	\$19,825
7/1/00-01	\$4,122	\$9,864	\$12,872	\$15,249	\$16,488	\$17,162	\$17,699	\$18,080	\$18,417	\$18,793	\$19,153	\$19,391	\$19,589	\$19,935
7/1/01-02	\$4,868	\$10,531	\$13,924	\$15,761	\$17,037	\$17,596	\$18,080	\$18,230	\$18,369	\$18,769	\$18,980	\$19,190	\$19,323	\$19,467
7/1/02-03	\$5,334	\$11,337	\$13,887	\$15,587	\$16,576	\$17,647	\$18,079	\$18,760	\$19,063	\$19,281	\$19,535	\$19,708	\$20,004	\$20,211
7/1/03-04	\$5,692	\$11,726	\$15,300	\$17,351	\$18,587	\$19,486	\$19,950	\$20,277	\$20,798	\$21,052	\$21,307	\$21,533	\$21,851	\$22,060
7/1/04-05	\$6,309	\$12,334	\$15,381	\$17,628	\$19,308	\$20,366	\$21,159	\$21,723	\$22,403	\$22,868	\$23,365	\$23,742	\$24,076	\$24,330
7/1/05-06	\$4,302	\$10,015	\$13,147	\$15,195	\$16,573	\$17,572	\$18,158	\$18,541	\$18,928	\$19,215	\$19,592	\$20,096	\$20,604	\$20,755
7/1/06-07	\$5,014	\$11,338	\$15,599	\$18,579	\$20,294	\$21,693	\$22,689	\$23,581	\$24,376	\$25,630	\$26,379	\$27,160	\$27,984	\$28,847
7/1/07-08	\$4,688	\$11,487	\$14,963	\$17,917	\$19,307	\$19,997	\$20,861	\$21,671	\$22,245	\$22,489	\$22,750	\$23,110	\$23,288	\$23,608
7/1/08-09	\$5,350	\$11,933	\$15,275	\$17,089	\$18,242	\$19,173	\$20,000	\$20,380	\$20,611	\$20,866	\$21,365	\$21,459	\$21,573	\$21,843
7/1/09-10	\$5,407	\$12,659	\$17,064	\$19,766	\$21,760	\$23,538	\$24,560	\$25,048	\$25,992	\$26,535	\$26,974	\$27,402	\$27,768	\$28,084
7/1/10-11	\$6,479	\$14,529	\$18,747	\$21,577	\$23,920	\$25,249	\$25,969	\$26,465	\$26,825	\$27,061	\$27,206	\$27,409	\$27,646	
7/1/11-12	\$6,725	\$13,963	\$18,451	\$21,197	\$22,839	\$24,638	\$26,126	\$27,085	\$27,465	\$27,775	\$28,377	\$28,605		
7/1/12-13	\$5,262	\$12,500	\$16,128	\$19,877	\$21,585	\$22,705	\$23,644	\$24,487	\$24,957	\$25,276				
7/1/13-14	\$4,810	\$11,525	\$16,188	\$19,486	\$20,724	\$21,698	\$22,298	\$23,029	\$23,412	\$23,768				
7/1/14-15	\$4,452	\$9,856	\$11,236	\$11,986	\$12,636	\$12,771	\$13,012	\$13,153	\$13,305					
7/1/15-16	\$4,760	\$9,467	\$11,144	\$11,669	\$12,163	\$12,742	\$12,877	\$13,078						
7/1/16-17	\$4,572	\$8,403	\$9,566	\$10,793	\$11,340	\$12,400	\$12,945							
7/1/17-18	\$3,956	\$7,370	\$8,822	\$9,286	\$9,849									
7/1/18-19	\$3,534	\$9,168	\$11,549	\$12,929	\$13,880									
7/1/19-20	\$4,384	\$8,382	\$10,143	\$10,961										
7/1/20-21	\$3,536	\$7,690	\$9,533											
7/1/21-22	\$3,619	\$7,117												
7/1/22-23	\$3,901													

