

ANALYSIS OF UNPAID LOSSES AND ALAE AS OF JUNE 30, 2023

City of Chandler

September 13, 2023

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1. Executive Summary

Purpose and Scope

Oliver Wyman Actuarial Consulting, Inc. (Oliver Wyman) has been engaged by the City of Chandler (the City) to review its retained workers compensation (WC) exposures. The purpose of this analysis is to estimate the City's unpaid losses and allocated loss adjustment expense (ALAE¹) as well as claim cost projections.

It is intended that this analysis will be used by the City of Chandler solely as a guide in its determination of its financial statement liabilities related to its self-insured exposures and for forecasting loss costs for budgeting purposes.

The conclusions in this report are related to its stated purpose only and may not be applicable for other purposes.

Specifically, the scope of services includes the following items:

- Unpaid losses and ALAE as of June 30, 2023 for claims incurred through that same date.
- Projected ultimate losses and ALAE for policy period July 1, 2023-24.
- Estimates of the 70%, 80% and 90% probability levels of the unpaid losses and ALAE as well as the projected ultimate losses as of June 30, 2023.

The estimates as of June 30, 2023 (accounting date) are based on data evaluated as of June 30, 2023 (valuation date) and additional information provided to Oliver Wyman through July 22, 2023 (review date).

The estimates are prepared on a nominal (undiscounted) basis, i.e. without considering the time value of money.

Additionally, estimates are presented as actuarial central estimates. An actuarial central estimate is defined as an expected value over the range of reasonably possible, as opposed to all conceivable, outcomes.

Estimates are also provided at varying probability levels which are either above or below the actuarial central estimate.

Amounts are provided net of non-insurance recoveries (e.g., salvage and subrogation) and are limited to the City's per occurrence retention. All insurance is considered to be valid and fully collectable.

Unless otherwise stated, all references to losses throughout this report and accompanying exhibits should be understood to include ALAE.

The scope of this project did not include the estimation of any expenses other than ALAE and ULAE that are sometimes associated with insurance programs. Such expenses include unallocated loss adjustment expense (ULAE), reinsurance premiums, the costs of trustee, legal, administrative, risk management and actuarial services, taxes, fees and assessments, and costs for surety bonds or letters of credit pertaining to outstanding liabilities or capital requirements. ULAE is the insurance industry term generally used to refer to any claims-handling costs that cannot be attributed to individual claims. Fees paid to third party administrators (TPAs) and salaries paid to in-house claim adjusters and in-house defense attorneys represent examples of this type of expense.

¹ ALAE is an Insurance industry term which generally refers to defense, litigation and cost containment amounts

This report sets forth the results of Oliver Wyman's analysis and is accompanied by exhibits which should be considered integral parts of this report.

For limitations on distribution of this report please see the *Distribution and Use* section of this report.

Please note that all values in this report are in U.S. currency.

Actuarial Findings

Unpaid Losses and ALAE

Table 1 below summarizes the nominal unpaid losses & ALAE, at the appropriate self-insured retention (SIR) levels as of June 30, 2023. Estimates are presented both at an actuarial central estimate and the 70%, 80% and 90% probability levels.

Table 1: Estimated Unpaid Losses & ALAE

Evaluation Date	Actuarial Central Estimate	Probability Levels		
		70th	80th	90th
As of June 30, 2023	11,105,144	12,704,285	14,747,631	18,145,805
As of June 30, 2022	10,504,362	11,985,477	13,718,696	16,533,865
<i>Change</i>	<i>600,782</i>	<i>718,808</i>	<i>1,028,935</i>	<i>1,611,940</i>

The estimate of approximately \$11.1 million as of June 30, 2023 represents an increase of approximately \$600K since the actuarial analysis performed as of June 30, 2022. This increase is driven by the inclusion of policy year 7/1/22 – 6/30/23 (which is at an increased retention level), largely offset by payments made and decreases in the estimated ultimates for previous policy periods driven by better than expected development. Actual incurred loss development over the last twelve months across policy years 7/1/21 – 6/30/22 and prior was \$101K, significantly less than the expected \$591K.

The increase is further amplified at the higher probability levels, as the increased retention brings additional volatility.

Forecasted Ultimate Losses and ALAE for Future Period

The nominal losses and ALAE expected to be incurred during policy period 7/1/23– 6/30/24 by the City, with a self-insured retention of \$3.0 million for police and fire employees and \$1.5 million for all other employees, are as shown in Table 2 below.

Table 2: Projected Ultimate Losses & ALAE

Self-Insured Retention	Actuarial Central Estimate	Probability Levels		
		70th	80th	90th
1.5M / 3M	2,885,000	3,303,325	3,842,820	4,745,825

This forecast is based on Oliver Wyman's estimated loss costs (losses per unit of exposure) and the City's forecasted exposures of approximately \$163 million. It should be noted that since the projected losses and ALAE

are directly related to the forecasted exposures, if actual exposures differ from the forecast, the projected losses and ALAE should be adjusted accordingly.

Relevant Comments

Estimated unpaid losses and ALAE are composed of case reserves and an incurred but not reported (IBNR) provision. The case reserves are established by individual claim adjusters on open claims. Case reserves are based on the facts of a claim as they are known as of the valuation date; however, the ultimate value of each claim will likely differ from the current incurred estimate.

IBNR is estimated by Oliver Wyman and includes a provision for a) events that have occurred for which claims have not been reported; b) future development on known open claims; c) claims that have been reported but not yet recorded; and d) claims that have closed but will reopen.

The fact that the IBNR estimate includes a provision for development on known claims does not necessarily imply that there is a problem with the case reserves. Please note that Oliver Wyman's IBNR estimate is appropriate for all historical periods in aggregate but not necessarily for any one particular period.

Loss and ALAE estimates may be dependent on exposure projections; if actual exposures differ from projected amounts, loss and ALAE should be adjusted accordingly.

2. Background

Founded on May 17, 1912, the City of Chandler is located in the Greater Phoenix Valley of Arizona, located 20 miles from the Phoenix Sky Harbor Airport.

The City began self-insuring its Workers' Compensation exposures on July 1, 2002 and has maintained a self-insured retention since inception. Prior to that date, the City's Workers' Compensation liabilities were covered through a guaranteed cost program.

The City's self-insured retentions since July 1, 2002 are as displayed below. All self-insured retentions are assumed to be on a per occurrence basis and eroded by loss and ALAE.

Policy Years	Self-Insured Retention	
	Police / Fire	All Other
7/1/02-03 to 7/1/11-12		500,000
7/1/12-13 to 7/1/14-15		600,000
7/1/15-16 to 7/1/17-18	1,000,000	600,000
7/1/18-19 to 7/1/19-20	1,250,000	600,000
7/1/20-21	2,250,000	750,000
7/1/21-22	3,000,000	1,000,000
7/1/22-23 to 7/1/23-24	3,000,000	1,500,000

3. Data

For this study, Oliver Wyman relied upon the following information, provided by the City:

- Historical ground-up and unlimited detailed claims listing for both open and closed claims as of June 30, 2023
- Historical estimated and audited (where applicable) payrolls by period
- Historical retention limits by period

Additionally, Oliver Wyman relied on the following information:

- Oliver Wyman's prior study titled *"Actuarial Analysis of Workers' Compensation Unpaid Losses and ALAE as of June 30, 2022"* and dated September 30, 2022.
- Industry loss development factors, increased limit factors and benefit level changes from the Annual Statistical Bulletin published by the National Council on Compensation Insurance (NCCI)

4. Methodology

The estimates in this report are developed in accordance with generally accepted actuarial methodology and applicable standards of practice promulgated by the Actuarial Standards Board. Below is a discussion of the actuarial methodologies and assumptions underlying the analysis. Projections for the City assume that the patterns observed in historical periods will be applicable to future periods.

Oliver Wyman first selected ultimate losses limited to \$75,000, which provides a more stable base for projections than the City's historical SIRs [or losses at statutory limits]. Oliver Wyman then used the City's data supplemented with insurance industry data to adjust the estimates limited to \$75,000 to the actual SIR by policy period.

To develop the estimates of limited ultimate losses, Oliver Wyman applied the following generally accepted actuarial techniques:

- Paid and incurred loss development methods
- Case reserve development method
- Paid and incurred Bornhuetter-Ferguson methods
- Frequency / severity method
- Loss cost method

The following describes each of these methods in more detail.

Loss Development Methods

Loss development methods involve estimating how a cohort of claims will change in value over time. This cohort of claims is typically defined as claims which have occurred over a span of time which is usually a full year which is referred to as a particular accident year. Oliver Wyman derived loss development patterns based on accident year development triangles created from available historical experience for the City, supplemented with insurance industry data where appropriate. For example, if an entity's exposure is small, if there are not enough historical periods of data to determine its own patterns, or if the entity's own patterns are volatile, then insurance industry data may be applied.

Under the *paid loss development method*, a loss payment pattern is applied directly to the latest evaluation of cumulative paid losses by accident year to project ultimate losses.

Under the *incurred loss development method*, a loss reporting pattern is applied directly to the latest incurred losses (case reserves plus cumulative paid losses) by accident year to project ultimate losses.

An advantage of the *paid loss development method* is that its predictive accuracy is independent of case reserving practices and philosophies.

An advantage of the *incurred loss development method* is that incurred losses provide a larger statistical database than paid losses (since case reserves are used in addition to payments) and that incurred losses provide more current information (since the establishment of case reserves occurs before payments are made).

Bornhuetter-Ferguson Methods

The Bornhuetter-Ferguson (B-F) method is a blending of the results of the loss development method with an *a priori* expectation of ultimate losses. The *a priori* expectation of ultimate losses, or preliminary ultimate losses, are based on the results of the loss development methods described above and the results of the loss cost method (described below) for more recent periods.

Under the *incurred B-F method*, the City's (or industry's) historical reporting pattern is used to estimate the percentage of ultimate losses which are unreported as of the valuation date. This percentage is then multiplied by preliminary ultimate losses to produce expected unreported losses. Expected unreported losses are also known as IBNR.

The *paid B-F method* relies on a mathematical procedure similar to the *incurred B-F method*. Payment patterns are used in place of reporting patterns and unpaid losses are estimated in place of unreported losses. Unpaid losses equal case reserves plus IBNR.

An advantage of the B-F method is that estimates of ultimate losses tend to be more stable than estimates produced by the loss development method. This is because estimates based on the B-F method are generally a weighted average between the estimate based on the loss development method and the preliminary ultimate loss.

Loss Cost Method

Under the *loss cost method*, an ultimate loss cost, or loss amount per exposure unit, is judgmentally selected to obtain the ultimate loss estimate. The ultimate loss cost selection is based on the City's historical loss costs, adjusted for inflation and benefit levels. The preliminary estimate of ultimate losses is based on the results of the loss development methods described above.

This method can be useful for estimating ultimate losses for more recent and future periods. The advantages of using a *loss cost method* for the most recent periods are that it accounts for changes in exposure and is less affected by changes in claims closing and case reserving practices than the loss development methods.

Frequency / Severity Method

Under the *frequency / severity method*, the ultimate losses for each period are the product of the selected ultimate severity (i.e., average cost per claim) multiplied by the estimated ultimate number of claims. The preliminary estimate of ultimate losses is based on the results of the loss development methods described above.

The ultimate severity for the most recent period is judgmentally selected based on the historical limited severities, trended to the current period's cost and benefit level. The ultimate severity for prior periods equals the selected current severity, detrended to the appropriate cost and benefit level to derive estimates of ultimate losses.

Estimated Ultimate Number of Claims

Similar to the paid and incurred loss development factors, reported claim count development factors are calculated based on historical claims triangles created from the City's own experience. The selected count development factors are applied to the latest reported counts to determine an estimate of the ultimate number of claims.

A second estimate of the ultimate number of claims is developed based on a combination of the frequency and Bornhuetter-Ferguson methods. The frequency method is used to develop the preliminary estimate. The Bornhuetter-Ferguson method uses the preliminary estimate and the reported claim count development pattern to determine a second estimate of ultimate claim counts. Oliver Wyman then judgmentally selects the ultimate number of claims based on the two estimates.

Estimated Ultimate Losses and ALAE at Retained Limits

To develop the estimates of retained ultimate losses, Oliver Wyman applied three generally accepted actuarial techniques: the Increased Limit Factor (ILF) Method, the LDF method, and the Excess Method.

In the ILF Method, Oliver Wyman used the City's data supplemented with insurance industry data to create ILFs, which are ratios of expected losses at different limits to expected losses at the selected limit of \$75,000. These selected ILFs were multiplied by the \$75,000 limited ultimate loss estimates to bring these estimates to the actual retention by policy period. This method can be useful for estimating ultimate losses for policy periods that are less mature. Typically, this is most useful for more recent or future policy periods and for policy periods with a significantly high retention, where actual losses have not yet had time to develop into that layer.

In the LDF Method, Oliver Wyman used internal data to adjust the selected limited loss development factors to reflect the incurred loss development pattern appropriate for the actual retention limit by policy period. These LDFs were then applied to the retained incurred losses. This method is useful when it is appropriate to assume that historical development patterns are representative of future development patterns, regardless of what has been reported so far in a given policy period.

In the Excess Method, Oliver Wyman used the aforementioned ILFs, LDFs at the \$75,000 limit, and LDFs at the actual retention limit to calculate an estimate of IBNR excess of the \$75,000 limit. This amount was then added to the limited ultimate losses and the excess incurred losses to estimate ultimate losses at the actual retention limit. This method is a blend of the ILF and LDF methods.

Unpaid Losses and ALAE

Unpaid losses and ALAE at retained limits as of June 30, 2023 were calculated by subtracting actual payments as of the same date from selected ultimate losses at retained limits.

Forecasted Ultimate Losses and ALAE for Future Period

Ultimate losses for the forecasted future period limited to \$75,000 per occurrence were selected based on the results of two methods, the Loss Cost method and the Frequency / Severity method. The selected ultimate losses are then adjusted to additional retentions by the application of selected ILFs. The ILFs were derived as described in the "Ultimate Losses and ALAE at Retained Limits" section of this report. The two methods are described below.

Loss Cost Method

Under the Loss Cost method, ultimate losses for the forecasted future period were estimated by multiplying forecasted payroll by a projected loss cost limited to \$75,000 per occurrence. The ultimate loss cost selection was based on the City's historical loss costs, adjusted for inflation and benefit levels, as applicable.

Frequency / Severity Method

Under the frequency / severity method, ultimate losses for the forecasted future period are the product of the selected ultimate severity (i.e., average cost per claim) multiplied by the estimated ultimate number of claims.

The ultimate frequency for the forecasted future period was judgmentally selected based on the historical frequencies, trended to the forecast period. The selected ultimate frequency was then multiplied by projected exposure to arrive at an estimate of estimated number of claims.

The ultimate severity for the forecasted future period was judgmentally selected based on the historical limited severities, trended to the forecast period's cost and benefit level.

Estimates at Various Probability Levels

Oliver Wyman's approach to estimating probability levels measures the variability or statistical fluctuation associated with the self-insurance process itself, i.e., "process risk." Oliver Wyman has also judgmentally introduced a variable for "parameter risk," which is defined as the additional fluctuation which would result if the actual parameter is different from the estimated parameter for the expected number of claims or the average claim cost. The methodology does not, however, consider "model risk," or the risk that the techniques used by Oliver Wyman may not be appropriate to the City's experience.

The parameters for the model were determined based on Oliver Wyman's analysis of the claim detail. Specifically, Oliver Wyman has assumed loss severity follow a lognormal distribution. The frequency for the distribution was estimated based on the number of open and IBNR claims, while the severity was based on the City's own loss experience.

5. Distribution and Use

Usage and Responsibility of Client – Oliver Wyman prepared this report for the sole use of the client named herein for the stated purpose. This report includes important considerations, assumptions, and limitations and, as a result, is intended to be read and used only as a whole. This report may not be separated into, or distributed, in parts other than by the client to whom this report was issued, as needed, in the case of distribution to such client's directors, officers, or employees. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the client named herein.

Third Party Reliance and Due Diligence – Oliver Wyman's consent to any distribution of this report (whether herein or in the written agreement pursuant to which we issued this report) to parties other than of the client named herein does not constitute advice by Oliver Wyman to any such third parties. Any distribution to third parties shall be solely for informational purposes and not for purposes of reliance by any such parties. Oliver Wyman assumes no liability related to third party use of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein. This report should not replace the due diligence on behalf of any such third party.

6. Considerations and Limitations

Oliver Wyman has prepared this analysis in conformity with its intended utilization by persons technically competent in the areas addressed and for the stated purposes only. Judgments as to the conclusions, indications, methods, and data contained in this analysis should be made only after studying the analysis in its entirety. Furthermore, Oliver Wyman staff is available to explain any matter presented herein. It is assumed that the user of the analysis will seek such explanation as to any matter in question.

Data Verification – For our analysis, we relied on data and information provided by the client named herein without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. Our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions might therefore be unreliable.

Prospective Policy / Accident Period Estimates – We estimated the prospective policy/accident period estimates developed in this analysis using estimated loss costs and the projected exposures. Prospective period loss and ALAE estimates are directly related to the projected exposures. Therefore, if actual exposures differ from the projection, we would need to adjust the prospective policy/accident period estimates accordingly.

Supplemental Data – Where historical data of the client named herein was either (i) not available, (ii) not appropriate or (iii) not sufficiently credible to develop our actuarial assumptions, we supplemented it with external information, as we deemed appropriate. Although we believe these external sources may be more predictive of future experience of the client named herein than any other data of which we are aware, the use of external data adds to the uncertainty associated with our projections.

Exclusion of Other Program Costs – The scope of the project does not include the estimation of any costs other than those described herein. Such ancillary costs may include unallocated loss adjustment expenses (ULAE); excess insurance premiums; the costs of trustee, legal, administrative, risk management and actuarial services; fees and assessments; and costs for surety bonds or letters of credit pertaining to claim liabilities.

Assumption of Valid Insurance / Reinsurance – We assumed that all insurance/reinsurance is valid and fully collectible. We made no assessment, and do not express any opinion, concerning the viability or collectability of any insurance or reinsurance. We have not evaluated the financial strength, claims-paying ability or any other factors with regard to the past, current, and prospective insurers/reinsurers of the client named herein.

Funding of Claim Payments – We have not examined any assets that may be supporting the liabilities, and have made no assumptions regarding the maturities and liquidity of these assets, should they exist. This examination is beyond the scope of our review.

Rounding and Accuracy – Our models may retain more digits than those displayed. Also, the results of certain calculations may be presented in the exhibits with more or fewer digits than would be considered significant. As a result, there may be rounding differences between the results of calculations presented in the exhibits and replications of those calculations based on displayed underlying amounts. Also, calculation results may not have been adjusted to reflect the precision of the calculation.

Unanticipated Changes – We developed our conclusions based on an analysis of the data of the client named herein and on the estimation of the outcome of many contingent events. We developed our estimates from the historical claim experience and covered exposure, with adjustments for anticipated changes. Our estimates make no provision for extraordinary future emergence of new types of losses not sufficiently represented in

historical databases or which are not yet quantifiable. Also, we assumed that the client named herein will remain a going concern, and we have not anticipated any impacts of potential insolvency, bankruptcy, or any similar event.

Internal / External Changes – The sources of uncertainty affecting our estimates are numerous and include factors internal and external to the client named herein. Internal factors include items such as changes in claim reserving or settlement practices. The most significant external influences include, but are not limited to, changes in the legal, social, or regulatory environment surrounding the claims process. Uncontrollable factors such as general economic conditions also contribute to the variability.

Uncertainty Inherent in Projections – While this analysis complies with applicable Actuarial Standards of Practice, users of this analysis should recognize that our projections involve estimates of future events and are subject to economic and statistical variations from expected values. We have not anticipated any extraordinary changes to the legal, social, or economic environment that might affect the frequency or severity of claims. For these reasons, we do not guarantee that the emergence of actual losses will correspond to the projections in this analysis.

Probability Levels – We have calculated estimates of the statistical uncertainty associated with the process risk inherent in our estimates. However, unless otherwise indicated, our probability level estimates do not address parameter or model risk. To the extent that the probability estimates do not address parameter risk or model risk, the true variability of results is greater than the range of outcomes presented. The client named herein may wish to consider this additional uncertainty in evaluating the estimates presented in this report.

COVID-19 Pandemic – We have included no explicit adjustments in this report for the effect of the COVID-19 pandemic on loss experience except as specifically noted in this report.

7. Acknowledgement of Qualifications

I, Adam Hirsch, am a Senior Principal with Oliver Wyman Actuarial Consulting, Inc. I am a Fellow of the Casualty Actuarial Society (FCAS), a member of the American Academy of Actuaries (MAAA) and I meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.

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Appendix A. Glossary

Accident Period

The period in which the event giving rise to a claim occurred, regardless of when the claim is actually reported.

Accounting Date

The point in time at which the estimate of unpaid claims and ALAE is evaluated.

Actuarial Central Estimate

An estimate that represents an expected value over the range of reasonably possible outcomes. Such range of reasonably possible outcomes may not include all conceivable outcomes.

Allocated Loss Adjustment Expense (ALAE)

Expense costs associated with the handling and settling of an individual claim that can be directly attributed to the particular claim. Fees paid to outside defense attorneys and investigation firms are examples of this expense cost.

Case Reserves

The unpaid claim estimates established by adjusters on an individual claim basis.

Claim

A demand for payment under the coverage provided by a plan or contract. As used throughout this Glossary, it also includes suits, potentially compensable events, notifications, and unasserted claims.

Claim Adjustment Expenses

The costs of administering, determining coverage for, settling, or defending claims. Claim adjustment expenses include allocated claim adjustment expenses and unallocated claim adjustment expenses.

Claim Frequency

The number of claims that occur over a period of time per unit of exposure.

Claim Reporting Pattern

The rate at which claims are assumed to be reported over time.

Claim Severity

The average cost per claim.

Coefficient of Variation

A statistical measure of dispersion. The coefficient of variation is calculated as the standard deviation of the random process divided by the expected value (mean).

Confidence Level

The probability that the outcome of a random process will not exceed an associated estimate. For example, a 75% confidence level for an unpaid claim estimate of \$10 million would indicate that there is a 75% probability that the actual claim payments will be less than or equal to \$10 million. The estimate is defined in the context of the risks modeled in our analysis and may not consider all factors contributing to variability of outcomes.

Credibility

A measure of the predictive value of a body of data.

Development

The change between valuation dates in the observed values of certain fundamental quantities that may be used in the unpaid claim estimation process.

For example, the number of reported claims associated with events occurring within a particular period will change from one valuation date to the next until all claims have been reported. In a similar fashion, the paid claim amounts for events occurring within a particular period will change from one valuation date to the next until all claims have been reported and closed. The change in the number of reported claims or the change in the paid claim amounts is referred to as development. The concept of development also applies to reported incurred losses.

Estimated Ultimate Incurred Losses

The estimated cost of claims during a period. Ultimate incurred losses represent the total of paid claim amounts, case reserves, and IBNR.

Event

The incident or activity that triggers potential for claim or allocated claim adjustment expense payment.

Exposure

A measure of the underlying potential for claim costs.

IBNR

The unpaid claim estimate for: (a) events that have occurred for which claims have not been reported as of the accounting date, (b) future development of the case reserves, (c) claims that have been reported but not yet recorded in the loss listing, and (d) claims that have been closed but that will be reopened.

Loss

The cost associated with a claim. The cost may or may not include loss adjustment expenses.

Loss Adjustment Expenses

The costs of administering, determining coverage for, settling, or defending claims. Loss adjustment expenses include allocated loss adjustment expenses and unallocated loss adjustment expenses.

Loss Cost

The loss amount per exposure unit.

Method

The systematic procedure for developing an actuarial estimate.

Model

A mathematical or empirical representation of a specified phenomenon.

Model Risk

The risk that the methods are not appropriate to the circumstances or the models are not representative of the specified phenomenon.

Paid Losses

The total aggregate dollar amount paid on all reported claims as of a certain date.

Parameter Risk

The risk that the assumptions or parameters used in the methods or models are not representative of future outcomes.

Payment Pattern

The rate at which claims are paid over time.

Process Risk

The uncertainty associated with the projection of future contingencies that are inherently variable, even when the parameters are known with certainty.

Reported Incurred Loss Amount

The total of paid claim amounts and case reserves.

Review Date

The date through which information is considered in the unpaid claim estimate analysis.

Risk Margin

An amount that may be added to the unpaid claim estimate to recognize the uncertainty in the estimate.

Salvage

Recoveries due to the sale of damaged or recovered property.

Subrogation

Recoveries from a third party responsible for the event for which a claim has already been paid.

Tail or Unreported Loss Estimate

The unpaid loss estimate for events that have occurred for which claims have not been reported as of the accounting date.

Unallocated Loss Adjustment Expense (ULAE)

Loss adjustment expenses that cannot be attributed to an individual claim. Typically includes salaries, utilities, and rent apportioned to the claim adjustment expense function but not readily assignable to specific claims.

Unpaid Loss Estimate

The estimate of the obligation for future payments resulting from losses due to past events.

Valuation Date

The date through which transactions are included in the data used in the unpaid claim estimate analysis.

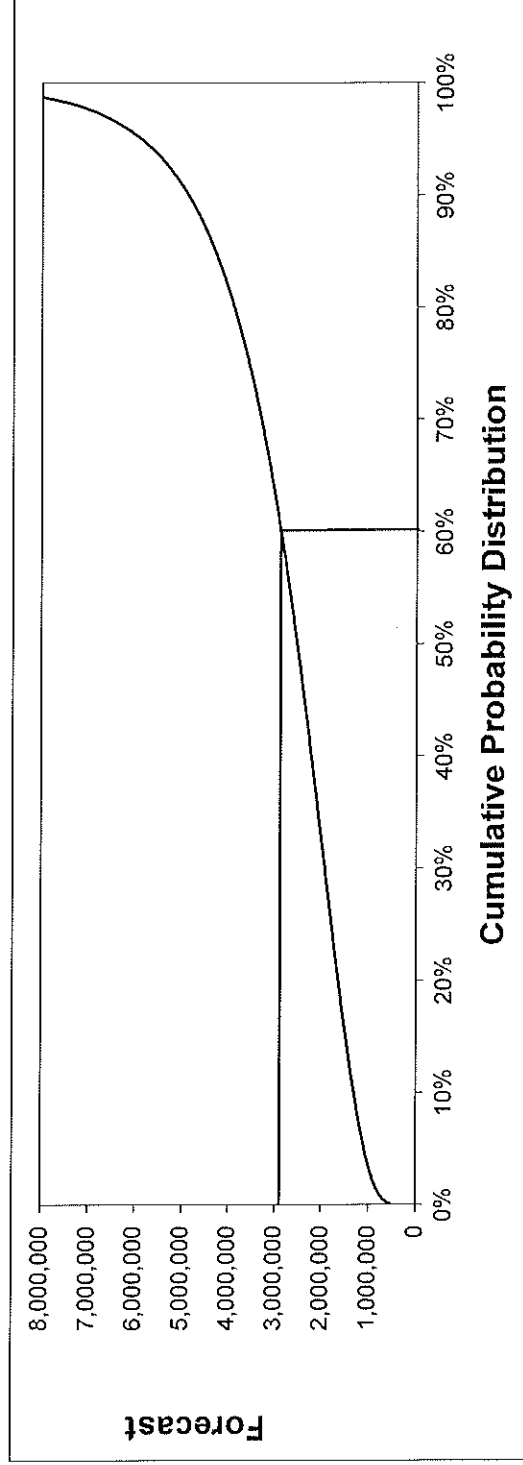
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Notes:

- (1) from Exhibit A, Page 3, Row (9)
- (2) from City of Chandler
- (3) from Appendix B, Page 1, Column (5), assuming 70% of losses limited to \$75,000 correspond to public safety employees; (limit adjusted for trend)
- (4) = (4) x (3)
- (5) = (2) x (4); rounded
- (6) from Exhibit A, Page 2
- (7) = (5) x (6)
- (8) from Exhibit A, Page 2
- (9) = (5) x (8)
- (10) from Exhibit A, Page 2
- (11) = (5) x (10)

City of Chandler
Workers' Compensation
Percentile Factor Calculation for Losses & ALAE Forecast for period 7/1/2023 to 6/30/2024 - Limited to SIR
Based on Data as of June 30, 2023

Losses & ALAE CV	5.620				
Claim Count Forecast	135				
Forecast Losses & ALAE CV	0.550				
σ	0.514				
σ^2	0.264				
μ	(0.132)				
Losses & ALAE Forecast (Central Estimate)	2,885,000				
		Percentile	Selected Percentile Factor	Percentile Losses & ALAE Forecast	
		50.0%	0.891	2,570,535	
		60.0%	1.006	2,902,310	
		70.0%	1.145	3,303,325	
		80.0%	1.332	3,842,820	
		90.0%	1.645	4,745,825	
		95.0%	1.959	5,651,715	
		99.0%	2.720	7,847,200	



Note:
 based on a lognormal distribution and
 including a variable for parameter risk

City of Chandler
Workers' Compensation
Losses & ALAE Forecast for period 7/1/2023 to 6/30/2024 - Limited to \$75,000
Based on Data as of June 30, 2023

(1)	Selected Frequency for period 7/1/2023 to 6/30/2024	0.830
(2)	Projected Exposures (\$1,000 Payroll)	162,522
(3)	Forecasted Ultimate Counts (Central Estimate)	135
(4)	Selected Loss Cost for period 7/1/2023 to 6/30/2024	7.95
(5)	Selected Severity for period 7/1/2023 to 6/30/2024	9,600
(6)	Estimated Ultimate Losses & ALAE (Loss Cost Method)	1,292,051
(7)	Estimated Ultimate Losses & ALAE (Frequency/Severity Method)	1,294,977
(8)	Forecasted Ultimate Losses & ALAE (Central Estimate)	1,294,000
(9)	Forecasted Loss Cost (Central Estimate)	7.96

Notes:

- (1) from Exhibit A, Page 5, Column (8)
- (2) from City of Chandler
- (3) = (1) / 1,000 x (2)
- (4) from Exhibit A, Page 4, Column (8)
- (5) from Exhibit A, Page 5, Column (12)
- (6) = (2) x (4)
- (7) = (1) / 1,000 x (2) x (5)
- (8) selected
- (9) = (8) / (2)

City of Chandler
Workers' Compensation
Losses & ALAE Forecast Loss Cost Method - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Age in Months	(2) Ultimate	(3) Exposures (\$1,000 Payroll)	(4) Ultimate Loss Cost	(5) Exposure Trend	(6) Benefit Level Factor	(7) Loss Cost Trend Factor	(8) Trended Ultimate Loss Cost
1/1/2003 to 6/30/2004	243	1,264,912	121,468	10.41	1.795	1.252	1.490	10.81
7/1/2004 to 6/30/2005	228	621,971	84,675	7.35	1.775	1.230	1.453	7.40
7/1/2005 to 6/30/2006	216	649,576	90,201	7.20	1.704	1.202	1.425	7.24
7/1/2006 to 6/30/2007	204	607,000	102,877	5.90	1.626	1.187	1.397	6.02
7/1/2007 to 6/30/2008	192	763,087	111,710	6.83	1.566	1.154	1.370	6.90
7/1/2008 to 6/30/2009	180	675,237	120,668	5.60	1.533	1.101	1.343	5.40
7/1/2009 to 6/30/2010	168	1,309,000	119,900	10.93	1.523	1.059	1.317	10.01
7/1/2010 to 6/30/2011	156	966,822	113,843	8.49	1.499	1.044	1.292	7.64
7/1/2011 to 6/30/2012	144	1,160,847	110,414	10.51	1.457	1.036	1.266	9.47
7/1/2012 to 6/30/2013	132	1,069,226	119,088	8.98	1.420	1.028	1.242	8.07
7/1/2013 to 6/30/2014	120	1,493,243	115,348	12.95	1.412	1.009	1.218	11.27
7/1/2014 to 6/30/2015	108	990,329	119,528	8.29	1.380	1.002	1.194	7.18
7/1/2015 to 6/30/2016	96	1,090,420	127,517	8.55	1.353	0.992	1.171	7.34
7/1/2016 to 6/30/2017	84	1,264,190	128,452	9.84	1.335	1.000	1.148	8.46
7/1/2017 to 6/30/2018	72	1,144,622	133,497	8.57	1.291	1.000	1.125	7.47
7/1/2018 to 6/30/2019	60	1,150,000	135,570	8.48	1.248	0.996	1.103	7.47
7/1/2019 to 6/30/2020	48	1,150,000	136,800	8.41	1.200	0.996	1.082	7.54
7/1/2020 to 6/30/2021	36	1,390,000	140,084	9.92	1.143	0.999	1.061	9.20
7/1/2021 to 6/30/2022	24	940,000	142,931	6.58	1.089	1.000	1.040	6.28
7/1/2022 to 6/30/2023	12	1,270,000	161,946	7.84	1.044	1.000	1.020	7.66
TOTALS		20,970,481	2,436,415					

Notes:

- (1) = (average evaluation period) - (average policy period)
- (2) from Exhibit C, Page 3, Column (12)
- (3) from City of Chandler
- (4) = (2) / (3)
- (5) derived from the 2022 edition of NCCI Annual Statistical Bulletin
- (6) based on information published by NCCI
- (7) assumed 2.0% annual loss cost trend
- (8) = (4) x (6) x (7) / (5)

Arithmetic Average	7.94
Weighted Average	7.95
Arithmetic Average Excluding Current Period	7.96
Weighted Average Excluding Current Period	7.97
5 Period Arithmetic Average	7.63
3 Period Arithmetic Average	7.71
Selected Loss Cost for period 7/1/2023 to 6/30/2024	7.95

City of Chandler
Workers' Compensation
Losses & ALAE Forecast Frequency / Severity Method - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Age in Months	(2) Exposures (\$1,000 Payroll)	(3) Exposure Trend	(4) Ultimate Losses	(5) Ultimate Counts	(6) Ultimate Frequency (per \$1M)	(7) Trended Frequency Trend	(8) Trended Ultimate Frequency (per \$1M)	(9) Ultimate Severity	(10) Benefit Level Factor	(11) Severity Trend Factor	(12) Trended Ultimate Severity
1/1/2003 to 6/30/2004	243	121,468	1.795	1,264,912	212	0.972	0.903	0.878	5,967	1.152	1.649	12,312
7/1/2004 to 6/30/2005	228	84,675	1.775	621,971	143	0.932	0.909	0.865	4,349	1.230	1.599	8,555
7/1/2005 to 6/30/2006	216	90,201	1.704	649,576	147	0.955	0.914	0.874	4,419	1.202	1.560	8,283
7/1/2006 to 6/30/2007	204	102,877	1.626	607,000	135	0.807	0.918	0.741	4,496	1.187	1.522	8,124
7/1/2007 to 6/30/2008	192	111,710	1.566	763,087	161	0.921	0.923	0.850	4,740	1.154	1.485	8,116
7/1/2008 to 6/30/2009	180	120,668	1.533	675,237	165	0.892	0.928	0.828	4,092	1.101	1.448	6,528
7/1/2009 to 6/30/2010	168	119,800	1.523	1,309,000	142	0.778	0.932	0.725	9,218	1.059	1.413	13,795
7/1/2010 to 6/30/2011	156	113,843	1.499	966,822	153	0.896	0.937	0.840	6,319	1.044	1.379	9,096
7/1/2011 to 6/30/2012	144	110,414	1.457	1,160,847	161	1.001	0.942	0.943	7,210	1.036	1.345	10,047
7/1/2012 to 6/30/2013	132	119,088	1.420	1,069,226	135	0.798	0.946	0.755	7,920	1.028	1.312	10,682
7/1/2013 to 6/30/2014	120	115,348	1.412	1,493,243	154	0.946	0.951	0.899	9,696	1.009	1.280	12,529
7/1/2014 to 6/30/2015	108	119,528	1.380	990,379	143	0.867	0.956	0.829	6,525	1.002	1.249	8,666
7/1/2015 to 6/30/2016	96	127,517	1.353	1,090,420	133	0.887	0.961	0.852	7,127	0.992	1.218	8,510
7/1/2016 to 6/30/2017	84	128,452	1.335	1,264,190	133	0.775	0.966	0.749	9,505	1.000	1.189	11,302
7/1/2017 to 6/30/2018	72	133,497	1.291	1,144,622	149	0.865	0.970	0.839	7,682	1.000	1.160	9,909
7/1/2018 to 6/30/2019	60	135,570	1.248	1,150,000	158	0.934	0.975	0.911	7,278	0.995	1.131	8,204
7/1/2019 to 6/30/2020	48	136,800	1.200	1,150,000	148	0.901	0.980	0.883	7,770	0.995	1.104	8,540
7/1/2020 to 6/30/2021	36	140,084	1.143	1,390,000	135	0.843	0.985	0.830	10,396	0.999	1.077	11,077
7/1/2021 to 6/30/2022	24	142,931	1.089	940,000	118	0.758	0.990	0.751	7,966	1.000	1.051	9,369
7/1/2022 to 6/30/2023	12	161,946	1.044	1,270,000	131	0.775	0.995	0.771	9,695	1.000	1.025	9,937
TOTALS		2,436,415		20,970,481	2,976							

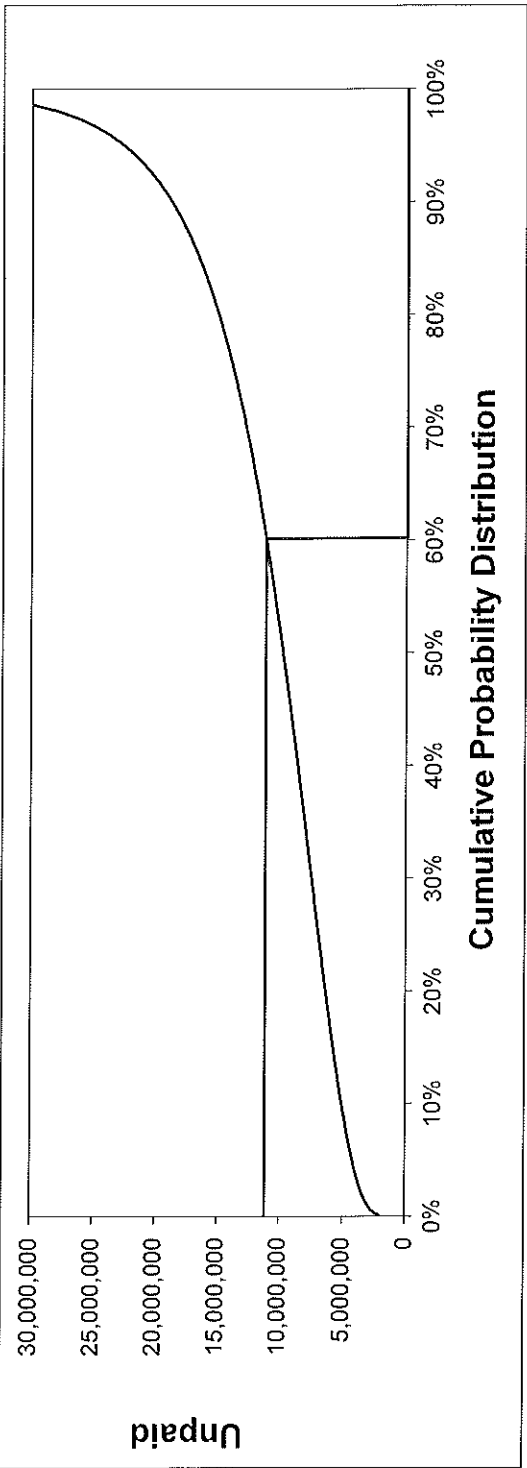
Notes:

- (1) = (average evaluation period) - (average policy period)
(2) from City of Chandler
(3) derived from the 2022 edition of NCCI Annual Statistical Bulletin
(4) from Exhibit C, Page 3, Column (12)
(5) from Exhibit C, Page 7, Column (12)
(6) = (5) / (2) x 1,000 / (3)
(7) assumed -0.5% annual frequency trend
(8) = (6) x (7)
(9) = (4) / (5)
(10) based on information published by NCCI
(11) assumed 2.5% annual severity trend
(12) = (9) x (10) x (11)

Arithmetic Average	0.837	Arithmetic Average	9,584
Weighted Average	0.829	Weighted Average	9,611
Arithmetic Average Excluding Current Period	0.834	Arithmetic Average Excluding Current Period	9,565
Weighted Average Excluding Current Period	0.833	Weighted Average Excluding Current Period	9,596
5 Period Arithmetic Average	0.829	5 Period Arithmetic Average	9,226
3 Period Arithmetic Average	0.784	3 Period Arithmetic Average	9,794
Selected Frequency for period 7/1/2023 to 6/30/2024	0.830	Selected Severity for period 7/1/2023 to 6/30/2024	9,600

City of Chandler
Workers' Compensation
Percentile Factor Calculation for Unpaid Losses & ALAE as of 6/30/2023 - Limited to Self-Insured Retention (SIR)
Based on Data as of June 30, 2023

Losses & ALAE CV	5.620	Percentile	Selected Percentile Factor	Percentile Unpaid Losses & ALAE
Open & IBNR Claim Count	121			
Unpaid Losses & ALAE CV	0.550	50.0%	0.895	9,939,104
σ	0.514	60.0%	1.008	11,193,985
σ^2	0.264	70.0%	1.144	12,704,285
μ	(0.132)	80.0%	1.328	14,747,631
		90.0%	1.634	18,145,805
		95.0%	1.940	21,543,979
Unpaid Losses & ALAE (Central Estimate)	11,105,144	99.0%	2.678	29,739,575



Note:
based on a lognormal distribution and
including a variable for parameter risk

City of Chandler
Workers' Compensation

Unpaid Losses & ALAE Reconciliation from 6/30/2022 to 6/30/2023 - Limited to Self-Insured Retention (SIR)
Based on Data as of June 30, 2023

(1) Indicated Unpaid Losses & ALAE as of 6/30/2022	10,504,362
(2) Estimated Ultimate Losses & ALAE for period 7/1/2022 to 6/30/2023	2,822,000
(3) Payments for period 7/1/2022 to 6/30/2023	1,483,718
(4) Change in Ultimate Losses & ALAE since 6/30/2022	(737,500)
(5) Indicated Unpaid Losses & ALAE as of 6/30/2023	11,105,144

Notes:

- (1) from Exhibit B, Page 3, Column (11)
- (2) from Exhibit B, Page 3, Column (20)
- (3) from Exhibit B, Page 3, Column (13)
- (4) from Exhibit B, Page 3, Column (19)
- (5) = (1) + (2) - (3) + (4)

City of Chandler
Workers' Compensation
Comparison of Losses & ALAE to Previous Analysis - Limited to Self-Insured Retention (\$IR)