Age to age development:														
Year	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:156	156:168	168:180
7/1/93-94					1.020	1.039	1.020	1.009	1.014	1.013	1.018	1.014	1.009	1.008
7/1/94-95				1.074	1.057	1.043	1.025	1.016	1.015	1.013	1.012	1.006	1.010	1.003
7/1/95-96			1.102	1.113	1.057	1.035	1.026	1.008	1.010	1.008	1.006	1.008	1.008	1.007
7/1/96-97		1.326	1.239	1.095	1.054	1.037	1.017	1.017	1.003	1.008	1.007	1.004	1.003	
7/1/97-98	2.412	1.371	1.048	1.214	1.072	1.051	1.027	1.017	1.024	1.010	1.013	1.008	1.012	1.010
7/1/98-99	2.556	1.200	1.272	1.100	1.043	1.024	1.018	1.013	1.015	1.011	1.009	1.009	1.007	1.006
7/1/99-00	2.038	1.440	1.177	1.069	1.065	1.040	1.030	1.020	1.017	1.013	1.016	1.011	1.013	1.010
7/1/00-01	2.393	1.305	1.185	1.081	1.041	1.031	1.022	1.019	1.020	1.019	1.012	1.010	1.018	1.008
7/1/01-02	2.163	1.322	1.132	1.081	1.033	1.027	1.008	1.008	1.022	1.011	1.011	1.007	1.007	1.010
7/1/02-03	2.125	1.225	1.122	1.063	1.065	1.024	1.038	1.016	1.011	1.013	1.009	1.015	1.010	1.009
7/1/03-04	2.060	1.305	1.134	1.071	1.048	1.024	1.016	1.026	1.012	1.012	1.011	1.015	1.010	1.018
7/1/04-05	1.955	1.247	1.146	1.095	1.055	1.039	1.027	1.031	1.021	1.022	1.016	1.014	1.011	1.012
7/1/05-06	2.328	1.313	1.156	1.091	1.060	1.033	1.021	1.015	1.020	1.020	1.026	1.025	1.007	1.015
7/1/06-07	2.261	1.376	1.191	1.092	1.069	1.046	1.039	1.034	1.051	1.029	1.030	1.030	1.031	1.040
7/1/07-08	2.450	1.303	1.197	1.078	1.036	1.043	1.039	1.026	1.011	1.012	1.016	1.008	1.014	1.012
7/1/08-09	2.231	1.280	1.119	1.067	1.051	1.043	1.019	1.011	1.012	1.024	1.004	1.005	1.013	1.002
7/1/09-10	2.341	1.348	1.158	1.101	1.082	1.043	1.020	1.038	1.021	1.017	1.016	1.013	1.011	
7/1/10-11	2.242	1.290	1.151	1.109	1.056	1.029	1.019	1.014	1.009	1.005	1.007	1.009		
7/1/11-12	2.076	1.321	1.149	1.077	1.079	1.060	1.037	1.014	1.011	1.022				
7/1/12-13	2.376	1.290	1.232	1.086	1.052	1.041	1.036	1.019	1.013	1.017				
7/1/13-14	2.396	1.405	1.204	1.064	1.047	1.028	1.033	1.017	1.015					
7/1/14-15	2.214	1.140	1.067	1.054	1.011	1.019	1.011	1.012						
7/1/15-16	1.989	1.177	1.047	1.042	1.048	1.011	1.016							
7/1/16-17	1.838	1.138	1.128	1.051	1.094	1.044								
7/1/17-18	1.863	1.197	1.053	1.061	1.037									
7/1/18-19	2.594	1.260	1.119	1.074										
7/1/19-20	1.912	1.210	1.081											
7/1/20-21	2.175	1.240												
7/1/21-22	1.967													
<b>Average</b>	2.198	1.281	1.144	1.084	1.053	1.036	1.025	1.018	1.017	1.015	1.013	1.012	1.011	1.011
<b>Wtd Avg Latest 5</b>	2.102	1.209	1.086	1.056	1.047	1.028	1.026	1.015	1.014	1.017	1.010	1.013	1.015	1.016
<b>Wtd Avg</b>	2.188	1.284	1.148	1.083	1.054	1.036	1.026	1.019	1.017	1.015	1.013	1.013	1.012	1.012
<b>Wtd Avg Latest 5 Industry*</b>	2.088	1.210	1.086	1.057	1.047	1.030	1.029	1.015	1.014	1.017	1.010	1.014	1.016	1.018
<b>Prior</b>	2.047	1.215	1.100	1.059	1.039	1.028	1.021	1.017	1.013	1.011	1.009	1.008	1.007	1.006
<b>Selected</b>	2.142	1.235	1.120	1.067	1.052	1.034	1.025	1.018	1.015	1.015	1.015	1.015	1.014	1.013
<b>Cumulative</b>	2.088	1.236	1.111	1.067	1.050	1.035	1.024	1.017	1.015	1.015	1.014	1.014	1.014	1.013
	4.321	2.070	1.675	1.507	1.412	1.344	1.299	1.268	1.247	1.228	1.209	1.193	1.177	1.161