Policy Period	Self-Insured Retention (\$IR)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
		Paid Losses & ALAE	Case Reserves	Incurred Losses & ALAE	IBNR	Unpaid Losses & ALAE	Estimated Ultimate	Paid Losses & ALAE	Case Reserves	Incurred Losses & ALAE	IBNR	Unpaid Losses & ALAE	Estimated Ultimate
1/1/2003 to 6/30/2004	500,000	1,890,397	28,801	1,919,198	802	29,603	1,920,000	1,889,579	29,606	1,919,198	3,892	33,407	1,923,000
7/1/2004 to 6/30/2005	500,000	651,732	0	651,732	0	651,732	651,732	651,732	0	651,732	0	0	651,732
7/1/2005 to 6/30/2006	500,000	980,898	44,214	1,025,112	978	45,192	1,026,000	980,898	44,214	1,025,112	4,478	48,692	1,029,500
7/1/2006 to 6/30/2007	500,000	600,275	18,893	619,168	-168	18,725	619,000	600,275	18,725	619,000	3,832	24,504	623,000
7/1/2007 to 6/30/2008	500,000	807,083	193,932	1,001,015	985	194,917	1,002,000	798,091	299,423	1,097,514	736	292,599	1,098,000
7/1/2008 to 6/30/2009	500,000	1,169,000	128,670	1,297,670	330	129,000	1,298,000	1,164,618	133,422	1,297,570	930	242,192	1,299,000
7/1/2009 to 6/30/2010	500,000	1,485,895	256,445	1,742,340	27,660	274,105	1,770,000	1,488,839	263,270	1,752,689	26,361	299,171	1,773,000
7/1/2010 to 6/30/2011	500,000	1,456,551	0	1,456,551	0	0	1,456,551	1,456,551	0	1,456,551	0	0	1,456,551
7/1/2011 to 6/30/2012	500,000	1,922,237	303,609	2,225,846	33,154	336,763	2,260,000	1,905,381	323,038	2,228,419	30,688	354,616	2,259,000
7/1/2012 to 6/30/2013	600,000	2,160,127	172,274	2,332,401	40,599	232,873	2,373,000	2,129,662	302,739	2,432,401	32,599	235,318	2,465,000
7/1/2013 to 6/30/2014	600,000	2,416,974	236,021	2,652,995	64,055	300,076	2,717,000	2,400,586	275,034	2,675,620	69,460	339,410	2,745,000
7/1/2014 to 6/30/2015	600,000	1,529,426	552,797	2,082,223	0	552,797	2,082,223	1,465,113	620,410	2,085,523	86,082	698,078	2,171,500
7/1/2015 to 6/30/2016	600K / 1M	2,827,131	710,839	3,537,970	60,030	770,869	3,598,000	2,855,922	891,966	3,747,888	121,246	210,156	3,958,000
7/1/2016 to 6/30/2017	600K / 1M	1,645,450	88,309	1,733,759	69,240	1,803,000	1,872,000	1,634,744	80,016	1,714,760	176,751	230,091	1,891,000
7/1/2017 to 6/30/2018	600K / 1M	1,748,880	985,673	2,734,553	74,647	1,060,320	2,809,000	1,691,840	1,054,006	2,745,846	176,751	230,091	2,922,000
7/1/2018 to 6/30/2019	600K / 1.25M	1,343,328	605,383	1,948,711	124,289	729,672	2,078,000	1,350,185	552,231	1,902,416	194,642	240,885	2,143,000
7/1/2019 to 6/30/2020	600K / 1.25M	1,345,196	662,071	2,007,267	136,732	798,804	2,145,000	1,169,315	246,044	1,415,359	194,642	240,885	2,143,000
7/1/2020 to 6/30/2021	750K / 2.25M	1,547,001	1,341,756	2,888,756	199,244	1,540,999	3,089,000	1,428,945	1,153,308	2,582,253	302,747	2,582,253	3,271,000
7/1/2021 to 6/30/2022	1M / 3M	944,524	1,318,845	2,263,369	250,631	1,560,476	2,514,000	709,428	1,916,639	2,625,867	645,133	2,561,772	3,271,000
7/1/2022 to 6/30/2023	1.5M / 3M	436,597	796,381	1,234,978	1,587,022	2,383,403	2,822,000	0	0	0	0	0	0
TOTALS		28,741,372	8,444,913	37,186,285	2,660,231	11,105,144	39,846,516	27,257,655	8,592,358	35,850,012	1,912,004	10,504,362	37,762,016

Notes:
(1) from City of Chandler
(2) from City of Chandler
(3) from City of Chandler
(4) = (6) - (3)
(5) = (6) - (3)
(6) from Exhibit C, Page 1, Column (7)
(7) to (12) from previous Oliver Wyman study
(13) = (11) - (7)
(14) = (11) - (8)
(15) = (13) - (8)
(16) = (4) - (10)
(17) = (5) - (11)
(18) = (6) - (12)
(19) = (6) - (12) at 6/30/2022
(20) derived from (6)

Policy Period	Self-Insured Retention (\$IR)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
		Paid Losses & ALAE	Case Reserves	Incurred Losses & ALAE	IBNR	Unpaid Losses & ALAE	Estimated Ultimate	Estimated Ultimate Through 6/30/2022	Estimated Ultimate 7/1/2022 to 6/30/2023
1/1/2003 to 6/30/2004	500,000	805	(605)	0	(3,000)	(3,895)	(3,000)	(3,000)	0
7/1/2004 to 6/30/2005	500,000	0	0	0	0	0	0	0	0
7/1/2005 to 6/30/2006	500,000	0	0	0	(3,500)	(3,500)	(3,500)	(3,500)	0
7/1/2006 to 6/30/2007	500,000	180	(180)	0	(6,000)	(6,180)	(6,000)	(6,000)	0
7/1/2007 to 6/30/2008	500,000	18,592	(91,071)	(72,479)	(6,921)	(97,992)	(79,000)	(79,000)	0
7/1/2008 to 6/30/2009	500,000	4,382	(4,382)	0	(9,000)	(13,382)	(9,000)	(9,000)	0
7/1/2009 to 6/30/2010	500,000	7,066	(7,425)	(359)	(8,641)	(16,066)	(9,000)	(9,000)	0
7/1/2010 to 6/30/2011	500,000	0	0	0	0	0	0	0	0
7/1/2011 to 6/30/2012	500,000	16,853	(20,319)	(3,466)	2,465	(17,853)	(1,000)	(1,000)	0
7/1/2012 to 6/30/2013	600,000	30,464	(39,464)	(9,000)	8,000	(22,464)	8,000	8,000	0
7/1/2013 to 6/30/2014	600,000	36,338	(39,613)	(3,275)	575	(39,338)	(3,000)	(3,000)	0
7/1/2014 to 6/30/2015	600,000	68,113	(68,113)	0	0	0	0	0	0
7/1/2015 to 6/30/2016	600K / 1M	171,209	(171,157)	52	(26,052)	(157,209)	(26,000)	(26,000)	0
7/1/2016 to 6/30/2017	600K / 1M	10,706	(706)	10,000	(52,000)	(52,706)	(42,000)	(42,000)	0
7/1/2017 to 6/30/2018	600K / 1M	56,838	(68,733)	(11,896)	(102,104)	(170,838)	(114,000)	(114,000)	0
7/1/2018 to 6/30/2019	600K / 1.25M	91,143	(92,561)	145,704	(76,704)	(24,143)	69,000	69,000	0
7/1/2019 to 6/30/2020	600K / 1.25M	176,882	(83,972)	92,909	(57,909)	(141,882)	35,000	35,000	0
7/1/2020 to 6/30/2021	750K / 2.25M	118,055	(188,448)	(206,503)	(103,503)	(391,953)	203,000	203,000	0
7/1/2021 to 6/30/2022	1M / 3M	235,096	(597,595)	(362,498)	(394,502)	(992,096)	(757,000)	(757,000)	0
7/1/2022 to 6/30/2023	1.5M / 3M	438,597	796,381	1,234,978	1,587,022	2,383,403	N/A	N/A	2,822,000
TOTALS		1,483,718	(147,445)	1,316,273	748,227	600,782	2,084,500	(737,500)	2,822,000

City of Chandler
Workers' Compensation
Summary - Limited to Self-Insured Retention (SIR)
Based on Data as of June 30, 2023

Policy Period	Self-Insured Retention (SIR)	Exposures (\$1,000 Payroll)	Losses & ALAE @ SIR			Claim Counts (ex. CWOIP)			Closed	Open	Reported	IBNR	Opn & IBNR	Selected Ultimate	Totals
			Paid	Case Reserves	Incurred	IBNR	Unpaid	Selected Ultimate							
1/1/2003 to 6/30/2004	500,000	121,468	1,850,397	28,801	1,919,198	802	29,603	1,920,000	209	3	212	0	3	212	212
7/1/2004 to 6/30/2005	500,000	84,675	651,732	0	651,732	0	0	651,732	143	0	143	0	0	143	143
7/1/2005 to 6/30/2006	500,000	90,201	980,808	44,214	1,025,022	978	45,192	1,026,000	146	1	147	0	1	147	147
7/1/2006 to 6/30/2007	500,000	102,877	800,275	18,893	619,188	-168	18,725	619,000	134	1	135	0	1	135	135
7/1/2007 to 6/30/2008	500,000	111,710	807,063	19,932	1,001,015	985	194,917	1,002,000	160	1	161	0	1	161	161
7/1/2008 to 6/30/2009	500,000	120,668	1,189,000	126,670	1,297,670	330	125,000	1,298,000	163	2	165	0	2	165	165
7/1/2009 to 6/30/2010	500,000	119,800	1,495,895	235,445	1,752,340	17,660	274,105	1,770,000	139	3	142	0	3	142	142
7/1/2010 to 6/30/2011	500,000	113,843	1,455,561	0	1,455,561	0	0	1,456,561	152	1	153	0	1	153	153
7/1/2011 to 6/30/2012	500,000	110,414	1,922,237	303,609	2,225,846	33,154	336,763	2,259,000	159	2	161	0	2	161	161
7/1/2012 to 6/30/2013	600,000	119,088	2,160,127	172,274	2,332,401	40,599	212,877	2,373,000	131	4	134	0	4	134	134
7/1/2013 to 6/30/2014	600,000	115,348	2,436,924	236,021	2,672,945	64,055	300,076	2,737,000	150	4	154	0	4	154	154
7/1/2014 to 6/30/2015	600,000	119,528	1,528,426	55,797	2,082,223	0	552,797	2,082,223	141	2	143	0	2	143	143
7/1/2015 to 6/30/2016	600K / 1M	127,517	2,827,131	710,839	3,537,970	60,030	770,869	3,598,000	149	4	153	0	4	153	153
7/1/2016 to 6/30/2017	600K / 1M	128,452	1,645,450	88,309	1,733,760	69,240	157,550	1,803,000	121	2	123	0	2	123	123
7/1/2017 to 6/30/2018	600K / 1M	133,497	1,745,680	985,673	2,730,353	74,847	1,060,320	2,809,000	146	3	149	0	3	149	149
7/1/2018 to 6/30/2019	600K / 1.25M	135,570	1,143,328	605,343	1,748,711	124,289	729,672	1,873,000	152	6	158	0	6	158	158
7/1/2019 to 6/30/2020	600K / 1.25M	136,800	1,342,196	662,071	2,008,268	136,732	798,804	2,145,000	140	8	148	0	8	148	148
7/1/2020 to 6/30/2021	750K / 2.25M	140,084	1,547,001	1,341,756	2,888,756	199,244	1,540,999	3,088,000	126	9	135	0	9	135	135
7/1/2021 to 6/30/2022	1M / 3M	142,931	944,524	1,318,845	2,263,369	250,631	1,559,476	2,514,000	112	6	118	0	6	118	118
7/1/2022 to 6/30/2023	1.5M / 3M	161,946	438,597	796,381	1,234,978	1,587,022	2,383,403	2,822,000	72	49	121	10	59	131	131
TOTALS		2,436,415	28,741,372	8,404,913	37,186,285	2,600,231	11,105,144	39,846,516	2,855	111	2,966	10	121	2,976	2,976

Notes:
(1) from City of Chandler
(2) from City of Chandler
(3) from City of Chandler
(4) from City of Chandler
(5) = (7) - (4)
(6) = (3) + (5)
(7) from Exhibit C, Page 2, Column (16)
(8) from City of Chandler
(9) = (10) - (8)
(10) from City of Chandler
(11) = (13) - (10)
(12) = (9) + (11)
(13) from Exhibit D, Page 7, Column (12)
(14) = (12) / (9)
(15) = (13) / (9)
(16) = (4) / (10)
(17) = (6) / (12)
(18) = (13) / (13)
(19) = (13) / (1) x 1,000
(20) = (7) / (1)

Policy Period	Self-Insured Retention (SIR)	(14)			(15)			(16)			(17)			(18)			(19)			(20)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
		Paid per Closed	Case Reserves per Open	Incurred per Reported	Unpaid per Open & IBNR	Implied Ultimate Severity	Implied Ultimate Frequency (per \$1M)	Implied Ultimate Loss Cost	Implied Ultimate Exposure	Paid per Closed	Case Reserves per Open	Incurred per Reported	Unpaid per Open & IBNR	Implied Ultimate Severity	Implied Ultimate Frequency (per \$1M)	Implied Ultimate Loss Cost	Implied Ultimate Exposure	Paid per Closed	Case Reserves per Open	Incurred per Reported	Unpaid per Open & IBNR	Implied Ultimate Severity	Implied Ultimate Frequency (per \$1M)	Implied Ultimate Loss Cost	Implied Ultimate Exposure																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1/1/2003 to 6/30/2004	500,000	9,045	9,600	9,053	9,858	9,057	1.745	15.81	1.745	15.81	9,045	9,600	9,053	9,858	9,057	1.745	15.81	1.745	15.81	9,045	9,600	9,053	9,858	9,057	1.745	15.81	1.745	15.81	9,045	9,600	9,053	9,858	9,057	1.745	15.81	1.745	15.81	9,045	9,600	9,053	9,858	9,057	1.745	15.81	1.745	15.81																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
7/1/2004 to 6/30/2005	500,000	4,558		4,558		4,558	1.689	7.70	4,558		4,558		4,558		4,558	1.689	7.70	4,558		4,558		4,558		4,558		1.689	7.70	4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558		4,558

City of Chandler
Workers' Compensation
Selected Ultimate Losses & ALAE - Limited to Self-Insured Retention (SIR)
Based on Data as of June 30, 2023

Policy Period	Self-Insured Retention (SIR)	Age in Months	Limited to \$75,000			Incurred	Expected IBNR	Limited to SIR			Incurred	Expected IBNR	Excess	
			Incurred	Ultimate	LDfs			ILFs to SIR	Incurred	LDfs			Incurred	Expected IBNR
1/1/2003 to 6/30/2004	500,000	243	1,264,912	1,354,912	1,000	1,919,198	0	1,639	1,000	1,000	654,286	0	654,286	0
7/1/2004 to 6/30/2005	500,000	228	621,971	621,971	1,000	651,732	0	1,643	1,000	1,000	29,762	0	29,762	0
7/1/2005 to 6/30/2006	500,000	216	649,576	649,576	1,000	1,023,022	0	1,646	1,000	1,000	375,446	0	375,446	0
7/1/2006 to 6/30/2007	500,000	204	607,316	607,316	1,000	610,118	0	1,648	1,000	1,000	11,852	0	11,852	0
7/1/2007 to 6/30/2008	500,000	192	763,087	763,087	1,000	1,001,015	0	1,649	1,000	1,000	237,929	0	237,929	0
7/1/2008 to 6/30/2009	500,000	180	675,237	675,237	1,000	1,297,670	0	1,651	1,000	1,000	622,433	0	622,433	0
7/1/2009 to 6/30/2010	500,000	168	1,304,928	1,304,928	1,001	1,308	1,308	1,753,340	1,007	1,007	447,411	13,955	447,411	13,955
7/1/2010 to 6/30/2011	500,000	156	966,822	966,822	1,002	1,391	1,391	1,456,561	1,014	1,014	489,739	19,359	489,739	19,359
7/1/2011 to 6/30/2012	500,000	144	1,160,847	1,160,847	1,003	3,476	3,476	2,225,946	1,019	1,019	1,064,999	32,320	1,064,999	32,320
7/1/2012 to 6/30/2013	500,000	132	1,089,226	1,089,226	1,004	4,266	4,266	2,332,401	1,025	1,025	1,283,175	40,079	1,283,175	40,079
7/1/2013 to 6/30/2014	500,000	120	1,493,243	1,493,243	1,005	7,444	7,444	2,672,945	1,028	1,028	1,179,702	63,104	1,179,702	63,104
7/1/2014 to 6/30/2015	500,000	108	990,329	990,329	1,006	5,921	5,921	2,062,223	1,034	1,034	1,091,893	44,313	1,091,893	44,313
7/1/2015 to 6/30/2016	600K / 1M	96	1,090,420	1,090,420	1,007	7,602	7,602	3,537,970	1,034	1,034	2,447,550	59,923	2,447,550	59,923
7/1/2016 to 6/30/2017	600K / 1M	84	1,254,190	1,254,190	1,008	10,068	10,068	1,733,760	1,034	1,034	469,570	66,679	469,570	66,679
7/1/2017 to 6/30/2018	600K / 1M	72	1,144,622	1,144,622	1,011	12,512	12,512	2,734,353	1,041	1,041	1,588,731	73,794	1,588,731	73,794
7/1/2018 to 6/30/2019	600K / 1.25M	60	1,128,598	1,128,598	1,016	18,230	18,230	1,748,711	1,056	1,056	620,113	102,842	620,113	102,842
7/1/2019 to 6/30/2020	600K / 1.25M	48	1,133,047	1,133,047	1,021	23,861	23,861	2,008,266	1,062	1,062	885,221	108,832	885,221	108,832
7/1/2020 to 6/30/2021	750K / 2.25M	36	1,350,396	1,350,396	1,031	42,317	42,317	2,888,756	1,072	1,072	1,538,360	159,039	1,538,360	159,039
7/1/2021 to 6/30/2022	1M / 3M	24	810,586	810,586	1,050	44,732	44,732	2,263,369	1,087	1,087	1,452,783	120,867	1,452,783	120,867
7/1/2022 to 6/30/2023	1.5M / 3M	12	949,608	1,270,000	1,286	282,601	282,601	1,234,978	1,374	1,374	285,370	485,122	285,370	485,122
TOTALS			20,428,961	20,970,481		37,186,285	466,269				16,757,325	1,392,229	16,757,325	1,392,229

Policy Period	Self-Insured Retention (SIR)	UF Method	Indicated Ultimate		Prior Ultimate	Selected Ultimate
			LDf Method	Excess Method		
1/1/2003 to 6/30/2004	500,000	2,073,421	1,919,198	1,919,198	1,923,000	1,920,000
7/1/2004 to 6/30/2005	500,000	1,021,899	651,732	651,732	651,732	651,732
7/1/2005 to 6/30/2006	500,000	1,068,594	1,023,022	1,023,022	1,023,000	1,028,000
7/1/2006 to 6/30/2007	500,000	1,000,287	619,168	618,852	625,000	619,000
7/1/2007 to 6/30/2008	500,000	1,258,662	1,001,015	1,001,015	1,081,000	1,082,000
7/1/2008 to 6/30/2009	500,000	1,114,772	1,297,670	1,297,670	1,307,000	1,298,000
7/1/2009 to 6/30/2010	500,000	2,161,595	1,764,801	1,770,367	1,779,000	1,770,000
7/1/2010 to 6/30/2011	500,000	1,596,308	1,476,250	1,475,920	1,456,561	1,456,561
7/1/2011 to 6/30/2012	500,000	1,919,757	2,268,137	2,258,165	2,260,000	2,259,000
7/1/2012 to 6/30/2013	500,000	1,853,128	2,389,583	2,379,480	2,365,000	2,373,000
7/1/2013 to 6/30/2014	600,000	2,596,940	2,747,586	2,736,049	2,740,000	2,737,000
7/1/2014 to 6/30/2015	600,000	1,726,971	2,144,605	2,126,536	2,082,223	2,082,223
7/1/2015 to 6/30/2016	600K / 1M	2,065,852	3,657,572	3,597,893	3,624,000	3,598,000
7/1/2016 to 6/30/2017	600K / 1M	2,404,359	1,792,467	1,803,439	1,845,000	1,803,000
7/1/2017 to 6/30/2018	600K / 1M	2,184,823	2,846,809	2,861,147	2,923,000	2,869,000
7/1/2018 to 6/30/2019	600K / 1.25M	2,277,930	1,846,872	1,872,955	1,804,000	1,873,000
7/1/2019 to 6/30/2020	600K / 1.25M	2,284,931	2,132,084	2,144,053	2,110,000	2,145,000
7/1/2020 to 6/30/2021	750K / 2.25M	2,987,541	3,057,525	3,087,399	2,885,000	3,088,000
7/1/2021 to 6/30/2022	1M / 3M	2,068,411	2,460,347	2,513,650	3,271,000	2,514,000
7/1/2022 to 6/30/2023	1.5M / 3M	2,821,140	1,696,707	2,040,492	2,896,000	2,822,000
TOTALS		38,487,659	38,835,100	39,120,035	40,658,016	39,846,516

Notes:
 (1) = (average evolution period) - (average policy period)
 (2) from City of Chandler
 (3) from Exhibit C, Page 3, Column (12)
 (4) from Appendix A, Page 1
 (5) = (3) x [1 - 1/(4)]
 (6) from City of Chandler
 (7) from Appendix B, Page 1
 (8) limit adjusted for trend for prior years
 (9) = (3) x (7) x (1 - 1/(8))
 (10) = (6) x (2)
 (11) = (9) - (5)
 (12) = (3) x (7)
 (13) = (6) x (8)
 (14) = (3) x (10) x (11)
 (15) from previous Oliver Wyman study; current year adjusted for revised payroll
 (16) selected

City of Chandler
Workers' Compensation
Selected Ultimate Losses & ALAE - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Exposures (\$1,000 Payroll)	(2) Open & IBNR Claim Count	(3) Paid	(4) Incurred	(5) Paid Development Method	(6) Incurred Development Method	(7) Loss Cost Method	(8) Frequency / Severity Method	(9) Paid Borhuetter- Ferguson Method	(10) Incurred Borhuetter- Ferguson Method	(11) Prior Ultimate	(12) Selected Ultimate
1/1/2003 to 6/30/2004	121,468	3	1,253,879	1,284,912	1,263,405	1,264,912			1,283,417	1,264,912	1,264,912	1,264,912
7/1/2004 to 6/30/2005	84,675	0	621,971	621,971	628,201	621,971			628,139	621,971	621,971	621,971
7/1/2005 to 6/30/2006	90,201	1	649,576	649,576	657,394	649,576			657,301	649,576	649,576	649,576
7/1/2006 to 6/30/2007	102,877	1	588,424	607,316	596,687	607,316			596,844	607,316	608,000	607,000
7/1/2007 to 6/30/2008	111,710	1	763,087	763,087	775,363	763,087			775,169	763,087	812,000	763,087
7/1/2008 to 6/30/2009	120,668	2	675,237	675,237	688,158	675,237			687,916	675,237	675,237	675,237
7/1/2009 to 6/30/2010	119,800	3	1,299,823	1,304,928	1,328,671	1,306,233			1,328,183	1,306,233	1,310,000	1,309,000
7/1/2010 to 6/30/2011	113,843	1	966,822	966,822	991,244	966,822			990,642	966,822	966,822	966,822
7/1/2011 to 6/30/2012	110,414	2	1,160,847	1,160,847	1,194,931	1,164,333			1,193,959	1,164,333	1,170,000	1,160,847
7/1/2012 to 6/30/2013	119,088	4	1,069,226	1,069,226	1,105,023	1,073,509			1,103,863	1,073,492	1,069,226	1,069,226
7/1/2013 to 6/30/2014	115,348	4	1,493,243	1,493,243	1,550,951	1,500,724			1,548,804	1,500,687	1,505,000	1,493,243
7/1/2014 to 6/30/2015	119,528	2	990,329	990,329	1,034,774	996,286			1,032,865	996,251	990,329	990,329
7/1/2015 to 6/30/2016	127,517	4	1,040,402	1,090,420	1,094,703	1,098,076			1,094,491	1,098,022	1,090,368	1,090,420
7/1/2016 to 6/30/2017	128,452	2	1,284,190	1,284,190	1,340,812	1,274,339			1,336,434	1,274,258	1,264,190	1,264,190
7/1/2017 to 6/30/2018	133,497	3	1,110,635	1,144,622	1,188,552	1,157,273			1,185,672	1,157,135	1,180,000	1,144,622
7/1/2018 to 6/30/2019	135,570	6	1,060,578	1,128,598	1,146,334	1,146,777			1,146,350	1,146,773	1,104,000	1,150,000
7/1/2019 to 6/30/2020	136,800	8	1,080,251	1,123,047	1,190,949	1,146,842	1,221,582	1,283,603	1,193,796	1,148,392	1,121,000	1,150,000
7/1/2020 to 6/30/2021	140,084	9	1,205,663	1,350,386	1,375,735	1,392,799	1,211,258	1,196,256	1,355,402	1,387,272	1,435,000	1,390,000
7/1/2021 to 6/30/2022	142,931	6	777,014	810,586	966,416	851,087	1,199,182	1,070,652	1,012,035	867,652	1,296,000	940,000
7/1/2022 to 6/30/2023	161,945	59	376,172	949,608	853,692	1,221,393	1,327,958	1,218,300	1,117,866	1,245,106	1,382,000	1,270,000
TOTALS	2,436,415	121	19,449,368	20,428,961	20,972,005	20,880,525			21,249,147	20,916,446	21,515,631	20,970,481

Notes:

- (1) from City of Chandler
- (2) = Exhibit D, Page 7, Column (12) - closed claim counts with payment
- (3) from City of Chandler
- (4) from City of Chandler
- (5) from Exhibit D, Page 1, Column (4)
- (6) from Exhibit D, Page 2, Column (4)
- (7) from Exhibit D, Page 3, Column (10)
- (8) from Exhibit D, Page 4, Column (8)
- (9) from Exhibit D, Page 5, Column (7)
- (10) from Exhibit D, Page 6, Column (7)
- (11) from previous Oliver Wyman study, current year adjusted for revised payroll
- (12) selected

City of Chandler
Workers' Compensation
Paid Losses & ALAE Development Method - Limited to \$75,000
Based on Data as of June 30, 2023

	(1)	(2)	(3)	(4)
Policy Period	Age in Months	Paid	Cumulative Development Factors	Ultimate
1/1/2003 to 6/30/2004	243	1,253,879	1.008	1,263,405
7/1/2004 to 6/30/2005	228	621,971	1.010	628,201
7/1/2005 to 6/30/2006	216	649,576	1.012	657,394
7/1/2006 to 6/30/2007	204	588,424	1.014	596,697
7/1/2007 to 6/30/2008	192	763,087	1.016	775,363
7/1/2008 to 6/30/2009	180	675,237	1.019	688,158
7/1/2009 to 6/30/2010	168	1,299,823	1.022	1,328,671
7/1/2010 to 6/30/2011	156	966,822	1.025	991,244
7/1/2011 to 6/30/2012	144	1,160,847	1.029	1,194,931
7/1/2012 to 6/30/2013	132	1,069,226	1.033	1,105,023
7/1/2013 to 6/30/2014	120	1,493,243	1.039	1,550,951
7/1/2014 to 6/30/2015	108	990,329	1.045	1,034,774
7/1/2015 to 6/30/2016	96	1,040,402	1.052	1,094,703
7/1/2016 to 6/30/2017	84	1,264,190	1.061	1,340,812
7/1/2017 to 6/30/2018	72	1,110,635	1.070	1,188,552
7/1/2018 to 6/30/2019	60	1,060,578	1.081	1,146,334
7/1/2019 to 6/30/2020	48	1,080,251	1.102	1,190,949
7/1/2020 to 6/30/2021	36	1,205,663	1.141	1,375,735
7/1/2021 to 6/30/2022	24	777,014	1.244	966,416
7/1/2022 to 6/30/2023	12	378,172	2.257	853,692
TOTALS		19,449,368		20,972,005

Notes:

(1) = (average evaluation period) - (average policy period)

(2) from City of Chandler

(3) from Appendix A, Page 1

(4) = (2) x (3)

City of Chandler
Workers' Compensation
Incurred Losses & ALAE Development Method - Limited to \$75,000
Based on Data as of June 30, 2023

	(1)	(2)	(3)	(4)
Policy Period	Age in Months	Incurred	Cumulative Development Factors	Ultimate
1/1/2003 to 6/30/2004	243	1,264,912	1.000	1,264,912
7/1/2004 to 6/30/2005	228	621,971	1.000	621,971
7/1/2005 to 6/30/2006	216	649,576	1.000	649,576
7/1/2006 to 6/30/2007	204	607,316	1.000	607,316
7/1/2007 to 6/30/2008	192	763,087	1.000	763,087
7/1/2008 to 6/30/2009	180	675,237	1.000	675,237
7/1/2009 to 6/30/2010	168	1,304,928	1.001	1,306,233
7/1/2010 to 6/30/2011	156	966,822	1.002	968,756
7/1/2011 to 6/30/2012	144	1,160,847	1.003	1,164,333
7/1/2012 to 6/30/2013	132	1,069,226	1.004	1,073,509
7/1/2013 to 6/30/2014	120	1,493,243	1.005	1,500,724
7/1/2014 to 6/30/2015	108	990,329	1.006	996,286
7/1/2015 to 6/30/2016	96	1,090,420	1.007	1,098,076
7/1/2016 to 6/30/2017	84	1,264,190	1.008	1,274,339
7/1/2017 to 6/30/2018	72	1,144,622	1.011	1,157,273
7/1/2018 to 6/30/2019	60	1,128,598	1.016	1,146,777
7/1/2019 to 6/30/2020	48	1,123,047	1.021	1,146,842
7/1/2020 to 6/30/2021	36	1,350,396	1.031	1,392,799
7/1/2021 to 6/30/2022	24	810,586	1.050	851,087
7/1/2022 to 6/30/2023	12	949,608	1.286	1,221,393
TOTALS		20,428,961		20,880,525

Notes:

(1) = (average evaluation period) - (average policy period)

(2) from City of Chandler

(3) from Appendix A, Page 1

(4) = (2) x (3)

City of Chandler
Workers' Compensation
Losses & ALAE Cost Method - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Age In Months	(2) Preliminary Ultimate	(3) Exposures (\$1,000 Payroll)	(4) Exposure Trend	(5) Benefit Level Factor	(6) Preliminary Ultimate Loss Cost	(7) Loss Cost Trend Factor	(8) Preliminary Trended Ult Loss Cost	(9) Adjusted Selected Loss Cost	(10) Ultimate
1/1/2003 to 6/30/2004	243	1,264,912	121,468	1.720	1.252	7.58	1.461	11.06	7.72	
7/1/2004 to 6/30/2005	228	621,971	84,675	1.701	1.230	5.31	1.425	7.57	7.95	
7/1/2005 to 6/30/2006	216	649,576	90,201	1.633	1.202	5.30	1.397	7.41	7.97	
7/1/2006 to 6/30/2007	204	607,316	102,877	1.558	1.187	4.50	1.370	6.17	7.85	
7/1/2007 to 6/30/2008	192	763,087	111,710	1.500	1.154	5.25	1.343	7.06	7.94	
7/1/2008 to 6/30/2009	180	675,237	120,668	1.469	1.101	4.20	1.317	5.53	8.30	
7/1/2009 to 6/30/2010	168	1,305,233	119,800	1.460	1.059	7.91	1.292	10.22	8.75	
7/1/2010 to 6/30/2011	156	965,822	113,843	1.437	1.044	6.17	1.266	7.82	8.91	
7/1/2011 to 6/30/2012	144	1,160,847	110,414	1.396	1.035	7.80	1.242	9.69	8.90	
7/1/2012 to 6/30/2013	132	1,969,126	119,088	1.361	1.028	6.78	1.217	8.26	8.92	
7/1/2013 to 6/30/2014	120	1,493,243	115,348	1.353	1.009	9.66	1.194	11.53	9.21	
7/1/2014 to 6/30/2015	108	990,329	119,528	1.323	1.002	6.28	1.171	7.35	9.25	
7/1/2015 to 6/30/2016	96	1,090,420	127,517	1.296	0.992	6.54	1.148	7.51	9.34	
7/1/2016 to 6/30/2017	84	1,264,190	128,452	1.280	1.000	7.69	1.125	8.66	9.32	
7/1/2017 to 6/30/2018	72	1,144,622	133,497	1.237	1.000	6.93	1.103	7.65	9.19	
7/1/2018 to 6/30/2019	60	1,146,555	135,570	1.196	0.996	7.05	1.082	7.62	9.10	
7/1/2019 to 6/30/2020	48	1,168,895	136,800	1.150	0.996	7.40	1.061	7.85	8.93	1,221,582
7/1/2020 to 6/30/2021	36	1,384,267	140,084	1.096	0.999	9.01	1.040	9.37	8.65	1,211,258
7/1/2021 to 6/30/2022	24	971,642	142,951	1.043	1.000	6.51	1.020	6.64	8.39	1,199,182
7/1/2022 to 6/30/2023	12	1,276,070	161,946	1.000	1.000	7.88	1.000	7.88	8.20	1,327,958
TOTALS		21,015,460	2,436,415							

Notes:

- (1) = (average evaluation period) - (average policy period)
- (2) based on Exhibit D, Page 1 and 2, Column (4) and actuarial judgment
- (3) from City of Chandler
- (4) derived from the 2022 edition of NCCI Annual Statistical Bulletin
- (5) based on information published by NCCI
- (6) = (2) x (5) / (3) / (4)
- (7) assumed 2.0% annual loss cost trend
- (8) = (6) x (7)
- (9) = (Selected for period 7/1/2022 to 6/30/2023) x (4) / (5) / (7)
- (10) = (3) x (9)

Arithmetic Average	8.16
Weighted Average	8.17
5 Period Arithmetic Average	7.83
3 Period Arithmetic Average	7.95
Prior Forecast	8.60
Frequency x Severity	8.23
Selected for period 7/1/2022 to 6/30/2023	8.20

City of Chandler
Workers' Compensation
Frequency / Severity Method for Losses & ALAE - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Preliminary Ultimate	(2) Selected Ultimate Counts	(3) Benefit Level Factor	(4) Preliminary Ultimate Severity	(5) Severity Trend Factor	(6) Preliminary Trended Ultimate Severity	(7) Adjusted Selected Severity	(8) Ultimate Severity
1/1/2003 to 6/30/2004	1,264,912	212	1.252	7,468	1.608	12,011	4,620	
7/1/2004 to 6/30/2005	621,971	143	1.230	5,352	1.560	8,346	4,846	
7/1/2005 to 6/30/2006	649,576	147	1.202	5,311	1.522	8,081	5,085	
7/1/2006 to 6/30/2007	607,316	135	1.187	5,342	1.485	7,930	5,276	
7/1/2007 to 6/30/2008	763,087	161	1.154	5,467	1.448	7,918	5,567	
7/1/2008 to 6/30/2009	675,237	165	1.101	4,507	1.413	6,368	5,976	
7/1/2009 to 6/30/2010	1,306,233	142	1.059	9,742	1.378	13,429	6,370	
7/1/2010 to 6/30/2011	966,822	153	1.044	6,598	1.345	8,874	6,623	
7/1/2011 to 6/30/2012	1,160,847	161	1.036	7,471	1.312	9,802	6,841	
7/1/2012 to 6/30/2013	1,059,226	135	1.028	8,141	1.280	10,421	7,068	
7/1/2013 to 6/30/2014	1,493,243	154	1.009	9,788	1.249	12,223	7,377	
7/1/2014 to 6/30/2015	990,329	143	1.002	6,939	1.218	8,454	7,618	
7/1/2015 to 6/30/2016	1,090,420	153	0.992	7,066	1.189	8,400	7,891	
7/1/2016 to 6/30/2017	1,264,190	133	1.000	9,508	1.160	11,027	8,017	
7/1/2017 to 6/30/2018	1,144,622	149	1.000	7,682	1.131	8,691	8,220	
7/1/2018 to 6/30/2019	1,146,555	158	0.996	7,230	1.104	7,980	8,457	
7/1/2019 to 6/30/2020	1,168,895	148	0.996	7,864	1.077	8,469	8,673	1,283,603
7/1/2020 to 6/30/2021	1,384,267	135	0.999	10,243	1.051	10,762	8,861	1,196,256
7/1/2021 to 6/30/2022	971,642	118	1.000	8,234	1.025	8,440	9,073	1,070,652
7/1/2022 to 6/30/2023	1,276,070	131	1.000	9,741	1.000	9,741	9,300	1,218,300
TOTALS	21,015,460	2,976						

Notes:

- (1) based on Exhibit D, Page 1 and 2, Column (4) and actuarial judgment
- (2) from Exhibit D, Page 7, Column (12)
- (3) based on information published by NCCI
- (4) = (1) / (2) x (3)
- (5) assumed 2.5% annual severity trend
- (6) = (4) x (5)
- (7) = (Selected for period 7/1/2022 to 6/30/2023) / [(3) x (5)]
- (8) = (2) x (7)

Excluding
Current
Period

Arithmetic Average
Weighted Average
5 Period Arithmetic Average
3 Period Arithmetic Average
Prior Forecast
Selected for period 7/1/2022 to 6/30/2023

City of Chandler
Workers' Compensation
Paid Losses & ALAE Bornhuetter-Ferguson Method - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Age in Months	(2) Preliminary Ultimate	(3) Actual Paid	(4) Cumulative Development Factors	(5) Expected Paid	(6) Expected Unpaid	(7) Ultimate
1/1/2003 to 6/30/2004	243	1,254,912	1,253,879	1.008	1,255,375	9,537	1,263,417
7/1/2004 to 6/30/2005	228	621,971	621,971	1.010	615,803	6,168	628,139
7/1/2005 to 6/30/2006	216	649,576	649,576	1.012	641,850	7,725	657,301
7/1/2006 to 6/30/2007	204	607,316	588,424	1.014	598,896	8,421	596,844
7/1/2007 to 6/30/2008	192	763,087	763,087	1.016	751,004	12,082	775,169
7/1/2008 to 6/30/2009	180	675,237	675,237	1.019	662,558	12,679	687,916
7/1/2009 to 6/30/2010	168	1,306,233	1,299,823	1.022	1,277,872	28,361	1,328,183
7/1/2010 to 6/30/2011	156	966,822	966,822	1.025	943,001	23,821	990,642
7/1/2011 to 6/30/2012	144	1,160,847	1,160,847	1.029	1,127,735	33,112	1,193,959
7/1/2012 to 6/30/2013	132	1,069,226	1,069,226	1.033	1,034,589	34,637	1,103,863
7/1/2013 to 6/30/2014	120	1,493,243	1,493,243	1.039	1,437,682	55,561	1,548,804
7/1/2014 to 6/30/2015	108	990,329	990,329	1.045	947,794	42,535	1,032,865
7/1/2015 to 6/30/2016	96	1,090,420	1,040,402	1.052	1,036,331	54,089	1,094,491
7/1/2016 to 6/30/2017	84	1,264,190	1,264,190	1.061	1,191,946	72,244	1,336,434
7/1/2017 to 6/30/2018	72	1,144,622	1,110,635	1.070	1,069,585	75,037	1,185,672
7/1/2018 to 6/30/2019	60	1,146,555	1,060,578	1.081	1,060,783	85,772	1,146,350
7/1/2019 to 6/30/2020	48	1,221,582	1,080,251	1.102	1,108,037	113,545	1,193,796
7/1/2020 to 6/30/2021	36	1,211,258	1,205,663	1.141	1,061,519	149,739	1,355,402
7/1/2021 to 6/30/2022	24	1,199,182	777,014	1.244	964,162	235,020	1,012,035
7/1/2022 to 6/30/2023	12	1,327,958	378,172	2.257	588,264	739,694	1,117,866
TOTALS		21,174,566	19,449,368		19,374,788	1,799,778	21,249,147

Notes:

- (1) = (average evaluation period) - (average policy period)
- (2) based on Exhibit D, Page 1 and 2, Column (4) and actuarial judgment; most recent 4 periods from Exhibit D, Page 3, Column (10)
- (3) from City of Chandler
- (4) from Appendix A, Page 1
- (5) = (2) x [1 / (4)]
- (6) = (2) x [1 - 1 / (4)]
- (7) = (3) + (6)

City of Chandler
Workers' Compensation
Incurred Losses & ALAE Bornhuetter-Ferguson Method - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Age in Months	(2) Preliminary Ultimate	(3) Actual Incurred	(4) Cumulative Development Factors	(5) Expected Incurred	(6) Expected IBNR	(7) Ultimate
1/1/2003 to 6/30/2004	243	1,264,912	1,264,912	1.000	1,264,912	0	1,264,912
7/1/2004 to 6/30/2005	228	621,971	621,971	1.000	621,971	0	621,971
7/1/2005 to 6/30/2006	216	649,576	649,576	1.000	649,576	0	649,576
7/1/2006 to 6/30/2007	204	607,316	607,316	1.000	607,316	0	607,316
7/1/2007 to 6/30/2008	192	763,087	763,087	1.000	763,087	0	763,087
7/1/2008 to 6/30/2009	180	675,237	675,237	1.000	675,237	0	675,237
7/1/2009 to 6/30/2010	168	1,306,233	1,304,928	1.001	1,304,928	1,305	1,306,233
7/1/2010 to 6/30/2011	156	966,822	966,822	1.002	964,891	1,931	968,753
7/1/2011 to 6/30/2012	144	1,160,847	1,160,847	1.003	1,157,371	3,476	1,164,323
7/1/2012 to 6/30/2013	132	1,069,226	1,069,226	1.004	1,064,960	4,266	1,073,492
7/1/2013 to 6/30/2014	120	1,493,243	1,493,243	1.005	1,485,799	7,444	1,500,687
7/1/2014 to 6/30/2015	108	990,329	990,329	1.006	984,408	5,921	996,251
7/1/2015 to 6/30/2016	96	1,090,420	1,090,420	1.007	1,082,817	7,602	1,098,022
7/1/2016 to 6/30/2017	84	1,264,190	1,264,190	1.008	1,254,122	10,068	1,274,258
7/1/2017 to 6/30/2018	72	1,144,622	1,144,622	1.011	1,132,110	12,512	1,157,135
7/1/2018 to 6/30/2019	60	1,146,555	1,128,598	1.016	1,128,380	18,175	1,146,773
7/1/2019 to 6/30/2020	48	1,221,582	1,123,047	1.021	1,196,237	25,346	1,148,392
7/1/2020 to 6/30/2021	36	1,211,258	1,350,396	1.031	1,174,382	36,875	1,387,272
7/1/2021 to 6/30/2022	24	1,199,182	810,586	1.050	1,142,116	57,066	867,652
7/1/2022 to 6/30/2023	12	1,327,958	949,608	1.286	1,032,461	295,498	1,245,106
TOTALS		21,174,566	20,428,961		20,687,081	487,485	20,916,446

Notes:

- (1) = (average evaluation period) - (average policy period)
- (2) based on Exhibit D, Page 1 and 2, Column (4) and actuarial judgment; most recent 4 periods from Exhibit D, Page 3, Column (10)
- (3) from City of Chandler
- (4) from Appendix A, Page 1
- (5) = (2) x [1 / (4)]
- (6) = (2) x [1 - 1 / (4)]
- (7) = (3) + (6)

City of Chandler
Workers' Compensation
Selected Ultimate Claim Counts - Excluding Closed Without Payments
Based on Data as of June 30, 2023

Policy Period	(1) Age in Months	(2) Exposures (\$1,000 Payroll)	(3) Exposure Trend	(4) Reported Counts	(5) Cumulative Development Factors	(6) Estimated Ultimate Counts	(7) Preliminary Frequency (per \$1M)	(8) Frequency Trend	(9) Preliminary Trended Frequency (per \$1M)	(10) Estimated Ultimate Counts	(11) Prior Ultimate Counts	(12) Selected Ultimate Counts	(13) Selected Frequency (per \$1M)
1/1/2003 to 6/30/2004	243	121,468	1.720	212	1.000	212	1.015	0.908	0.921	212	212	212	1.745
7/1/2004 to 6/30/2005	228	84,675	1.701	143	1.000	143	0.953	0.914	0.907	143	143	143	1.689
7/1/2005 to 6/30/2006	216	90,201	1.633	147	1.000	147	0.998	0.918	0.917	147	147	147	1.630
7/1/2006 to 6/30/2007	204	102,877	1.558	135	1.000	135	0.842	0.923	0.778	135	135	135	1.312
7/1/2007 to 6/30/2008	192	111,710	1.500	151	1.000	151	0.961	0.928	0.891	151	151	151	1.441
7/1/2008 to 6/30/2009	180	120,668	1.489	165	1.000	165	0.931	0.932	0.868	165	165	165	1.367
7/1/2009 to 6/30/2010	168	119,800	1.460	142	1.000	142	0.812	0.937	0.761	142	142	142	1.185
7/1/2010 to 6/30/2011	156	113,843	1.437	153	1.000	153	0.936	0.942	0.881	153	153	153	1.344
7/1/2011 to 6/30/2012	144	110,414	1.396	151	1.000	151	1.045	0.946	0.889	151	151	151	1.458
7/1/2012 to 6/30/2013	132	119,088	1.361	135	1.000	135	0.833	0.951	0.792	135	135	135	1.134
7/1/2013 to 6/30/2014	120	115,348	1.353	154	1.000	154	0.987	0.956	0.943	154	154	154	1.335
7/1/2014 to 6/30/2015	108	119,528	1.323	143	1.000	143	0.905	0.961	0.869	143	143	143	1.196
7/1/2015 to 6/30/2016	96	127,517	1.296	153	1.000	153	0.925	0.966	0.894	153	153	153	1.200
7/1/2016 to 6/30/2017	84	128,452	1.280	133	1.000	133	0.809	0.970	0.785	133	133	133	1.035
7/1/2017 to 6/30/2018	72	135,497	1.237	149	1.000	149	0.902	0.975	0.880	149	149	149	1.116
7/1/2018 to 6/30/2019	60	135,570	1.196	158	1.000	158	0.975	0.980	0.955	158	158	158	1.165
7/1/2019 to 6/30/2020	48	136,800	1.150	148	1.000	148	0.941	0.985	0.926	148	148	148	1.082
7/1/2020 to 6/30/2021	36	140,084	1.096	135	1.001	135	0.880	0.990	0.872	135	135	135	0.964
7/1/2021 to 6/30/2022	24	142,931	1.043	118	1.004	118	0.794	0.985	0.790	119	126	118	0.826
7/1/2022 to 6/30/2023	12	161,946	1.000	121	1.084	131	0.810	1.000	0.810	132	147	131	0.809
TOTALS		2,436,415		2,966		2,977				2,978	3,000	2,976	