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin



**Analysis of Paid Loss Development  
Workers Compensation**

Year	Gross Paid Losses in Thousands as of (Months):														
	180	192	204	216	228	240	252	264	276	288	300	312	324	336	348
7/1/93-94	\$14,412	\$14,551			\$14,967	\$15,102	\$15,254	\$15,370	\$15,463	\$15,541	\$15,585	\$15,629	\$15,692	\$15,732	\$15,764
7/1/94-95	\$14,853	\$14,923		\$15,166	\$15,184	\$15,239	\$15,281	\$15,336	\$15,391	\$15,447	\$15,501	\$15,537	\$15,590	\$15,622	\$15,659
7/1/95-96	\$14,301	\$14,412	\$14,492	\$14,545	\$14,623	\$14,679	\$14,748	\$15,467	\$15,499	\$15,529	\$15,558	\$15,579	\$15,661	\$15,808	
7/1/96-97	\$11,366	\$11,429	\$11,527	\$11,607	\$11,659	\$11,728	\$11,791	\$11,912	\$11,965	\$12,041	\$12,107	\$12,171	\$12,226		
7/1/97-98	\$14,762	\$14,872	\$15,004	\$15,104	\$15,183	\$15,287	\$15,372	\$15,482	\$15,567	\$15,639	\$15,730	\$15,756			
7/1/98-99	\$17,503	\$17,578	\$17,661	\$17,733	\$17,854	\$17,945	\$17,989	\$18,033	\$18,079	\$18,120	\$18,162				
7/1/99-00	\$20,016	\$20,275	\$20,646	\$20,814	\$21,166	\$21,737	\$22,003	\$22,177	\$22,297	\$22,434					
7/1/00-01	\$20,096	\$20,217	\$20,322	\$20,450	\$20,570	\$20,666	\$20,780	\$20,867	\$20,939						
7/1/01-02	\$19,663	\$19,775	\$19,959	\$20,160	\$20,372	\$20,478	\$20,660	\$20,726							
7/1/02-03	\$20,396	\$20,600	\$20,769	\$20,932	\$21,084	\$21,188	\$21,317								
7/1/03-04	\$22,460	\$22,684	\$22,792	\$22,900	\$22,977	\$23,104									
7/1/04-05	\$24,615	\$24,912	\$25,171	\$25,433	\$25,840										
7/1/05-06	\$21,069	\$21,368	\$21,490	\$21,596											
7/1/06-07	\$29,993	\$30,920	\$31,703												
7/1/07-08	\$23,901	\$24,105													
7/1/08-09	\$21,898														
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
7/1/22-23															