Notes:

- (1) = (average evaluation period) - (average policy period)
- (2) from City of Chandler
- (3) Total Weighted by State annual trend from 2022 edition of NCCI Annual Statistical Bulletin
- (4) from City of Chandler
- (5) from Appendix A, Page 1
- (6) = (4) x (5)
- (7) = (6) / (2) x 1,000 / (3)
- (8) assumed -0.5% annual frequency trend
- (9) = (7) x (8)
- (10) = (selected (9) x (2) / 1,000 x (3) / (8) x (1 - 1 / (5))) + (4)
- (11) from previous Oliver Wyman study; current year adjusted for revised payroll
- (12) selected
- (13) = (12) / (2) x 1,000

Arithmetic Average
Weighted Average
5 Period Arithmetic Average
3 Period Arithmetic Average
Prior Forecast
Selected for period 7/1/2022 to 6/30/2023

Excluding
Current
Period

0.875
0.874
0.885
0.863
0.910
0.885

City of Chandler
Workers' Compensation
Actual vs. Expected Paid Losses & ALAE between 7/1/2022 and 6/30/2023 - Limited to Self-Insured Retention (SIR)
Based on Data as of June 30, 2023

Policy Period	(1) Ultimate @ 6/30/2022	(2) Paid @ 6/30/2022	(3) Unpaid @ 6/30/2022	(4) Expected Period Paid %	(5) Expected Period Paid	(6) Actual Period Paid	(7) Difference
1/1/2003 to 6/30/2004	1,923,000	1,889,593	33,407	17.4%	5,810	805	(5,005)
7/1/2004 to 6/30/2005	651,732	651,732	0	8.4%	0	0	0
7/1/2005 to 6/30/2006	1,029,500	980,808	48,692	7.8%	3,793	0	(3,793)
7/1/2006 to 6/30/2007	625,000	600,096	24,904	6.9%	1,709	180	(1,530)
7/1/2007 to 6/30/2008	1,081,000	788,091	292,909	6.1%	17,876	18,992	1,116
7/1/2008 to 6/30/2009	1,307,000	1,164,618	142,382	6.2%	8,809	4,382	(4,427)
7/1/2009 to 6/30/2010	1,779,000	1,488,829	290,171	5.7%	16,458	7,066	(9,392)
7/1/2010 to 6/30/2011	1,456,561	1,456,561	0	8.1%	0	0	0
7/1/2011 to 6/30/2012	2,260,000	1,905,384	354,616	5.9%	20,844	16,853	(3,991)
7/1/2012 to 6/30/2013	2,365,000	2,129,662	235,338	6.9%	16,350	30,464	14,114
7/1/2013 to 6/30/2014	2,740,000	2,400,586	339,414	8.2%	27,759	36,338	8,578
7/1/2014 to 6/30/2015	2,082,223	1,461,313	620,910	9.1%	56,563	68,113	11,550
7/1/2015 to 6/30/2016	3,624,000	2,655,922	968,078	3.4%	32,626	171,209	138,583
7/1/2016 to 6/30/2017	1,845,000	1,634,744	210,256	0.5%	1,066	10,706	9,640
7/1/2017 to 6/30/2018	2,923,000	1,691,843	1,231,157	3.8%	47,284	56,838	9,554
7/1/2018 to 6/30/2019	1,804,000	1,050,185	753,815	3.5%	26,089	93,143	67,053
7/1/2019 to 6/30/2020	2,110,000	1,169,315	940,685	3.6%	34,122	176,882	142,759
7/1/2020 to 6/30/2021	2,885,000	1,428,945	1,456,055	3.5%	50,968	118,055	67,087
7/1/2021 to 6/30/2022	3,271,000	709,428	2,561,572	57.3%	1,467,907	235,096	(1,232,811)
TOTALS	37,762,016	27,257,655	10,504,362		1,836,035	1,045,121	(790,914)

Notes:

- (1) from previous Oliver Wyman study
- (2) from previous Oliver Wyman study
- (3) = (1) - (2)
- (4) based on paid loss development factors from previous Oliver Wyman study

- (5) = (3) x (4)
- (6) from City of Chandler
- (7) = (6) - (5)

City of Chandler
Workers' Compensation

Actual vs. Expected Incurred Losses & ALAE between 7/1/2022 and 6/30/2023 - Limited to Self-Insured Retention (SIR)
Based on Data as of June 30, 2023

Policy Period	(1) Ultimate @ 6/30/2022	(2) Incurred @ 6/30/2022	(3) IBNR @ 6/30/2022	(4) Expected Period Incurred %	(5) Expected Period Incurred	(6) Actual Period Incurred	(7) Difference
1/1/2003 to 6/30/2004	1,923,000	1,919,198	3,802	100.0%	3,802	0	(3,802)
7/1/2004 to 6/30/2005	651,732	651,732	0	13.6%	0	0	0
7/1/2005 to 6/30/2006	1,029,500	1,025,022	4,478	25.6%	1,146	0	(1,146)
7/1/2006 to 6/30/2007	625,000	619,168	5,832	18.8%	1,094	0	(1,094)
7/1/2007 to 6/30/2008	1,081,000	1,073,094	7,906	10.2%	809	(72,079)	(72,888)
7/1/2008 to 6/30/2009	1,307,000	1,297,670	9,330	34.9%	3,254	0	(3,254)
7/1/2009 to 6/30/2010	1,779,000	1,752,699	26,301	17.1%	4,492	(359)	(4,851)
7/1/2010 to 6/30/2011	1,456,561	1,456,561	0	18.9%	0	0	0
7/1/2011 to 6/30/2012	2,260,000	2,229,312	30,688	4.6%	1,399	(3,466)	(4,865)
7/1/2012 to 6/30/2013	2,365,000	2,332,401	32,599	12.5%	4,082	0	(4,082)
7/1/2013 to 6/30/2014	2,740,000	2,676,520	63,480	18.3%	11,606	(3,575)	(15,181)
7/1/2014 to 6/30/2015	2,082,223	2,082,223	0	23.3%	0	0	0
7/1/2015 to 6/30/2016	3,624,000	3,537,918	86,082	6.0%	5,180	52	(5,129)
7/1/2016 to 6/30/2017	1,845,000	1,723,760	121,240	18.2%	22,061	10,000	(12,061)
7/1/2017 to 6/30/2018	2,923,000	2,746,249	176,751	26.8%	47,297	(11,896)	(59,192)
7/1/2018 to 6/30/2019	1,804,000	1,603,007	200,993	6.2%	12,549	145,704	133,155
7/1/2019 to 6/30/2020	2,110,000	1,915,358	194,642	5.9%	11,438	92,909	81,471
7/1/2020 to 6/30/2021	2,885,000	2,582,253	302,747	6.5%	19,704	306,503	286,799
7/1/2021 to 6/30/2022	3,271,000	2,625,867	645,133	68.4%	441,441	(362,498)	(803,939)
TOTALS	37,762,016	35,850,012	1,912,004		591,353	101,295	(490,058)

Notes:

- (1) from previous Oliver Wyman study
- (2) from previous Oliver Wyman study
- (3) = (1) - (2)
- (4) based on incurred loss development factors from previous Oliver Wyman study

- (5) = (3) x (4)
- (6) from City of Chandler
- (7) = (6) - (5)

City of Chandler
Workers' Compensation
Actual vs. Expected Paid Losses & ALAE between 7/1/2022 and 6/30/2023 - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Ultimate @ 6/30/2022	(2) Paid @ 6/30/2022	(3) Unpaid @ 6/30/2022	(4) Expected Period Paid %	(5) Expected Period Paid	(6) Actual Period Paid	(7) Difference
1/1/2003 to 6/30/2004	1,264,912	1,253,758	11,155	17.4%	1,940	122	(1,818)
7/1/2004 to 6/30/2005	621,971	621,971	0	17.1%	0	0	0
7/1/2005 to 6/30/2006	649,576	649,576	0	15.4%	0	0	0
7/1/2006 to 6/30/2007	508,000	588,244	19,756	14.4%	2,850	180	(2,670)
7/1/2007 to 6/30/2008	812,000	750,292	61,708	13.6%	8,369	12,795	4,426
7/1/2008 to 6/30/2009	675,237	675,237	0	13.5%	0	0	0
7/1/2009 to 6/30/2010	1,310,000	1,299,526	10,474	12.2%	1,280	297	(983)
7/1/2010 to 6/30/2011	966,822	966,822	0	15.7%	0	0	0
7/1/2011 to 6/30/2012	1,170,000	1,160,847	9,153	13.7%	1,257	0	(1,257)
7/1/2012 to 6/30/2013	1,069,226	1,069,226	0	16.7%	0	0	0
7/1/2013 to 6/30/2014	1,505,000	1,493,243	11,757	16.1%	1,898	0	(1,898)
7/1/2014 to 6/30/2015	990,329	990,329	0	14.9%	0	0	0
7/1/2015 to 6/30/2016	1,090,368	1,040,350	50,018	13.8%	6,915	52	(6,863)
7/1/2016 to 6/30/2017	1,264,190	1,264,190	0	12.0%	0	0	0
7/1/2017 to 6/30/2018	1,180,000	1,108,047	71,953	15.1%	10,869	2,588	(8,281)
7/1/2018 to 6/30/2019	1,104,000	994,592	109,408	13.0%	14,173	65,986	51,813
7/1/2019 to 6/30/2020	1,121,000	970,464	150,536	14.5%	21,799	109,787	87,987
7/1/2020 to 6/30/2021	1,435,000	1,148,306	286,694	39.7%	113,803	57,357	(56,446)
7/1/2021 to 6/30/2022	1,296,000	593,767	702,233	64.6%	453,552	183,248	(270,304)
TOTALS	20,133,631	18,638,786	1,494,844		638,704	432,410	(206,294)

Notes:

- (1) from previous Oliver Wyman study
- (2) from previous Oliver Wyman study
- (3) = (1) - (2)
- (4) based on paid loss development factors from previous Oliver Wyman study
- (5) = (3) x (4)
- (6) from City of Chandler
- (7) = (6) - (5)

City of Chandler
Workers' Compensation
Actual vs. Expected Incurred Losses & ALAE between 7/1/2022 and 6/30/2023 - Limited to \$75,000
Based on Data as of June 30, 2023

Policy Period	(1) Ultimate @ 6/30/2022	(2) Incurred @ 6/30/2022	(3) IBNR @ 6/30/2022	(4) Expected Period Incurred %	(5) Expected Period Incurred	(6) Actual Period Incurred	(7) Difference
1/1/2003 to 6/30/2004	1,264,912	1,264,912	0	100.0%	0	0	0
7/1/2004 to 6/30/2005	621,971	621,971	0	30.2%	0	0	0
7/1/2005 to 6/30/2006	649,576	649,576	0	36.9%	0	0	0
7/1/2006 to 6/30/2007	608,000	607,316	684	29.2%	200	0	(200)
7/1/2007 to 6/30/2008	812,000	811,227	773	18.4%	143	(48,141)	(48,283)
7/1/2008 to 6/30/2009	675,237	675,237	0	40.4%	0	0	0
7/1/2009 to 6/30/2010	1,310,000	1,305,287	4,713	23.8%	1,124	(359)	(1,483)
7/1/2010 to 6/30/2011	966,822	966,822	0	26.0%	0	0	0
7/1/2011 to 6/30/2012	1,170,000	1,164,313	5,687	11.4%	646	(3,466)	(4,112)
7/1/2012 to 6/30/2013	1,069,226	1,069,226	0	20.2%	0	0	0
7/1/2013 to 6/30/2014	1,505,000	1,496,818	8,182	19.7%	1,609	(3,575)	(5,184)
7/1/2014 to 6/30/2015	990,329	990,329	0	22.9%	0	0	0
7/1/2015 to 6/30/2016	1,090,368	1,090,368	0	13.6%	0	52	52
7/1/2016 to 6/30/2017	1,264,190	1,264,190	0	28.9%	0	0	0
7/1/2017 to 6/30/2018	1,180,000	1,156,518	23,482	32.4%	7,617	(11,896)	(19,512)
7/1/2018 to 6/30/2019	1,104,000	1,078,690	25,310	24.4%	6,176	49,908	43,732
7/1/2019 to 6/30/2020	1,121,000	1,083,624	37,376	32.6%	12,176	39,423	27,247
7/1/2020 to 6/30/2021	1,435,000	1,374,718	60,282	39.0%	23,497	(24,321)	(47,818)
7/1/2021 to 6/30/2022	1,296,000	1,002,644	293,356	79.6%	233,461	(192,058)	(425,519)
TOTALS	20,133,631	19,673,786	459,845		286,647	(194,433)	(481,080)

Notes:

- (1) from previous Oliver Wyman study
(2) from previous Oliver Wyman study
(3) = (1) - (2)
(4) based on incurred loss development factors from previous Oliver Wyman study
- (5) = (3) x (4)
(6) from City of Chandler
(7) = (6) - (5)

Age	Paid Losses & ALAE										Incurred Losses & ALAE										Reported Counts	
	75,000	500,000	600,000	880,000	1,000,000	1,055,000	1,800,000	2,400,000	2,550,000	2,506	75,000	500,000	600,000	880,000	1,055,000	1,800,000	2,400,000	2,550,000	1,374	1,374	Age	Excl. GVOP
12	2.257	2.448	2.453	2.459	2.475	2.477	2.477	2.499	2.505	2.506	1.286	1.353	1.355	1.361	1.364	1.372	1.374	1.374	1.374	1.374	12	1,084
24	1.244	1.309	1.311	1.316	1.318	1.319	1.323	1.323	1.325	1.325	1.050	1.079	1.080	1.082	1.083	1.086	1.087	1.087	1.087	1.087	24	1,004
36	1.141	1.250	1.252	1.256	1.259	1.261	1.261	1.265	1.268	1.268	1.021	1.063	1.064	1.067	1.069	1.072	1.073	1.073	1.073	1.073	36	1,001
48	1.022	1.280	1.283	1.289	1.292	1.292	1.298	1.298	1.300	1.300	1.021	1.055	1.057	1.060	1.062	1.065	1.067	1.067	1.067	1.067	48	1,000
60	1.021	1.177	1.180	1.180	1.184	1.184	1.186	1.186	1.188	1.188	1.016	1.050	1.051	1.054	1.056	1.060	1.061	1.061	1.061	1.061	60	1,000
72	1.070	1.167	1.171	1.171	1.176	1.176	1.179	1.179	1.182	1.182	1.011	1.037	1.038	1.041	1.043	1.046	1.046	1.046	1.046	1.046	72	1,000
84	1.061	1.158	1.162	1.162	1.168	1.168	1.171	1.171	1.174	1.174	1.008	1.030	1.031	1.034	1.035	1.038	1.039	1.039	1.039	1.039	84	1,000
96	1.052	1.148	1.152	1.152	1.158	1.158	1.161	1.161	1.164	1.164	1.007	1.030	1.031	1.034	1.035	1.038	1.039	1.039	1.039	1.039	96	1,000
108	1.045	1.139	1.143	1.143	1.149	1.149	1.152	1.152	1.155	1.155	1.006	1.029	1.030	1.033	1.035	1.038	1.039	1.039	1.039	1.039	108	1,000
120	1.039	1.131	1.135	1.135	1.141	1.141	1.144	1.144	1.147	1.147	1.005	1.027	1.028	1.031	1.033	1.036	1.037	1.037	1.037	1.037	120	1,000
132	1.033	1.124	1.128	1.128	1.134	1.134	1.137	1.137	1.140	1.140	1.004	1.024	1.025	1.028	1.029	1.032	1.033	1.033	1.033	1.033	132	1,000
144	1.029	1.119	1.123	1.123	1.129	1.129	1.132	1.132	1.135	1.135	1.003	1.019	1.020	1.023	1.024	1.027	1.028	1.028	1.028	1.028	144	1,000
156	1.025	1.111	1.115	1.115	1.121	1.121	1.124	1.124	1.127	1.127	1.002	1.014	1.014	1.016	1.017	1.019	1.020	1.020	1.020	1.020	156	1,000
168	1.022	1.107	1.111	1.111	1.117	1.117	1.120	1.120	1.123	1.123	1.001	1.007	1.007	1.009	1.009	1.010	1.011	1.011	1.011	1.011	168	1,000
180	1.019	1.102	1.105	1.105	1.111	1.111	1.114	1.114	1.117	1.117	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	180	1,000
192	1.016	1.094	1.098	1.098	1.104	1.104	1.107	1.107	1.110	1.110	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	192	1,000
204	1.014	1.092	1.096	1.096	1.102	1.102	1.105	1.105	1.108	1.108	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	204	1,000
216	1.012	1.089	1.093	1.093	1.100	1.100	1.103	1.103	1.106	1.106	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	216	1,000
228	1.010	1.085	1.089	1.089	1.100	1.100	1.103	1.103	1.106	1.106	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	228	1,000
240	1.008	1.080	1.084	1.084	1.106	1.106	1.109	1.109	1.111	1.111	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	240	1,000

Notes:
limited (bolded) paid LDFs based on Appendix A, Page 2
other (bolded) incurred LDFs based on Appendix A, Page 3
other LDFs are adjusted using Oliver Wyman reactivities
reported count factors based on Appendix A, Page 4

Industry development factors based on data from the 2023 edition of NCCI Annual Statistical Bulletin

[illegible]

Notes:
Industry development factors based on data from the 2021 edition of NCCI Annual Statistical Bulletin

[illegible][illegible]

City of Chandler
Workers' Compensation
Paid Losses & ALAE / Ultimate Losses & ALAE - Limited to \$75,000
Based on Data as of June 30, 2023

Account Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	247,046	565,242	621,763	661,178	715,176	770,556	722,269	722,205	722,300	725,097	725,897	725,665	725,665	725,665	725,665	725,665	725,665	725,665	725,665	725,665
7/1/2004	276,397	536,761	577,418	592,457	605,379	600,033	616,357	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775
7/1/2005	200,786	505,956	552,067	594,741	603,672	614,644	622,212	629,386	640,201	649,276	649,276	649,276	649,276	649,276	649,276	649,276	649,276	649,276	649,276	649,276
7/1/2006	200,247	464,091	511,101	552,386	552,895	564,807	581,105	578,421	581,840	581,848	582,503	582,503	582,503	582,503	582,503	582,503	582,503	582,503	582,503	582,503
7/1/2007	321,283	616,773	702,222	685,014	595,827	595,827	597,997	602,245	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716
7/1/2008	331,181	616,773	702,222	685,014	595,827	595,827	597,997	602,245	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716	604,716
7/1/2009	807,243	1,268,370	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229	1,274,229
7/1/2010	667,115	932,878	953,800	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497	958,497
7/1/2011	608,264	1,040,286	1,107,126	1,140,890	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179	1,152,179
7/1/2012	308,264	737,223	822,237	861,204	892,282	907,688	1,037,066	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226	1,069,226
7/1/2013	515,797	1,109,619	1,422,414	1,433,603	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349	1,479,349
7/1/2014	557,797	927,794	988,164	988,803	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329	990,329
7/1/2015	498,863	903,262	998,672	997,797	1,034,850	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344	1,040,344
7/1/2016	443,228	1,121,329	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076	1,098,076
7/1/2017	477,621	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292	974,292
7/1/2018	511,953	927,140	974,292	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251	1,080,251
7/1/2019	596,321	1,148,306	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463	1,205,463
7/1/2020	593,767	777,014																		
7/1/2021	378,172																			
7/1/2022																				

Account Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	0.444	0.563	0.629	0.653	0.672	0.679	0.691	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
7/1/2004	0.399	0.770	0.851	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875	0.875
7/1/2005	0.345	0.765	0.875	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910
7/1/2006	0.460	0.808	0.920	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946	0.946
7/1/2007	0.477	0.901	0.922	0.915	0.906	0.929	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952	0.952
7/1/2008	0.617	0.969	0.973	0.961	0.970	0.969	0.969	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2009	0.690	0.965	0.986	0.989	0.993	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
7/1/2010	0.566	0.898	0.954	0.983	0.993	0.994	0.997	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2011	0.288	0.690	0.797	0.855	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841	0.841
7/1/2012	0.245	0.783	0.923	0.960	0.990	0.991	0.991	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2013	0.340	0.837	0.958	0.998	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	1.000
7/1/2014	0.385	0.838	0.958	0.998	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	1.000
7/1/2015	0.533	0.972	0.953	0.960	0.968	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970
7/1/2016	0.527	0.972	0.953	0.960	0.968	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970
7/1/2017	0.450	0.972	0.953	0.960	0.968	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970
7/1/2018	0.447	0.967	0.944	0.955	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932	0.932
7/1/2019	0.424	0.926	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884	0.884
7/1/2020	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602
7/1/2021	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602	0.602
7/1/2022	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598	0.598

City of Chandler
Workers' Compensation
Incurred Losses & ALAE / Ultimate Losses & ALAE - Limited to \$75,000
Based on Data as of June 30, 2023

Accident Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
Beginning																				
7/1/2001	405,319	615,533	694,303	716,149	753,179	744,414	746,126	746,568	745,968	746,350	746,550	746,507	745,507	757,007	770,204	770,204	786,381	786,381	786,381	786,381
7/1/2004	433,092	596,058	636,433	655,098	694,707	654,721	654,020	655,980	652,775	649,775	649,775	649,775	649,775	649,775	649,775	649,775	649,775	649,775	649,775	649,775
7/1/2005	210,097	566,416	611,104	665,312	694,707	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810
7/1/2006	210,097	566,416	611,104	665,312	694,707	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810	641,810
7/1/2007	591,135	712,531	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707
7/1/2008	606,357	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707	694,707
7/1/2009	1,290,165	1,394,432	1,317,306	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754	1,278,754
7/1/2010	846,987	997,056	971,254	962,038	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714	966,714
7/1/2011	1,111,010	1,158,245	1,151,669	1,164,497	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245	1,158,245
7/1/2012	540,779	962,837	971,078	888,482	986,527	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675	1,028,675
7/1/2013	1,110,080	1,536,783	1,478,594	1,480,078	1,491,735	1,486,217	1,472,586	1,463,450	1,456,818	1,450,226	1,443,243	1,436,243	1,429,243	1,422,243	1,415,243	1,408,243	1,401,243	1,394,243	1,387,243	1,380,243
7/1/2014	718,305	1,067,238	1,066,337	1,060,018	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362	1,060,362
7/1/2015	1,070,000	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422	1,257,422
7/1/2016	1,201,210	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141	1,230,141
7/1/2017	812,931	1,070,028	1,080,337	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509	1,078,509
7/1/2018	850,380	1,040,391	1,081,024	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047	1,121,047
7/1/2019	1,314,418	1,374,718	1,350,396																	
7/1/2020	1,002,644	810,586																		
7/1/2021																				
7/1/2022	940,608																			

Accident Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
Beginning																				
7/1/2003																				
7/1/2004	0.696	0.958	1.023	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053	1.053
7/1/2005	0.337	0.870	0.944	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024	1.024
7/1/2006	0.580	0.943	1.004	1.032	1.015	1.014	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013
7/1/2007	0.775	0.965	1.011	0.912	0.807	0.860	0.917	0.942	0.936	0.929	0.924	0.927	0.927	0.927	0.927	0.927	0.927	0.927	0.927	0.927
7/1/2008	0.688	1.030	0.970	0.953	0.952	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
7/1/2009	0.924	0.876	1.006	0.977	0.976	0.974	0.978	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
7/1/2010	0.876	1.031	1.005	0.995	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	1.000	1.000	1.000
7/1/2011	0.959	0.998	0.992	1.001	0.998	1.001	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
7/1/2012	0.959	0.998	0.992	1.001	0.998	1.001	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
7/1/2013	0.943	0.971	1.001	0.971	0.999	0.995	0.991	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2014	0.962	1.031	1.019	1.027	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	1.000
7/1/2015	0.669	0.989	0.995	0.997	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	1.000
7/1/2016	0.728	0.989	0.995	1.004	1.003	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
7/1/2017	1.590	1.077	1.004	1.003	1.010	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
7/1/2018	0.706	0.938	0.939	0.938	0.961	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965
7/1/2019	0.747	0.905	0.942	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977
7/1/2020	0.960	0.989	0.982																	
7/1/2021	1.007	0.962																		
7/1/2022	0.748																			

City of Chandler
Workers' Compensation
Rate of Paid Losses & ALAE to Exposure (\$5,000 Payroll) - Limited to \$75,000
Based on Data as of June 30, 2023

Accident Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	267,026	565,311	621,763	661,178	714,176	720,556	722,269	722,205	722,100	725,097	725,097	725,655	725,655	725,679	729,785	729,785	734,870	734,870	735,127	735,240
7/1/2004	276,397	536,761	577,418	592,457	603,379	605,033	616,357	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775	621,775
7/1/2005	290,706	505,266	552,607	594,741	603,672	614,644	622,212	620,380	620,380	620,380	620,380	620,380	620,380	620,380	620,380	620,380	620,380	620,380	620,380	620,380
7/1/2006	300,307	464,091	521,481	552,895	562,895	564,890	565,106	565,106	565,106	565,106	565,106	565,106	565,106	565,106	565,106	565,106	565,106	565,106	565,106	565,106
7/1/2007	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2008	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2009	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2010	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2011	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2012	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2013	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2014	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2015	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2016	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2017	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2018	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2019	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2020	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2021	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726
7/1/2022	351,883	615,773	702,322	645,614	596,827	595,827	597,997	635,245	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726	644,726

Accident Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	299	684	752	800	865	871	874	873	874	878	878	878	878	878	895	906	937	937	937	938
7/1/2004	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2005	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2006	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2007	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2008	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2009	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2010	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2011	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2012	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2013	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2014	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2015	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2016	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2017	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2018	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2019	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2020	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2021	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735
7/1/2022	326	634	682	700	715	719	728	734	734	734	734	734	734	734	735	735	735	735	735	735

City of Chandler
Workers' Compensation
Rate of Incurred Losses & ALAE to Exposure (\$1,000 Payroll) - Limited to \$75,000
Based on Data as of June 30, 2023

Accident Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	405,310	615,233	638,303	716,130	751,170	744,414	746,126	746,568	745,368	746,550	746,550	746,507	746,507	752,007	770,294	770,294	786,283	786,283	786,283	786,283
7/1/2004	431,092	596,068	636,433	655,098	654,707	654,721	654,029	655,980	643,968	643,968	643,968	643,968	643,968	643,968	643,968	643,968	643,968	643,968	643,968	643,968
7/1/2005	218,097	362,416	411,404	465,312	542,900	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810
7/1/2006	218,097	362,416	411,404	465,312	542,900	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810	643,810
7/1/2007	501,135	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221	771,221
7/1/2008	606,167	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001	696,001
7/1/2009	1,209,165	1,386,432	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386	1,387,386
7/1/2010	846,987	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056	997,056
7/1/2011	1,111,010	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945	1,158,945
7/1/2012	549,779	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837	982,837
7/1/2013	1,110,080	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783	1,536,783
7/1/2014	1,041,527	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443	1,020,443
7/1/2015	718,305	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288	1,067,288
7/1/2016	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169	1,203,169
7/1/2017	829,380	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028	1,070,028
7/1/2018	1,334,518	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718	1,374,718
7/1/2019	1,002,644	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286	810,286
7/1/2020	909,608																			

Accident Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	430	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744	744
7/1/2004	531	704	704	704	704	704	704	704	704	704	704	704	704	704	704	704	704	704	704	704
7/1/2005	348	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556
7/1/2006	529	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609	609
7/1/2007	501	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576	576
7/1/2008	1009	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156	1156
7/1/2009	744	876	876	876	876	876	876	876	876	876	876	876	876	876	876	876	876	876	876	876
7/1/2010	1008	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049	1049
7/1/2011	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462	462
7/1/2012	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871	871
7/1/2013	563	837	837	837	837	837	837	837	837	837	837	837	837	837	837	837	837	837	837	837
7/1/2014	716	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923
7/1/2015	901	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923	923
7/1/2016	599	756	756	756	756	756	756	756	756	756	756	756	756	756	756	756	756	756	756	756
7/1/2017	628	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760	760
7/1/2018	953	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981
7/1/2019	701	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567	567

City of Chandler
Workers' Compensation
Closed Claim Counts / Ultimate Claim Counts - Excluding Closed Without Payments
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	92	110	146	145	145	146	147	148	148	149	148	148	148	148	148	148	148	148	148	148
7/1/2004	76	138	139	139	140	140	141	141	141	141	141	141	141	141	141	141	141	141	141	141
7/1/2005	117	144	144	145	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146
7/1/2006	106	129	129	130	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131
7/1/2007	106	129	129	130	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131
7/1/2008	116	135	135	136	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137
7/1/2009	103	126	126	127	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
7/1/2010	101	132	132	133	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134
7/1/2011	93	142	142	143	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
7/1/2012	71	108	110	110	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111	111
7/1/2013	62	112	112	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
7/1/2014	63	139	148	147	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148
7/1/2015	88	108	123	126	128	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131
7/1/2016	92	125	125	126	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127
7/1/2017	94	137	144	144	145	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146
7/1/2018	70	124	126	126	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127
7/1/2019	73	116	116	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117
7/1/2020	84	112	112	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
7/1/2021	84	112	112	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113	113
7/1/2022	72																			

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	0.531	0.265	0.972	0.572	0.579	0.977	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2004	0.796	0.580	0.980	0.586	0.593	0.993	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2005	0.689	0.519	0.956	0.578	0.580	0.976	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2006	0.658	0.525	0.950	0.557	0.550	0.975	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2007	0.703	0.539	0.964	0.553	0.542	0.975	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2008	0.725	0.587	0.987	0.579	0.572	0.986	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2009	0.660	0.563	0.974	0.587	0.587	0.987	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2010	0.578	0.582	0.944	0.550	0.553	0.959	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2011	0.526	0.580	0.981	0.556	0.556	0.956	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2012	0.527	0.571	0.903	0.542	0.555	0.951	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2013	0.527	0.571	0.903	0.542	0.555	0.951	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2014	0.534	0.578	0.957	0.542	0.555	0.951	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2015	0.412	0.528	0.957	0.542	0.555	0.951	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2016	0.421	0.522	0.925	0.546	0.552	0.952	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2017	0.638	0.566	0.946	0.546	0.552	0.952	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2018	0.595	0.567	0.957	0.546	0.552	0.952	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2019	0.534	0.538	0.910	0.546	0.552	0.952	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2020	0.541	0.541	0.933	0.546	0.552	0.952	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2021	0.712	0.549	0.933	0.546	0.552	0.952	0.246	0.586	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7/1/2022	0.590																			

City of Chandler
Workers' Compensation
Reported Claim Counts / Ultimate Claim Counts - Excluding Closed Without Payments
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	143	150	149	149	149	149	149	149	151	149	149	149	149	149	149	149	149	149	149	149
7/1/2004	135	141	142	142	142	142	143	143	143	143	143	143	143	143	143	143	143	143	143	143
7/1/2005	130	147	147	147	147	147	155	147	147	147	147	147	147	147	147	147	147	147	147	147
7/1/2006	104	135	135	135	135	139	135	135	135	135	135	135	135	135	135	135	135	135	135	135
7/1/2007	154	159	160	160	160	160	160	160	160	161	161	161	161	161	161	161	161	161	161	161
7/1/2008	144	166	166	166	166	166	165	165	165	164	165	165	165	165	165	165	165	165	165	165
7/1/2009	144	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177	177
7/1/2010	148	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
7/1/2011	148	151	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152
7/1/2012	107	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
7/1/2013	128	133	134	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
7/1/2014	146	154	154	154	154	154	154	154	154	154	154	154	154	154	154	154	154	154	154	154
7/1/2015	138	140	142	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
7/1/2016	137	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153
7/1/2017	135	131	132	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133
7/1/2018	145	150	150	150	150	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149
7/1/2019	145	150	150	150	150	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149
7/1/2020	134	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148	148
7/1/2021	128	134	135	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146	146
7/1/2022	115	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2004	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2005	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2006	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2007	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2008	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2009	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2010	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2011	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2012	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2013	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2014	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2015	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2016	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2017	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2018	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2019	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2020	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2021	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2022	0.944	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993

City of Chandler
Workers' Compensation
Rate of Reported Count Frequency to Exposure (Payroll (per \$1M)) - Excluding Closed Without Payments
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	143	150	140	140	149	149	140	149	151	149	140	149	149	149	149	149	149	149	149	149
7/1/2004	135	141	142	142	142	142	143	143	143	143	143	143	143	143	143	143	143	143	143	143
7/1/2005	130	147	147	147	147	147	147	147	147	147	147	147	147	147	147	147	147	147	147	147
7/1/2006	104	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
7/1/2007	104	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149
7/1/2008	140	144	147	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
7/1/2009	148	161	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153
7/1/2010	167	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161	161
7/1/2011	128	133	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134
7/1/2012	138	140	142	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
7/1/2013	135	131	132	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133	133
7/1/2014	146	150	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149
7/1/2015	136	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142
7/1/2016	128	134	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135	135
7/1/2017	115	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118	118
7/1/2018	121																			
7/1/2019	121																			
7/1/2020	121																			
7/1/2021	121																			
7/1/2022	121																			

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2004	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2005	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2006	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2007	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2008	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2009	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2010	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2011	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2012	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2013	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2014	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2015	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2016	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2017	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2018	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2019	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2020	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2021	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802
7/1/2022	1729	1824	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802	1802

City of Chandler
Workers' Compensation
Paid Losses & ALAE / Incurred Losses & ALAE - Limited to \$75,000
Based on Data as of June 30, 2023

Accident Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	0.609	0.718	0.744	0.723	0.750	0.768	0.788	0.768	0.768	0.772	0.772	0.772	0.772	0.772	0.760	0.772	0.782	0.786	0.786	0.786
7/1/2004	0.638	0.701	0.707	0.704	0.725	0.730	0.742	0.748	0.768	0.772	0.772	0.772	0.772	0.772	0.760	0.772	0.782	0.786	0.786	0.786
7/1/2005	0.638	0.695	0.701	0.694	0.719	0.725	0.736	0.747	0.767	0.772	0.772	0.772	0.772	0.772	0.760	0.772	0.782	0.786	0.786	0.786
7/1/2006	0.685	0.811	0.817	0.821	0.827	0.828	0.834	0.845	0.858	0.868	0.868	0.868	0.868	0.868	0.858	0.868	0.878	0.882	0.882	0.882
7/1/2007	0.694	0.827	0.832	0.834	0.840	0.843	0.854	0.867	0.884	0.894	0.894	0.894	0.894	0.894	0.884	0.894	0.904	0.908	0.908	0.908
7/1/2008	0.694	0.827	0.832	0.834	0.840	0.843	0.854	0.867	0.884	0.894	0.894	0.894	0.894	0.894	0.884	0.894	0.904	0.908	0.908	0.908
7/1/2009	0.688	0.816	0.822	0.824	0.830	0.833	0.844	0.857	0.874	0.884	0.884	0.884	0.884	0.884	0.874	0.884	0.894	0.898	0.898	0.898
7/1/2010	0.788	0.936	0.942	0.944	0.950	0.953	0.964	0.977	0.994	1.000	1.000	1.000	1.000	1.000	0.990	1.000	1.000	1.000	1.000	1.000
7/1/2011	0.790	0.936	0.942	0.944	0.950	0.953	0.964	0.977	0.994	1.000	1.000	1.000	1.000	1.000	0.990	1.000	1.000	1.000	1.000	1.000
7/1/2012	0.790	0.936	0.942	0.944	0.950	0.953	0.964	0.977	0.994	1.000	1.000	1.000	1.000	1.000	0.990	1.000	1.000	1.000	1.000	1.000
7/1/2013	0.665	0.770	0.777	0.769	0.794	0.801	0.811	0.825	0.842	0.852	0.852	0.852	0.852	0.852	0.842	0.852	0.862	0.866	0.866	0.866
7/1/2014	0.636	0.762	0.762	0.762	0.780	0.780	0.791	0.801	0.818	0.828	0.828	0.828	0.828	0.828	0.818	0.828	0.838	0.842	0.842	0.842
7/1/2015	0.583	0.696	0.696	0.696	0.714	0.714	0.725	0.736	0.753	0.763	0.763	0.763	0.763	0.763	0.753	0.763	0.773	0.777	0.777	0.777
7/1/2016	0.540	0.654	0.654	0.654	0.672	0.672	0.683	0.694	0.711	0.721	0.721	0.721	0.721	0.721	0.711	0.721	0.731	0.735	0.735	0.735
7/1/2017	0.540	0.654	0.654	0.654	0.672	0.672	0.683	0.694	0.711	0.721	0.721	0.721	0.721	0.721	0.711	0.721	0.731	0.735	0.735	0.735
7/1/2018	0.536	0.650	0.650	0.650	0.668	0.668	0.679	0.690	0.707	0.717	0.717	0.717	0.717	0.717	0.707	0.717	0.727	0.731	0.731	0.731
7/1/2019	0.536	0.650	0.650	0.650	0.668	0.668	0.679	0.690	0.707	0.717	0.717	0.717	0.717	0.717	0.707	0.717	0.727	0.731	0.731	0.731
7/1/2020	0.442	0.556	0.556	0.556	0.574	0.574	0.585	0.596	0.613	0.623	0.623	0.623	0.623	0.623	0.613	0.623	0.633	0.637	0.637	0.637
7/1/2021	0.442	0.556	0.556	0.556	0.574	0.574	0.585	0.596	0.613	0.623	0.623	0.623	0.623	0.623	0.613	0.623	0.633	0.637	0.637	0.637
7/1/2022	0.398	0.512	0.512	0.512	0.530	0.530	0.541	0.552	0.569	0.579	0.579	0.579	0.579	0.579	0.569	0.579	0.589	0.593	0.593	0.593

City of Chandler
Workers' Compensation
Closed Claim Counts / Reported Claim Counts - Excluding Closed Without Payments
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	0.643	0.867	0.980	0.773	0.773	0.960	0.987	0.973	0.980	0.973	0.973	0.993	0.993	0.993	0.973	0.973	0.973	0.993	0.993	0.993
7/1/2004	0.563	0.579	0.979	0.779	0.986	0.966	0.986	0.986	0.986	0.986	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2005	0.975	0.980	0.980	0.985	0.993	0.973	0.942	0.973	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
7/1/2006	0.894	0.919	0.956	0.978	0.985	0.950	0.965	0.985	0.985	0.985	0.985	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2007	0.888	0.937	0.956	0.993	0.916	0.971	0.969	0.969	0.969	0.969	0.969	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
7/1/2008	0.707	0.939	0.956	0.893	0.982	0.976	0.976	0.976	0.976	0.976	0.976	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
7/1/2009	0.725	0.939	0.956	0.893	0.982	0.976	0.976	0.976	0.976	0.976	0.976	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
7/1/2010	0.682	0.820	0.974	0.893	0.986	0.971	0.987	0.987	0.987	0.987	0.987	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2011	0.557	0.882	0.944	0.850	0.986	0.966	0.987	0.987	0.987	0.987	0.987	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2012	0.555	0.812	0.985	0.856	0.986	0.956	0.986	0.986	0.986	0.986	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
7/1/2013	0.425	0.727	0.903	0.842	0.955	0.951	0.951	0.951	0.951	0.951	0.951	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974
7/1/2014	0.449	0.871	0.930	0.979	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
7/1/2015	0.460	0.968	0.967	0.951	0.967	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974
7/1/2016	0.448	0.854	0.932	0.947	0.962	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
7/1/2017	0.655	0.880	0.940	0.965	0.971	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980
7/1/2018	0.438	0.862	0.911	0.956	0.962	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
7/1/2019	0.439	0.844	0.914	0.945	0.962	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
7/1/2020	0.570	0.865	0.933	0.945	0.962	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
7/1/2021	0.730	0.949																		
7/1/2022	0.595																			

City of Chandler
Workers' Compensation
Average Paid Losses & ALAL - Limited to \$75,000 & Excluding Closed Without Payments
Based on Data as of June 30, 2023

Accident Period	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	2,665	4,348	4,250	4,560	4,332	4,035	4,013	4,880	4,880	4,503	4,703	4,903	4,903	4,905	4,908	5,061	5,236	5,337	5,337	5,238
7/1/2004	1,637	3,890	4,124	4,262	4,326	4,350	4,371	4,410	4,348	4,348	4,348	4,348	4,348	4,348	4,349	4,349	4,349	4,349	4,349	4,349
7/1/2005	1,715	3,514	3,818	4,102	4,235	4,230	4,262	4,311	4,415	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480	4,480
7/1/2006	2,500	3,743	4,118	4,383	4,457	4,430	4,399	4,349	4,375	4,375	4,344	4,344	4,345	4,385	4,387	4,390	4,400	4,400	4,400	4,400
7/1/2007	2,314	4,199	4,500	4,492	3,894	3,795	3,658	4,105	4,223	4,203	4,272	4,320	4,351	4,405	4,369	4,369	4,371	4,371	4,371	4,371
7/1/2008	2,745	3,527	3,917	3,914	3,775	3,896	3,898	3,994	4,005	4,005	4,138	4,238	4,238	4,238	4,238	4,238	4,238	4,238	4,238	4,238
7/1/2009	2,844	3,056	3,443	3,534	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402	3,402
7/1/2010	6,605	7,057	6,400	7,456	7,433	7,396	7,423	7,438	7,438	7,438	7,438	7,438	7,438	7,438	7,438	7,438	7,438	7,438	7,438	7,438
7/1/2011	7,080	7,340	7,284	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566	7,566
7/1/2012	4,343	6,830	7,162	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676	6,676
7/1/2013	8,310	10,443	10,233	9,887	10,060	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996	9,996
7/1/2014	8,997	7,605	7,486	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603	7,603
7/1/2015	6,646	6,698	6,748	6,801	6,892	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992	6,992
7/1/2016	8,873	9,194	9,798	10,833	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876	9,876
7/1/2017	6,350	6,623	7,788	7,630	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842
7/1/2018	6,350	6,623	7,788	7,630	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842
7/1/2019	6,350	6,623	7,788	7,630	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842	7,842
7/1/2020	8,073	9,899	9,569	7,716	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077	6,077
7/1/2021	7,069	6,038	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569	5,569
7/1/2022	5,252																			

City of Chandler
Workers' Compensation
Average Incurred Losses & ALAE - United to \$75,000 & Excluding Closed Without Payments
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	2,634	4,104	4,418	4,806	5,055	4,596	5,008	5,006	4,240	5,010	5,010	5,010	5,010	5,081	5,170	5,270	5,277	5,277	5,277	5,277
7/1/2004	1,208	4,227	4,482	4,613	4,611	4,611	4,574	4,587	4,348	4,348	4,348	4,348	4,348	4,348	4,349	4,349	4,349	4,349	4,349	4,349
7/1/2005	1,822	3,846	4,171	4,259	4,373	4,380	4,125	4,381	4,315	4,419	4,419	4,419	4,419	4,419	4,419	4,419	4,419	4,419	4,419	4,419
7/1/2006	1,318	4,240	4,312	4,342	4,364	4,427	4,578	4,408	4,499	4,499	4,499	4,499	4,499	4,499	4,499	4,499	4,499	4,499	4,499	4,499
7/1/2007	1,819	4,252	4,311	4,342	4,363	4,400	4,374	4,408	4,408	4,408	4,408	4,408	4,408	4,408	4,408	4,408	4,408	4,408	4,408	4,408
7/1/2008	1,037	4,216	4,344	4,355	4,363	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400	4,400
7/1/2009	8,637	9,614	8,961	8,888	8,877	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888	8,888
7/1/2010	5,723	6,103	6,348	6,298	6,319	6,286	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310	6,310
7/1/2011	6,665	7,103	7,152	7,213	7,197	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230	7,230
7/1/2012	4,295	7,390	7,251	6,581	7,111	7,054	7,070	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030	7,030
7/1/2013	7,003	9,979	9,601	9,611	9,687	9,651	9,608	9,603	9,720	9,720	9,720	9,720	9,720	9,720	9,720	9,720	9,720	9,720	9,720	9,720
7/1/2014	7,547	7,290	7,104	6,976	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925	6,925
7/1/2015	5,243	6,975	6,904	6,938	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127
7/1/2016	7,289	9,240	9,286	9,595	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505
7/1/2017	4,242	6,784	7,803	7,705	7,762	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682	7,682
7/1/2018	5,800	6,786	6,786	6,786	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403	7,403
7/1/2019	5,820	7,976	7,922	7,588																
7/1/2020	10,425	10,259	10,003																	
7/1/2021	8,710	6,869																		
7/1/2022	7,848																			