Year	Age to age development:														
	180:192	192:204	204:216	216:228	228:240	240:252	252:264	264:276	276:288	288:300	300:312	312:324	324:336	336:348	348:ULT
7/1/93-94	1.010				1.009	1.010	1.008	1.006	1.005	1.003	1.003	1.004	1.002	1.002	
7/1/94-95	1.005			1.001	1.004	1.003	1.004	1.004	1.004	1.003	1.002	1.003	1.002	1.002	
7/1/95-96	1.008	1.006	1.004	1.005	1.004	1.005	1.049	1.002	1.002	1.002	1.001	1.005	1.009		
7/1/96-97	1.006	1.008	1.007	1.004	1.006	1.005	1.010	1.004	1.006	1.006	1.005	1.005			
7/1/97-98	1.008	1.009	1.007	1.005	1.007	1.006	1.007	1.005	1.005	1.006	1.002				
7/1/98-99	1.004	1.005	1.004	1.007	1.005	1.002	1.002	1.003	1.002	1.002					
7/1/99-00	1.013	1.018	1.008	1.017	1.027	1.012	1.008	1.005	1.006						
7/1/00-01	1.006	1.005	1.006	1.006	1.005	1.005	1.004	1.003							
7/1/01-02	1.006	1.009	1.010	1.011	1.005	1.009	1.003								
7/1/02-03	1.010	1.008	1.008	1.007	1.005	1.006									
7/1/03-04	1.010	1.005	1.005	1.003	1.006										
7/1/04-05	1.012	1.010	1.010	1.016											
7/1/05-06	1.014	1.006	1.005												
7/1/06-07	1.031	1.025													
7/1/07-08	1.009														
7/1/08-09															
7/1/09-10															
7/1/10-11															
7/1/11-12															
7/1/12-13															
7/1/13-14															
7/1/14-15															
7/1/15-16															
7/1/16-17															
7/1/17-18															
7/1/18-19															
7/1/19-20															
7/1/20-21															
7/1/21-22															
<b>Average</b>	1.010	1.010	1.007	1.008	1.007	1.006	1.011	1.004	1.004	1.004	1.003	1.004	1.005	1.002	
<b>Avg Latest 5</b>	1.015	1.011	1.008	1.009	1.009	1.007	1.005	1.004	1.004	1.004	1.003				
<b>Wtd Avg</b>	1.011	1.010	1.007	1.008	1.008	1.007	1.010	1.004	1.004	1.004	1.003	1.004	1.005	1.002	
<b>Wtd Avg Latest 5</b>	1.016	1.012	1.008	1.009	1.009	1.007	1.005	1.004	1.004	1.004	1.003				
<b>Industry*</b>	1.005	1.005	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.052
<b>Prior</b>	1.012	1.008	1.008	1.007	1.006	1.006	1.006	1.004	1.004	1.003	1.003	1.003	1.002	1.002	1.060
<b>Selected</b>	1.012	1.010	1.008	1.008	1.006	1.006	1.005	1.005	1.004	1.003	1.003	1.003	1.003	1.002	1.060
<b>Cumulative</b>	1.146	1.132	1.120	1.112	1.104	1.097	1.090	1.084	1.079	1.074	1.070	1.068	1.065	1.062	1.060

\* NAIC Countrywide Data for Loss and Loss Adjustment Expense data from year end 2021, adjusted for State specific experience from the 2023 NCCI Annual Statistical Bulletin

**Analysis of Reported Claim Development  
Workers Compensation**

Year	Reported Claims as of (Months):											
	12	24	36	48	60	72	84	96	108	120	132	144
7/1/93-94							3,930	3,930	3,930	3,930	3,930	3,930
7/1/94-95						4,092	4,092	4,092	4,092	4,093	4,093	4,093
7/1/95-96					4,026	4,026	4,027	4,027	4,027	4,027	4,027	4,027
7/1/96-97				3,854	3,856	3,856	3,858	3,858	3,858	3,858	3,858	3,858
7/1/97-98			3,738	3,741	3,741	3,743	3,743	3,744	3,744	3,744	3,745	3,746
7/1/98-99		3,691	3,701	3,703	3,704	3,704	3,704	3,705	3,705	3,705	3,705	3,705
7/1/99-00	3,468	3,670	3,688	3,693	3,694	3,694	3,694	3,694	3,694	3,694	3,695	3,696
7/1/00-01	3,613	3,876	3,887	3,893	3,896	3,897	3,898	3,898	3,898	3,898	3,898	3,898
7/1/01-02	3,873	4,106	4,118	4,120	4,121	4,121	4,121	4,121	4,121	4,121	4,121	4,121
7/1/02-03	3,711	3,930	3,944	3,950	3,951	3,953	3,954	3,954	3,954	3,954	3,954	3,954
7/1/03-04	3,637	3,810	3,816	3,819	3,823	3,824	3,824	3,824	3,824	3,824	3,824	3,824
7/1/04-05	3,522	3,702	3,710	3,712	3,713	3,713	3,716	3,715	3,715	3,716	3,716	3,716
7/1/05-06	3,471	3,648	3,653	3,657	3,661	3,661	3,662	3,662	3,662	3,662	3,662	3,662
7/1/06-07	3,399	3,554	3,551	3,557	3,557	3,557	3,559	3,559	3,559	3,560	3,560	3,561
7/1/07-08	3,284	3,401	3,408	3,408	3,409	3,409	3,409	3,410	3,410	3,410	3,411	3,413
7/1/08-09	3,264	3,389	3,390	3,390	3,390	3,390	3,390	3,390	3,390	3,390	3,391	3,390
7/1/09-10	3,216	3,346	3,350	3,351	3,351	3,351	3,351	3,351	3,351	3,353	3,353	3,353
7/1/10-11	3,166	3,297	3,303	3,304	3,306	3,308	3,308	3,308	3,309	3,308	3,308	3,308
7/1/11-12	2,989	3,116	3,121	3,122	3,122	3,123	3,123	3,123	3,124	3,124	3,124	3,124
7/1/12-13	2,941	3,051	3,054	3,055	3,055	3,055	3,055	3,055	3,055	3,055	3,055	3,055
7/1/13-14	2,790	2,906	2,912	2,912	2,913	2,914	2,915	2,915	2,915	2,915		
7/1/14-15	2,905	2,966	2,976	2,980	2,982	2,982	2,982	2,982	2,982	2,983		
7/1/15-16	2,802	2,910	2,915	2,921	2,922	2,922	2,922	2,922	2,922			
7/1/16-17	2,833	2,880	2,885	2,887	2,887	2,887	2,887					
7/1/17-18	3,112	3,185	3,188	3,188	3,189	3,189						
7/1/18-19	3,071	3,132	3,134	3,135	3,136							
7/1/19-20	2,620	2,649	2,651	2,651								
7/1/20-21	2,135	2,174	2,177									
7/1/21-22	2,187	2,226										
7/1/22-23	2,279											

Year	Age to age development:											
	12:24	24:36	36:48	48:60	60:72	72:84	84:96	96:108	108:120	120:132	132:144	144:ULT
7/1/93-94							1.000	1.000	1.000	1.000	1.000	
7/1/94-95						1.000	1.000	1.000	1.000	1.000	1.000	
7/1/95-96					1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/96-97				1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	
7/1/97-98			1.001	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/98-99		1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/99-00	1.058	1.005	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/00-01	1.073	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/01-02	1.060	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/02-03	1.059	1.004	1.002	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/03-04	1.048	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/04-05	1.051	1.002	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	
7/1/05-06	1.051	1.001	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/06-07	1.046	0.999	1.002	1.000	1.000	1.001	1.000	1.000	1.000	1.000	1.000	
7/1/07-08	1.036	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.001	
7/1/08-09	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/09-10	1.040	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.000	1.000	
7/1/10-11	1.041	1.002	1.000	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/11-12	1.042	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
7/1/12-13	1.037	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
7/1/13-14	1.042	1.002	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
7/1/14-15	1.021	1.003	1.001	1.001	1.000	1.000	1.000	1.000				
7/1/15-16	1.039	1.002	1.002	1.000	1.000	1.000	1.000					
7/1/16-17	1.017	1.002	1.001	1.000	1.000	1.000						
7/1/17-18	1.023	1.001	1.000	1.000	1.000							
7/1/18-19	1.020	1.001	1.000	1.000								
7/1/19-20	1.011	1.001	1.000									
7/1/20-21	1.018	1.001										
7/1/21-22	1.018											
<b>Average</b>	1.039	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
<b>Avg Latest 5</b>	1.018	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
<b>Wtd Avg</b>	1.040	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
<b>Wtd Avg Latest 5</b>	1.018	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
<b>Industry*</b>	1.083	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Prior</b>	1.020	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Selected</b>	1.018	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
<b>Cumulative</b>	1.021	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

\* Based on the experience of several large carriers