City of Chandler
Workers' Compensation
Average Open - Limited to \$75,000
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003	3,104	2,516	12,180	11,743	9,501	7,953	11,229	23,763	7,889	20,852	20,852	20,852	20,852	31,333	30,539	21,311	11,412	11,190	11,155	11,033
7/1/2004	2,656	19,769	19,672	20,880	24,664	22,844	18,836	17,403	4,376	0	0	0	0	0	0	0	0	0	0	0
7/1/2005	5,997	19,917	20,166	35,285	39,231	29,166	2,417	14,581	12,738	12,734	25,254	25,246	25,140	10,527	19,515	19,072	18,893	0	0	0
7/1/2006	11,482	9,842	12,994	24,890	31,607	4,309	16,464	16,452	17,256	19,542	24,411	25,440	23,037	38,430	20,312	0	0	0	0	0
7/1/2007	4,997	11,984	9,858	8,690	4,710	20,051	20,307	16,492	5,075	6,772	0	0	0	0	0	0	0	0	0	0
7/1/2008	5,825	8,091	4,542	1,313	10,236	9,459	5,902	5,600	1,650	1,551	1,979	1,931	1,921	1,702	0	0	0	0	0	0
7/1/2009	10,544	10,544	2,095	4,656	1,486	1,736	2,354	1,270	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2010	3,827	2,233	4,944	2,951	1,895	1,877	1,211	1,031	1,095	867	1,115	0	0	0	0	0	0	0	0	0
7/1/2011	6,188	6,923	4,964	2,951	1,895	1,877	1,211	1,031	1,095	867	1,115	0	0	0	0	0	0	0	0	0
7/1/2012	4,235	6,923	7,903	5,104	1,848	1,146	0	0	715	0	0	0	0	0	0	0	0	0	0	0
7/1/2013	7,075	8,742	3,745	5,104	1,848	1,146	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2014	6,305	5,153	2,065	2,917	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2015	4,049	11,713	11,537	10,937	11,102	12,504	12,504	12,504	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2016	6,130	11,366	5,601	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2017	11,979	5,718	5,680	9,212	12,118	11,329	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2018	7,765	11,284	9,409	12,054	11,337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2019	7,142	14,581	14,581	14,581	11,337	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2020	11,947	12,578	16,081	5,249	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2021	11,900	5,595	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2022	11,662	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Chandler
Workers' Compensation
Average Unpaid Losses & LALE - Limited to \$75,000 & Excluding Closed Without Payments
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003																				
7/1/2004	5,158	17,042	11,138	7,378	5,531	4,313	2,807	98	4,087	[0]	[0]	(0)	(0)	0	0	0	0	0	0	0
7/1/2005	14,062	47,870	32,323	27,417	45,004	34,932	27,363	20,189	12,590	11,576	24,037	24,029	24,824	19,211	0	0	0	0	0	0
7/1/2006	9,470	12,992	12,636	18,271	27,053	7,400	10,947	14,290	20,874	29,804	41,941	38,074	35,671	22,374	10,199	18,756	18,276	0	0	0
7/1/2007	7,487	12,193	7,596	10,782	20,007	41,815	27,515	21,140	7,628	7,552	376	338	0	0	4,205	0	0	0	0	0
7/1/2008	7,410	6,654	8,720	8,111	21,209	12,012	8,095	8,093	13,406	2,623	2,881	3,125	3,158	3,099	0	0	0	0	0	0
7/1/2009	12,240	1,598	1,570	1,592	9,221	20,282	13,406	2,327	2,623	2,510	0	0	0	0	0	0	0	0	0	0
7/1/2010	5,754	1,616	3,106	5,287	1,445	0	0	(0)	6	0	0	0	0	0	0	0	0	0	0	0
7/1/2011	7,416	6,240	5,963	2,595	1,445	1,432	492	402	229	109	0	0	0	0	0	0	0	0	0	0
7/1/2012	11,888	12,295	13,162	34,670	28,324	11,929	6,432	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2013	10,624	7,795	4,722	6,027	2,503	2,317	2,731	2,128	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2014	5,340	2,978	197	569	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2015	7,463	13,368	18,350	15,104	11,114	12,519	12,517	12,504	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2016	9,065	10,849	5,898	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2017	10,086	1,451	5,813	9,186	9,144	11,329	12,517	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2018	9,176	13,138	14,460	22,201	14,504	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2019	9,216	2,461	2,461	22,201	14,504	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2020	12,943	12,721	20,482	8,719	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2021	10,183	27,164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7/1/2022	15,116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

City of Chandler
Workers' Compensation
IBNR / Case Reserve - Limited to \$75,000
Based on Data as of June 30, 2023

Accident Period Beginning	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
7/1/2003																				
7/1/2004	1.21	0.44	[0.25]	[0.53]	[0.64]	[0.72]	[0.85]	[0.99]	0.67	[0.01]	[0.01]	[0.01]	[0.01]	[0.02]	[0.02]	[0.02]				
7/1/2005	21.95	1.42	0.00	[0.22]	0.17	0.20	0.26	0.28	[0.01]											
7/1/2006	1.68	0.32	[0.03]	[0.20]	[0.14]	[0.27]	[0.34]	[0.01]												
7/1/2007	1.75	0.25	[0.02]	1.12	1.54	1.78	0.02	0.54	0.21	0.53	0.72	0.50	0.55	[0.42]						
7/1/2008	0.16	0.20	[0.01]	1.18	1.05	0.27	0.46	0.46	0.50	0.49										
7/1/2009	0.25	[0.03]	[0.01]	1.49	1.46	0.21	2.42	0.47	0.59	0.49										
7/1/2010	0.67	[0.47]	[0.25]	0.85	0.85	[0.07]	[0.52]	[0.61]	[0.79]	[1.00]	0.46	0.62	0.64	0.80						
7/1/2011	0.10	0.02	0.11	[0.15]	0.12	[0.13]	[0.52]	[0.61]	[0.79]	[1.00]										
7/1/2012	2.15	0.35	0.62	6.63	0.94	0.75	5.21	11.53	[1.00]											
7/1/2013	0.64	[0.12]	0.26	0.28	0.12	1.02														
7/1/2014	[0.43]	[0.33]	[0.90]	[0.83]																
7/1/2015	1.24	0.14	0.59	0.50																
7/1/2016	0.81	0.06	0.13																	
7/1/2017	0.14	[0.73]	[0.09]	[0.07]	[0.25]															
7/1/2018	0.44	0.15	0.15	0.85	0.31	0.00														
7/1/2019	0.07	0.07	0.50	0.63																
7/1/2020			0.27																	
7/1/2021	[0.15]	3.85																		
7/1/2022	0.56																			

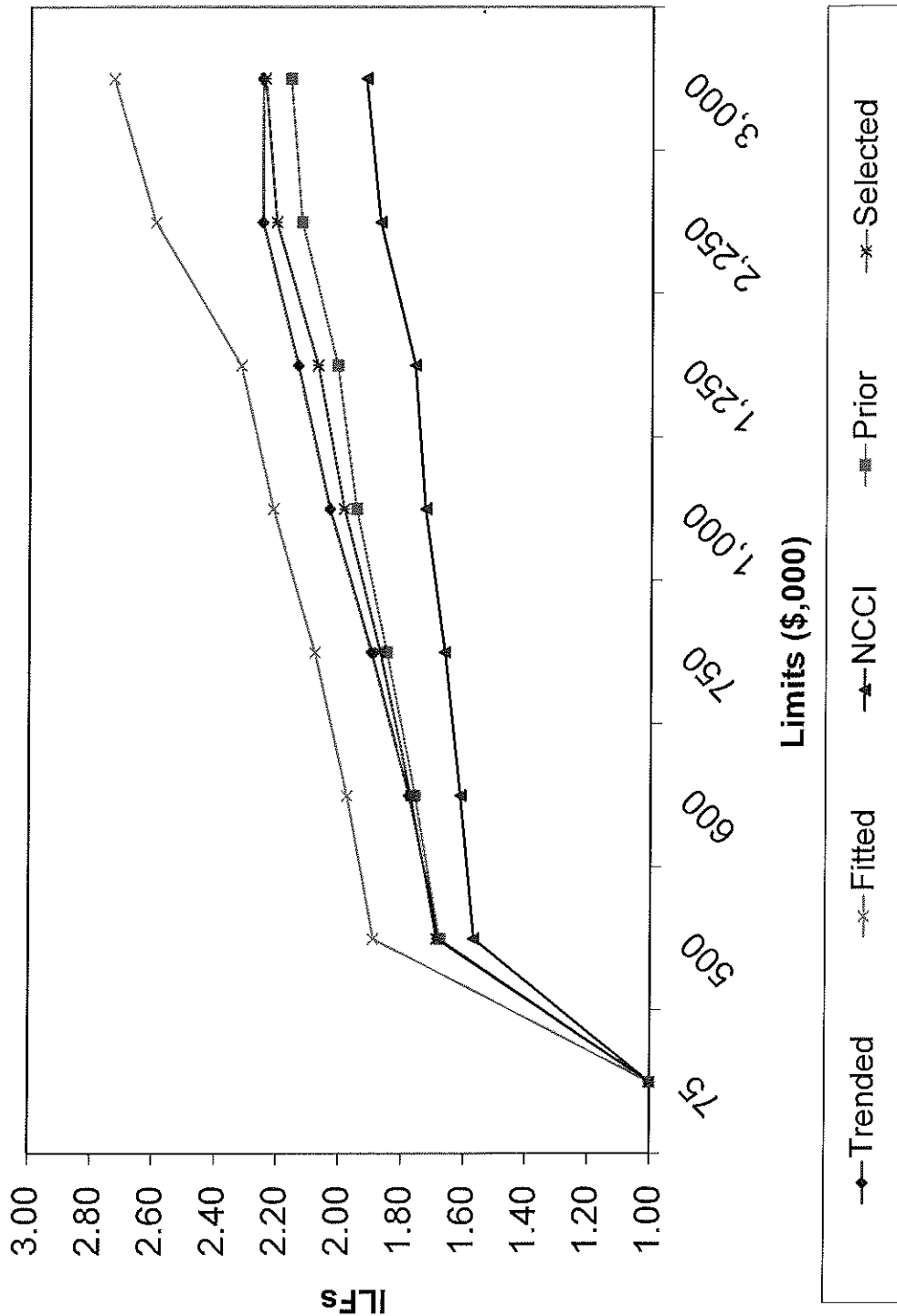
City of Chandler
Workers' Compensation
Increased Limit Factors - Losses & ALAE
Based on Data as of June 30, 2023

	(1)	(2)	(3)	(4)	(5)
Limit	Trended Incurred Losses	Fitted	NCCI	Prior	Selected
75,000	1.000	1.000	1.000	1.000	1.000
500,000	1.679	1.890	1.568	1.677	1.687
600,000	1.777	1.975	1.613	1.757	1.769
750,000	1.898	2.080	1.664	1.847	1.869
1,000,000	2.033	2.215	1.726	1.946	1.986
1,250,000	2.136	2.320	1.761	2.008	2.072
2,250,000	2.252	2.596	1.872	2.124	2.207
3,000,000	2.252	2.730	1.919	2.160	2.244

Notes:

- (1) assumed 2.5% annual severity trend
 (2) fitted using a logarithmic distribution
 (3) NCCI = National Council on Compensation Insurance
 (4) from previous Oliver Wyman study
 (5) selected

City of Chandler
Workers' Compensation
Increased Limit Factors - Losses & ALAE
Based on Data as of June 30, 2023



City of Chandler
Workers' Compensation
Data Summary
Based on Data as of June 30, 2023

Policy Period	Self-Insured Retention (SIR)	Exposures (\$1,000 Payroll)	(1)		(2)		(3)		(4)		(5)		(6)		(7)		(8)		(9)		(10)		(11)		(12)	
			Limited Paid to 75,000	Limited Paid from Limit to SIR	Paid Losses & ALAE Paid from Limit to SIR	Paid Excess of SIR	Unlimited Paid	Limited Incurred to 75,000	Limited Incurred from Limit to SIR	Incurred Losses & ALAE Incurred from Limit to SIR	Incurred Excess of SIR	Unlimited Incurred	Reported (ex. CWOP)	Claim Counts Closed With Payment	Closed Payment											
1/1/2003 to 6/30/2004	500,000	121,488	1,253,879	635,518	97,440	1,987,838	1,264,912	654,286	283,030	2,202,228	212	209	21													
7/1/2004 to 6/30/2005	500,000	84,675	621,971	29,762	0	651,732	621,971	29,762	0	651,732	143	143	7													
7/1/2005 to 6/30/2006	500,000	90,201	649,576	331,232	0	980,808	649,576	375,446	0	1,025,022	147	146	12													
7/1/2006 to 6/30/2007	500,000	102,877	588,424	11,852	0	600,275	607,316	11,852	0	619,168	135	134	7													
7/1/2007 to 6/30/2008	500,000	111,710	763,087	43,986	0	807,083	763,087	237,929	0	1,001,015	161	160	6													
7/1/2008 to 6/30/2009	500,000	120,668	675,237	493,763	0	1,169,000	675,237	622,433	0	1,297,670	165	163	14													
7/1/2009 to 6/30/2010	500,000	119,800	1,299,823	196,073	632,710	1,495,895	1,304,928	447,411	0	1,752,340	142	139	4													
7/1/2010 to 6/30/2011	500,000	113,843	966,822	489,739	0	2,089,271	966,822	489,739	1,253,417	2,709,979	153	152	10													
7/1/2011 to 6/30/2012	500,000	110,414	1,160,847	761,390	0	1,922,237	1,160,847	1,064,999	347,758	2,573,604	161	159	12													
7/1/2012 to 6/30/2013	600,000	119,088	1,069,226	1,090,901	0	2,160,127	1,069,226	1,663,175	28,185	2,360,586	135	131	19													
7/1/2013 to 6/30/2014	600,000	115,348	1,493,243	943,661	0	2,436,924	1,493,243	1,179,702	389,364	3,062,309	154	150	8													
7/1/2014 to 6/30/2015	600,000	119,528	990,329	539,096	0	1,529,426	990,329	1,091,893	334,213	2,416,436	143	141	9													
7/1/2015 to 6/30/2016	600K / 1M	127,517	1,040,402	1,786,729	0	2,827,131	1,090,420	2,447,550	1,399,051	4,937,021	153	149	9													
7/1/2016 to 6/30/2017	600K / 1M	128,452	1,264,190	381,261	0	1,645,450	1,264,190	469,570	0	1,793,760	133	131	9													
7/1/2017 to 6/30/2018	600K / 1M	133,497	1,110,635	638,045	0	1,748,680	1,104,622	1,599,731	386,506	3,120,859	149	146	15													
7/1/2018 to 6/30/2019	600K / 1.25M	135,570	1,060,578	82,750	0	1,143,328	1,128,598	620,113	0	1,748,711	158	148	14													
7/1/2019 to 6/30/2020	600K / 1.25M	136,800	1,080,251	265,945	0	1,346,196	1,123,047	885,221	0	2,008,268	148	140	14													
7/1/2020 to 6/30/2021	750K / 2.25M	140,084	1,205,663	341,337	0	1,547,001	1,350,396	1,538,360	0	2,888,756	135	126	5													
7/1/2021 to 6/30/2022	1M / 3M	142,931	777,014	167,510	0	944,524	810,586	1,453,783	0	2,263,369	118	112	5													
7/1/2022 to 6/30/2023	1.5M / 3M	161,946	378,172	60,425	0	438,597	949,608	285,370	0	1,234,978	121	72	12													
TOTALS		2,436,415	19,449,368	9,292,004	730,150	29,471,523	20,428,961	16,757,325	4,421,523	41,607,809	2,966	2,855	206													

Notes:
(1) through (12) from City of Chandler
* Where two SIR's are displayed, the first is for non public safety employees and the second is for public safety employees.

City of Chandler
Workers' Compensation
Large Loss Listing (Incurred > \$75,000)
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Claim Number	Accident Date	Claim Status	Self-Insured Retention (\$IR)	(1) Limited Paid to SIR	(2) Paid from Limit to SIR	(3) Paid Excess of SIR	(4) Unlimited Paid	(5) Prior Unlimited Paid	(6) Unlimited Paid Change	(7) Limited Incurred to SIR	(8) Incurred from Limit to SIR	(9) Incurred Excess of SIR	(10) Unlimited Incurred	(11) Prior Unlimited Incurred	(12) Unlimited Incurred Change
CN-03-0500003	1/2/2003	Closed	500,000	75,000	3,602	0	78,602	78,602	0	75,000	3,602	0	78,602	78,602	0
CN-03-0500013	2/12/2003	Open	500,000	75,000	97,440	0	575,256	575,256	22,184	75,000	425,000	283,030	783,030	783,030	0
CN-03-0500045	5/8/2003	Open	500,000	75,000	164,969	0	239,969	239,969	683	75,000	178,709	0	253,709	253,709	0
CN-04-0500041	10/2/2004	Closed	500,000	75,000	4,813	0	79,813	79,813	0	75,000	4,813	0	79,813	79,813	0
CN-04-0500099	3/8/2004	Open	500,000	63,957	0	0	63,957	63,957	122	75,000	4,028	0	79,028	79,028	0
CN-04-0500125	4/28/2004	Closed	500,000	75,000	38,134	0	113,134	113,134	0	75,000	38,134	0	113,134	113,134	0
1/1/2003 to 6/30/2004 ; 6 claims ; 3 open				438,967	636,518	97,440	1,172,925	1,149,936	22,989	450,000	654,286	283,030	1,387,316	1,387,316	0
CN-05-0500010	7/28/2004	Closed	500,000	75,000	29,762	0	104,762	104,762	0	75,000	29,762	0	104,762	104,762	0
7/1/2004 to 6/30/2005 ; 1 claim ; 0 open				75,000	29,762	0	104,762	104,762	0	75,000	29,762	0	104,762	104,762	0
CN-06-0500060	11/16/2005	Closed	500,000	75,000	85,341	0	160,341	160,341	0	75,000	85,341	0	160,341	160,341	0
CN-06-0500138	5/23/2006	Open	500,000	75,000	245,891	0	320,891	320,891	0	75,000	290,105	0	365,105	365,105	0
7/1/2005 to 6/30/2006 ; 2 claims ; 1 open				150,000	331,232	0	481,232	481,232	0	150,000	375,446	0	525,446	525,446	0
CN-07-0500083	2/22/2007	Closed	500,000	75,000	11,852	0	86,852	86,852	0	75,000	11,852	0	86,852	86,852	0
7/1/2006 to 6/30/2007 ; 1 claim ; 0 open				75,000	11,852	0	86,852	86,852	0	75,000	11,852	0	86,852	86,852	0
CN-08-0500045	9/7/2007	Open	500,000	75,000	19,988	0	94,988	88,791	6,197	75,000	213,520	0	288,520	288,520	0
CN-08-0500153	5/16/2008	Closed	500,000	75,000	24,009	0	99,009	99,009	0	75,000	24,009	0	99,009	99,009	0
7/1/2007 to 6/30/2008 ; 2 claims ; 1 open				150,000	43,996	0	193,996	187,799	6,197	150,000	237,929	0	387,929	387,929	0
CN-09-0500034	9/3/2008	Closed	500,000	75,000	44,596	0	119,596	119,596	0	75,000	44,596	0	119,596	119,596	0
CN-09-0500085	12/18/2008	Open	500,000	75,000	347,490	0	422,490	418,899	3,591	75,000	397,598	0	472,598	472,598	0
CN-09-0500107	2/17/2009	Open	500,000	75,000	101,677	0	176,677	175,886	791	75,000	179,839	0	254,839	254,839	0
7/1/2008 to 6/30/2009 ; 3 claims ; 2 open				225,000	493,763	0	718,763	714,381	4,382	225,000	622,433	0	847,433	847,433	0
CN-10-0500009	7/17/2009	Open	500,000	75,000	33,570	0	108,570	105,160	3,410	75,000	178,598	0	253,598	253,598	0
CN-10-0500033	9/4/2009	Closed	500,000	75,000	7,866	0	82,866	82,866	0	75,000	7,866	0	82,866	82,866	0
CN-10-0500067	12/5/2009	Closed	500,000	75,000	35,293	0	110,293	110,293	0	75,000	35,293	0	110,293	110,293	0
CN-10-0500085	2/8/2010	Closed	500,000	75,000	18,413	0	93,413	93,413	0	75,000	18,413	0	93,413	93,413	0
CN-10-0500103	3/8/2010	Open	500,000	75,000	66,225	0	141,225	137,665	3,560	75,000	172,136	0	247,136	247,136	0
CN-10-0500104	3/11/2010	Closed	500,000	75,000	34,705	0	109,705	109,705	0	75,000	34,705	0	109,705	109,705	0
7/1/2009 to 6/30/2010 ; 6 claims ; 2 open				450,000	196,073	0	646,073	639,303	6,770	450,000	447,411	0	897,411	897,411	0
WC-001	7/28/2010	Open	500,000	75,000	425,000	632,710	1,132,710	1,102,601	30,109	75,000	425,000	1,253,417	1,753,417	1,753,417	0
CN-11-0500036	8/22/2010	Closed	500,000	75,000	37,715	0	112,715	112,715	0	75,000	37,715	0	112,715	112,715	0
CN-11-0500057	10/2/2010	Closed	500,000	75,000	1,945	0	76,945	76,945	0	75,000	1,945	0	76,945	76,945	0
CN-11-0500103	2/13/2011	Closed	500,000	75,000	25,979	0	100,979	100,079	0	75,000	25,079	0	100,079	100,079	0
7/1/2010 to 6/30/2011 ; 4 claims ; 1 open				300,000	489,739	632,710	1,422,450	1,392,341	30,109	300,000	489,739	1,253,417	2,043,157	2,043,157	0
CN-12-0500036	9/8/2011	Closed	500,000	75,000	245,800	0	321,800	321,800	0	75,000	245,800	0	321,800	321,800	0
CN-12-0500073	11/13/2011	Open	500,000	75,000	273,105	0	348,105	342,861	5,244	75,000	319,007	0	394,007	394,007	0
CN-10-0500002	3/23/2012	Open	500,000	75,000	167,294	0	242,294	230,685	11,609	75,000	425,000	347,758	847,758	847,758	0
CN-12-0500139	4/19/2012	Closed	500,000	75,000	74,192	0	146,192	146,192	0	75,000	74,192	0	146,192	146,192	0
7/1/2011 to 6/30/2012 ; 4 claims ; 2 open				300,000	761,390	0	1,061,390	1,044,137	16,853	300,000	1,064,599	347,758	1,712,757	1,712,757	0

City of Chandler
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CN-13-005122	9/30/2012	Open	600,000	75,000	16,065	0	91,065	91,065	0	75,000	65,501	0	140,501	140,501	0
CN-13-005159	1/16/2013	Closed	600,000	75,000	65,458	0	140,458	140,458	0	75,000	65,458	0	140,458	140,458	0
CN-13-005205	3/19/2013	Open	600,000	75,000	162,682	0	237,682	222,458	15,133	75,000	254,972	0	329,972	329,972	0
CN-13-005252	5/2/2013	Open	600,000	75,000	511,996	0	586,996	577,842	9,155	75,000	525,000	28,185	628,185	628,185	0
CN-13-005314	5/8/2013	Closed	600,000	75,000	176,745	0	245,745	245,745	0	75,000	170,745	0	245,745	245,745	0
CN-13-005281	5/20/2013	Open	600,000	75,000	8,593	0	83,593	77,417	6,176	75,000	26,137	0	101,137	101,137	0
CN-13-005273	5/22/2013	Closed	600,000	75,000	155,330	0	230,330	230,360	30	75,000	155,360	0	230,360	230,360	0
7/1/2012 to 6/30/2013 : 7 claims ; 4 open				525,000	1,099,901	0	1,615,901	1,585,436	30,464	525,000	1,263,175	28,185	1,816,360	1,816,360	0
CN-14-005049	8/20/2013	Closed	600,000	75,000	467	0	75,467	75,467	0	75,000	467	0	75,467	75,467	0
CN-14-005093	10/17/2013	Open	600,000	75,000	184,789	0	259,789	259,300	489	75,000	197,569	0	272,469	272,469	0
CN-14-005197	2/19/2014	Open	600,000	75,000	73,628	0	148,628	148,425	204	75,000	84,515	0	159,515	159,515	0
CN-14-005202	2/28/2014	Closed	600,000	75,000	38,249	0	113,249	113,249	0	75,000	38,249	0	113,249	113,249	0
CN-14-005219	5/12/2014	Open	600,000	75,000	159,185	0	234,185	218,941	15,243	75,000	334,002	0	409,002	409,002	0
CN-14-005344	6/13/2014	Open	600,000	75,000	487,362	0	562,362	541,951	20,411	75,000	525,000	389,364	970,014	970,014	19,350
7/1/2012 to 6/30/2014 : 6 claims ; 4 open				450,000	942,681	0	1,393,681	1,357,243	36,438	450,000	1,179,702	389,364	2,019,066	1,999,716	19,359
CN-15-005102	10/1/2014	Closed	600,000	75,000	41,893	0	116,893	116,893	0	75,000	41,893	0	116,893	116,893	0
CN-15-005128	10/28/2014	Open	600,000	75,000	263,760	0	338,760	304,703	34,057	75,000	525,000	161,640	761,640	761,640	0
CN-15-005142	10/31/2014	Open	600,000	75,000	233,443	0	308,443	274,387	34,056	75,000	525,000	172,573	772,573	772,573	0
7/1/2012 to 6/30/2015 : 3 claims ; 2 open				225,000	539,096	0	764,096	695,984	68,113	225,000	1,091,893	334,213	1,651,106	1,651,106	0
CN-16-005088	10/12/2015	Open	1,000,000	75,000	182,839	0	257,839	242,870	14,969	75,000	559,550	0	634,550	634,550	0
CN-16-005145	10/30/2015	Open	1,000,000	75,000	24,982	0	24,982	24,982	0	75,000	20,280	0	95,280	95,280	0
CN-16-005314	4/23/2016	Open	1,000,000	75,000	799,156	0	874,156	806,160	67,996	75,000	925,000	666,787	1,666,787	1,646,939	19,848
CN-16-005324	5/5/2016	Closed	1,000,000	75,000	17,720	0	92,720	92,720	0	75,000	17,720	0	92,720	92,720	0
CN-16-005367	5/18/2016	Open	1,000,000	75,000	787,013	0	862,013	773,821	88,192	75,000	925,000	732,564	1,732,564	1,725,174	7,090
7/1/2012 to 6/30/2016 : 5 claims ; 4 open				374,982	1,786,729	0	2,111,711	1,940,554	171,157	375,000	2,447,550	1,399,051	4,221,601	4,194,663	26,938
CN-17-005049	8/16/2016	Open	1,000,000	75,000	22,268	0	97,268	96,773	495	75,000	43,014	0	118,014	118,014	0
CN-17-005102	9/29/2016	Closed	1,000,000	75,000	31,553	0	106,553	106,553	0	75,000	31,553	0	106,553	106,553	0
CN-17-005110	10/14/2016	Closed	600,000	75,000	1,270	0	76,270	76,270	0	75,000	1,270	0	76,270	76,270	0
CN-17-005137	11/9/2016	Open	1,000,000	75,000	85,795	0	160,795	150,584	10,211	75,000	153,958	0	238,958	218,358	10,000
CN-17-005202	12/29/2016	Closed	1,000,000	75,000	20,852	0	95,852	95,852	0	75,000	20,852	0	95,852	95,852	0
CN-17-005440	4/3/2017	Closed	1,000,000	75,000	119,323	0	194,323	194,323	0	75,000	119,323	0	194,323	194,323	0
CN-17-005633	4/20/2017	Closed	1,000,000	75,000	80,288	0	155,288	155,289	0	75,000	80,289	0	155,289	155,289	0
CN-17-005638	5/10/2017	Closed	1,000,000	75,000	13,912	0	94,912	94,912	0	75,000	13,912	0	94,912	94,912	0
7/1/2016 to 6/30/2017 : 8 claims ; 2 open				600,000	381,261	0	981,261	970,554	10,706	600,000	469,570	0	1,069,570	1,059,570	10,000
CN-18-005172	9/28/2017	Closed	1,000,000	75,000	21,574	0	96,574	96,574	0	75,000	21,574	0	96,574	96,574	0
CN-18-005210	10/25/2017	Closed	1,000,000	75,000	2,131	0	77,131	77,131	0	75,000	2,131	0	77,131	77,131	0
CN-18-005237	11/9/2017	Closed	1,000,000	75,000	7,283	0	82,283	82,283	0	75,000	7,283	0	82,283	82,283	0
CN-18-005238	11/14/2017	Closed	1,000,000	75,000	40,763	0	115,763	115,763	0	75,000	40,763	0	115,763	115,763	0
CN-18-005344	12/8/2017	Open	1,000,000	41,013	0	0	41,013	40,106	907	75,000	18,086	0	93,086	93,086	0
CN-18-005439	3/6/2018	Open	1,000,000	75,000	164,955	0	239,955	222,714	17,241	75,000	574,894	0	649,894	649,894	0
CN-18-005455	3/6/2018	Open	1,000,000	75,000	401,340	0	476,340	439,330	37,009	75,000	925,000	386,506	1,386,506	1,386,506	0
7/1/2017 to 6/30/2018 : 7 claims ; 3 open				491,013	638,045	0	1,129,058	1,073,901	55,157	525,000	1,589,721	386,506	2,501,236	2,501,236	0

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CN-19-005032	7/20/2018	Open	600,000	75,000	19,153	0	94,153	93,762	391	75,000	26,367	0	101,367	101,367	0
CN-19-005106	9/4/2018	Closed	1,250,000	75,000	10,054	0	85,054	85,054	0	75,000	10,054	0	85,054	85,054	0
CN-19-005453	4/8/2019	Open	600,000	75,000	44,646	0	44,646	42,216	2,430	75,000	10,729	0	85,729	2,430	83,299
CN-19-005526	5/2/2019	Open	1,250,000	75,000	53,543	0	128,543	26,768	101,775	75,000	155,336	0	240,336	147,261	93,075
CN-19-005522	5/29/2019	Open	1,250,000	64,603	51,246	0	64,603	13,358	51,246	75,000	407,627	0	482,627	482,627	0
7/1/2018 to 6/30/2019 ; 5 claims ; 4 open				334,249	82,750	0	416,999	334,269	82,730	375,000	620,113	0	995,113	818,759	176,374
CN-20-005092	8/9/2019	Open	1,250,000	75,000	25,355	0	100,355	14,607	85,748	75,000	40,233	0	115,233	20,407	94,826
CN-20-005053	9/15/2019	Closed	1,250,000	75,000	139,938	0	208,938	198,269	10,669	75,000	133,938	0	208,938	221,684	(12,746)
CN-20-005093	9/25/2019	Open	1,250,000	75,000	26,962	0	101,962	94,924	7,139	75,000	39,684	0	114,684	114,684	0
CN-20-005089	10/10/2019	Open	1,250,000	75,000	5,279	0	80,279	71,553	8,716	75,000	20,517	0	95,517	88,017	7,500
CN-20-005167	1/27/2020	Open	1,250,000	75,000	27,464	0	102,464	102,297	167	75,000	34,114	0	109,114	109,114	0
CN-20-005223	1/27/2020	Open	1,250,000	75,000	46,948	0	121,948	103,488	18,460	75,000	605,021	0	680,021	685,521	14,500
CN-22-005178	4/21/2020	Open	1,250,000	49,162	49,162	0	49,162	5,390	43,772	75,000	11,734	0	86,734	82,734	4,000
7/1/2019 to 6/30/2020 ; 7 claims ; 6 open				499,162	265,945	0	765,107	590,411	174,697	525,000	885,221	0	1,410,221	1,302,142	108,080
CN-21-005075	7/15/2020	Open	2,250,000	75,000	20,570	0	104,570	82,982	21,588	75,000	262,090	0	337,090	89,843	247,247
CN-21-005128	12/7/2020	Closed	2,250,000	75,000	84,398	0	159,398	159,398	0	75,000	84,398	0	159,398	159,398	0
CN-21-005148	12/7/2020	Open	2,250,000	75,000	227,369	0	302,369	263,259	39,110	75,000	1,085,690	0	1,160,690	1,160,690	0
CN-21-005154	1/21/2021	Open	2,250,000	21,848	0	0	21,848	11,600	10,048	75,000	7,785	0	82,785	16,000	66,785
CN-21-005158	2/13/2021	Open	2,250,000	47,252	0	0	47,252	30,284	16,968	75,000	92,353	0	167,353	77,048	90,305
CN-21-005173	2/19/2021	Open	2,250,000	73,647	0	0	73,647	73,166	481	75,000	6,044	0	81,044	81,044	0
7/1/2020 to 6/30/2021 ; 6 claims ; 5 open				367,747	341,337	0	709,084	620,489	88,595	450,000	1,538,360	0	1,988,360	1,594,022	404,338
CN-22-005123	11/3/2021	Open	3,000,000	75,000	159,266	0	234,266	190,651	43,605	75,000	1,439,507	0	1,514,507	1,514,507	0
CN-22-005133	1/8/2022	Closed	3,000,000	75,000	8,244	0	83,244	61,623	21,621	75,000	8,244	0	83,244	145,509	(62,265)
CN-22-005221	4/20/2022	Open	3,000,000	73,461	0	0	73,461	38,787	34,675	75,000	4,932	0	79,932	88,385	(8,452)
7/1/2021 to 6/30/2022 ; 3 claims ; 2 open				223,461	167,510	0	390,971	201,071	99,900	225,000	1,452,783	0	1,677,783	1,748,500	(70,717)
CN-23-300058	8/30/2022	Open	3,000,000	16,555	0	0	16,555	0	16,555	75,000	11,742	0	86,742	0	86,742
CN-23-300104	11/15/2022	Open	3,000,000	17,865	0	0	17,865	0	17,865	75,000	16,330	0	91,330	0	91,330
CN-23-300172	11/23/2022	Open	3,000,000	26,033	0	0	26,033	0	26,033	75,000	15,524	0	90,524	0	90,524
CN-23-300168	1/24/2023	Open	3,000,000	9,284	0	0	9,284	0	9,284	75,000	73,449	0	148,449	0	148,449
CN-23-300169	1/26/2023	Open	1,500,000	75,000	60,425	0	135,425	0	135,425	75,000	167,926	0	242,926	0	242,926
7/1/2022 to 6/30/2023 ; 5 claims ; 5 open				144,738	60,425	0	205,163	0	205,163	375,000	285,370	0	660,370	0	660,370
TOTALS ; 91 claims ; 53 open				6,349,319	9,292,004	730,150	16,371,474	15,261,554	1,109,519	6,825,000	16,757,325	4,421,523	28,003,848	26,669,116	1,334,733

Notes:
(1) through (12) from City of Chandler

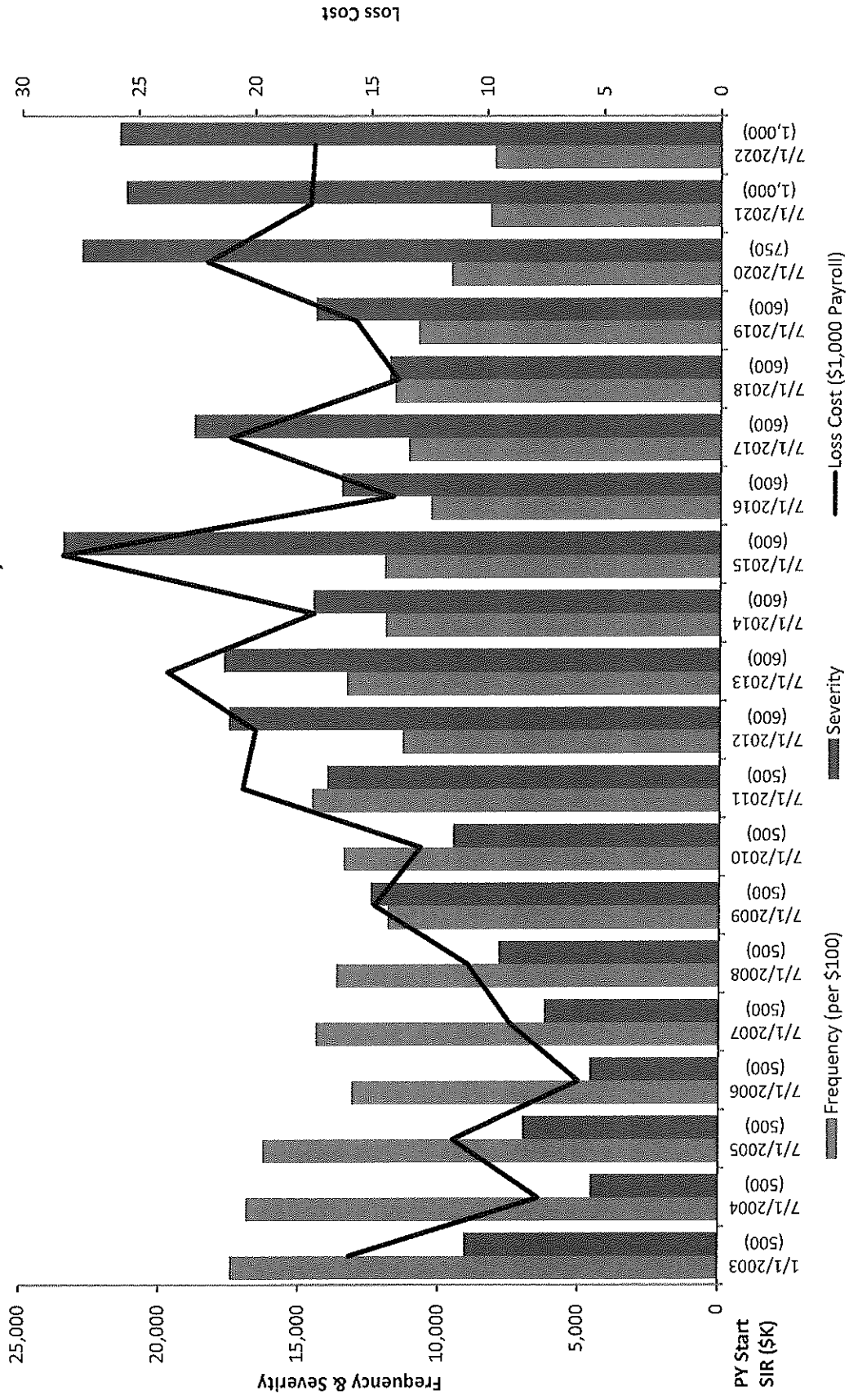
City of Chandler
Workers' Compensation
Losses & ALAE Reconciliation
Based on Data as of June 30, 2023

	Paid	Incurred
(1) Loss Run 1 - Unlimited	29,471,104	41,607,390
(2) Manual Adjustment	419	419
(3) Amounts Excess of SIR	730,150	4,421,523
(4) OW Analysis - Retained	28,741,372	37,186,285
(5) Difference - Retained	0	0

Notes:

- (1) from City of Chandler; paid and incurred losses provided on a net of recoveries basis
(2) from City of Chandler; adjusted for negative incurred losses
(3) from City of Chandler
(4) from Appendix A, Page 1
(5) = (1) + (2) - (3) - (4)

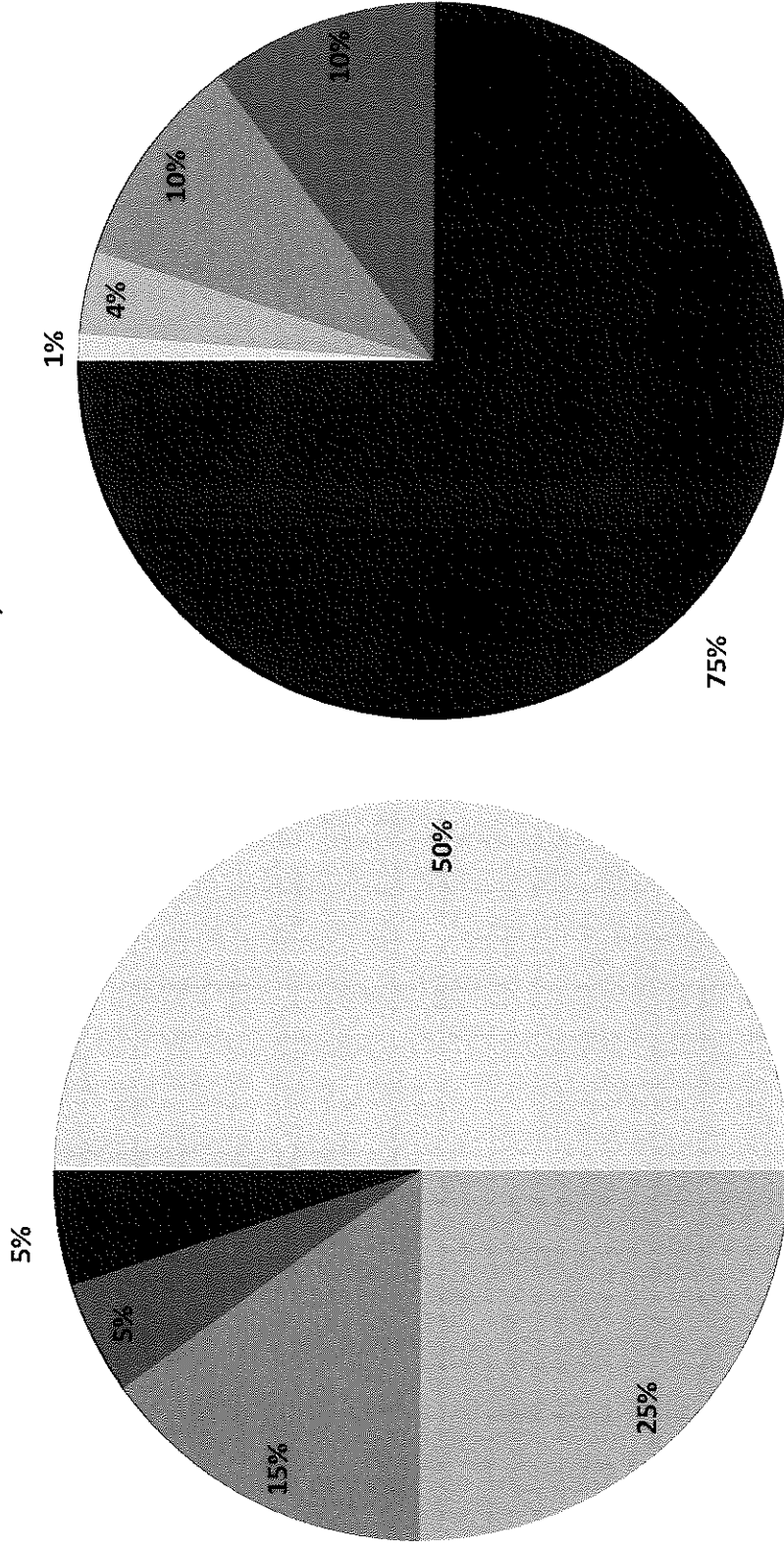
City of Chandler
Workers' Compensation
Ultimate Frequency, Severity & Loss Cost - Limited to SIR
Based on Data as of June 30, 2023



Oliver Wyman Actuarial Consulting, Inc.

Chart1 on 9/13/2023 at 9:44 AM

City of Chandler
Workers' Compensation
Layer Distribution
Based on Data as of June 30, 2023





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